

SERVRAIL

Final Report

APPENDIX A

COUNTRY SUMMARIES

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1. AUSTRIA

Introduction

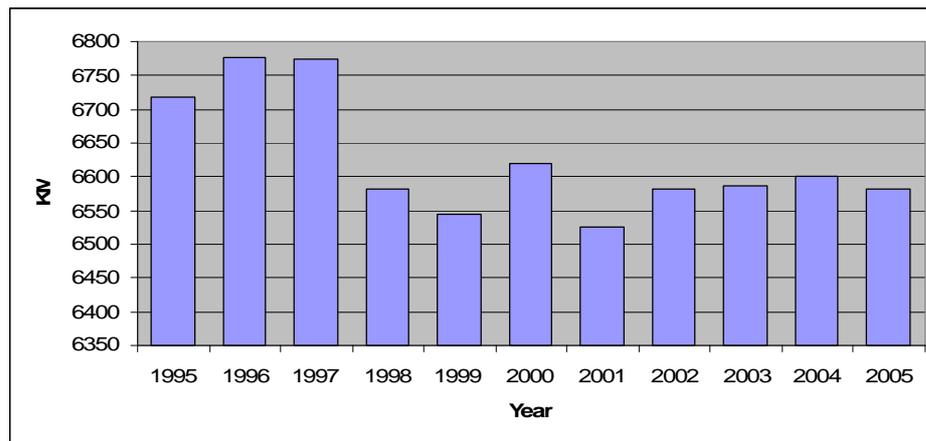
- 1.1 In the "Railimplement" project, the main trends concerning the effectiveness of the legal framework were assessed. That information can be utilised now as a first part of a more comprehensive analysis providing the current picture of the development of rail-related services in Austria.
- 1.2 In Austria, rail-related services are offered by a small number of companies (also because the market is proportionally smaller). The table below shows the previously mentioned services sorted by category and the companies looking after them.

TABLE 1.1 RAIL-RELATED SERVICES BY PROVIDER

Service	Provider
Electricity for traction	ÖBB Infrastructure (infrastructure manager)
Diesel fuel for locomotives	ÖBB Infrastructure
Locomotive pushing services	Each operator independently
Back-up services	Each operator independently
Services in marshalling and shunting yards	Marshalling yards still almost exclusively used by ÖBB Cargo
Train formation services	Sometimes offered by ÖBB. otherwise each operator
Services in freight terminals	Each operator (mostly ÖBB)
Telematics services for freight operations	Each operator
Services in passenger stations	Each operator
Computer reservation services for passenger transport	Each operator
Training facilities	Retraining: each operator Training institutes mainly by ÖBB
Leasing of rolling stock and staff	Private lessors, Separate leasing of staff
Maintenance	Operator, manufacturer, lessor
Rolling stock cleaning	Operator (subcontractor)
Services in storage sidings	Operator (subcontractor)
Provision of on-board train protection systems; telecom and communications services	Manufacturers of the equipment
Services in border stations	ÖBB Infrastructure and incumbent New entrants: Principally no demand

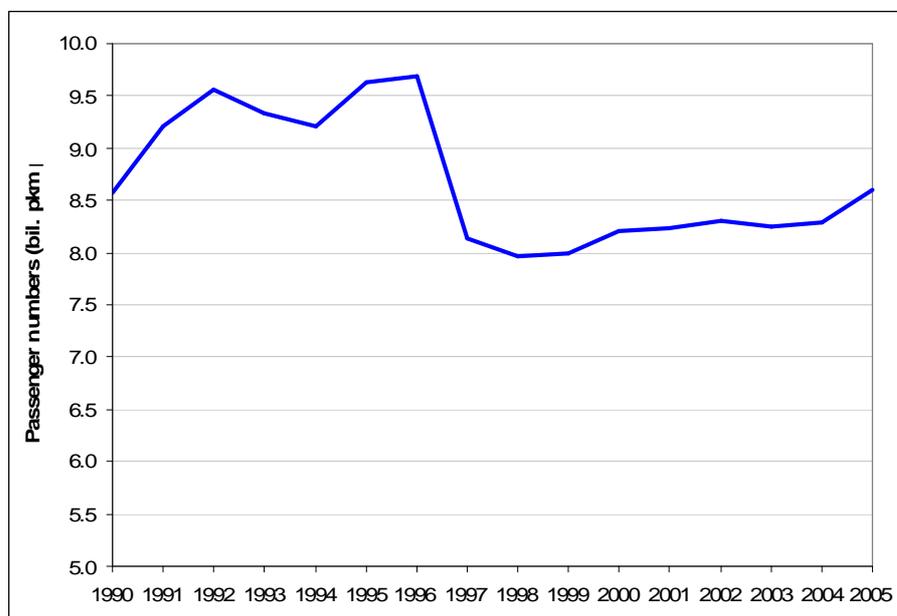
Market information

- 1.3 The railway network – has diminished slightly in the last years. The following figure shows in fact that network length decreased from about 6,800 km in 1996 to 6,581 km in 2005 (the most recent available figure).

FIGURE 1.1 LENGTH OF AUSTRIAN RAILWAY NETWORK

Source: ÖBB

- 1.4 On one hand, this reduction can be interpreted as a reaction to structural changes within the economy (e.g. growing importance of service sector and site relocation to Eastern Europe), but on the other hand it led to a fall in the supply to rail market, including a reduction in the number of sidings available.
- 1.5 There is a substantial shift in the transport figures as shown in the figure below. While 2005 has seen an increase in the passenger-km transported, the mid 1990s saw a substantial fall in the number of passenger-km.

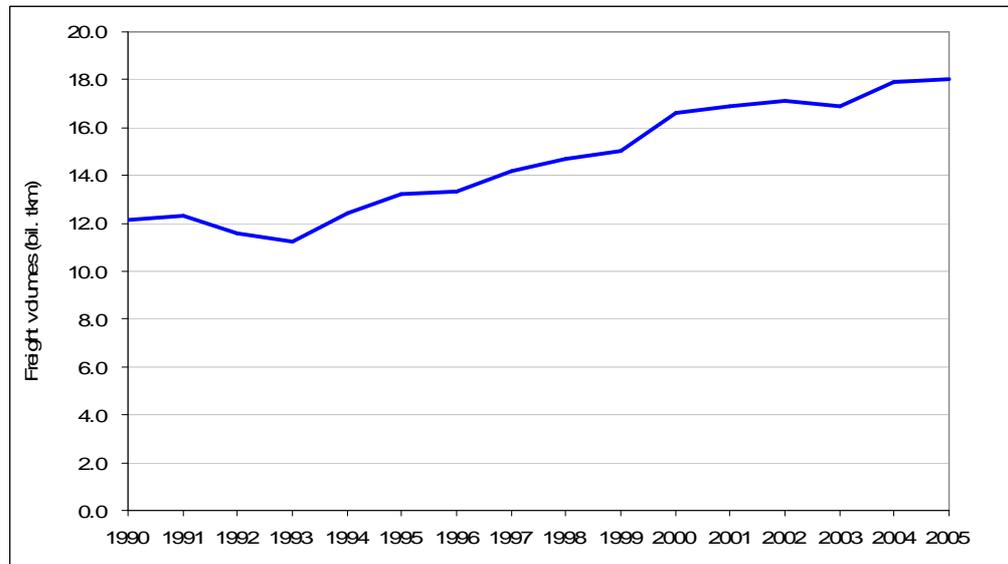
FIGURE 1.2 PASSENGER TRANSPORT IN THE AUSTRIAN RAILWAYS

Source: ÖBB

- 1.6 The rail freight market has also experienced growth, with just over 18 billion tonne-km carried in 2005; this was the largest volume of traffic in the last decade, as shown

in the figure below.

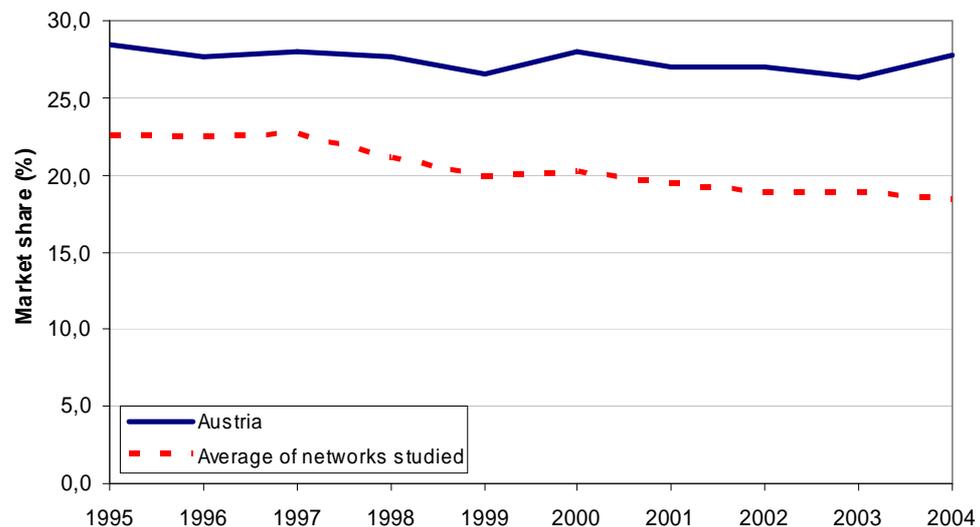
FIGURE 1.3 FREIGHT TRANSPORT IN THE AUSTRIAN RAILWAYS



Source: European Commission and Steer Davies Gleave analysis

- 1.7 The intermodal share between the various transport modes has remained stable in the recent years. Measured in (tonne-km) the market share of the rail sector was in 2004 above 25% when compared to other land based transport modes. The change in market share is shown in the figure below.

FIGURE 1.4 MARKET SHARE OF RAIL FREIGHT IN AUSTRIA



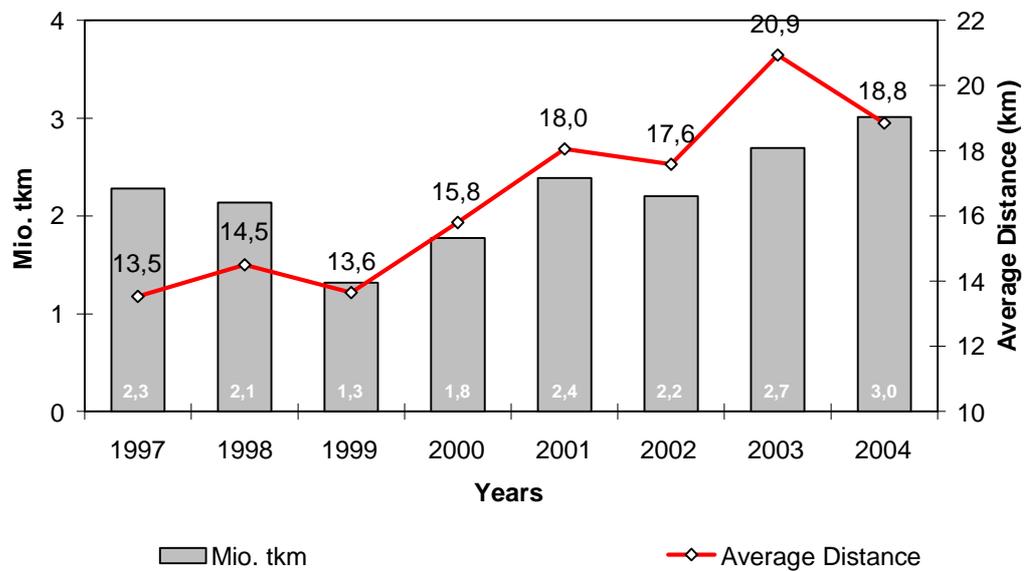
Source: European Commission and Steer Davies Gleave analysis (when compared to other land based modes of freight transport)

- 1.8 Market trends altogether reflect a common picture, which is that there have not been major changes in growth rates, intermodal shares or average distances travelled. The

effects of the intramodal competition level can be derived from the following figure.

- 1.9 In the past two years, private railway companies have begun to grow, but the market share of new entrants is still small, 0.19% in 2004 when measured in tonne-km. This compares to 0.24% achieved in the 1997, the first year in which records were kept for private companies.

FIGURE 1.5 AUSTRIAN PRIVATE COMPANIES DEVELOPMENT



Source: Statistic Austria

- 1.10 The companies currently operating in the Austrian market are listed in the table below.

TABLE 1.2 LIST OF AUSTRIAN RAILWAY COMPANIES

Companies	Companies
ÖBB Österreichische Bundesbahnen	Niederösterreichische Schneebergbahn GmbH
Rail Cargo Austria (RCA, OEBB)	Raab - Oedenburg - Ebenfurter Eisenbahn AG
Achenseebahn AG	RTS Rail Transport Service GmbH
Aktiengesellschaft der Wiener Lokalbahnen (WLB)	Salzburger Lokalbahn
CargoServ Cargo Service GmbH	Stadtwerke Klagenfurt AG – Verkehrsbetriebe
Graz – Köflacher Eisenbahn GmbH	Stadtwerke Leoben – Verkehrsbetriebe
Grazer Stadtwerke AG – Verkehrsbetriebe	Steiermarkbahn Transport und Logistik GmbH
Innsbrucker Verkehrsbetriebe und Stubaitalbahnen GmbH	Steiermärkische Landesbahnen
Linz Linien GmbH	Stern & Hafferl Verkehrsgesellschaft m.b.H.
Linzer Lokalbahn AG	Südburgenländische Regionalbahn
Lokalbahn Payerbach, Hirschwang GmbH	Tauern Touristik GmbH
LTE Logistik- und Transport GmbH	TX Logistik GmbH
Montafonerbahn AG	Wiener Linien GmbH & Co KG
Mürztaler Verkehrsgesellschaft m.b.H.	Zillertaler Verkehrsbetriebe AG

Source: Railimplement

- 1.11 The largest companies among those mentioned above are ÖBB, Rail Cargo Austria and LTE Logistik. ÖBB to a certain extent is developing in a similar way to the incumbents in Switzerland or Germany.

Implementation into national law of the provisions relating to access to railway services

TABLE 1.3 EU LEGISLATION TRANSPOSED INTO NATIONAL LAW

EU Legislation	Title	Implemented (and if so, in which piece of legislation)
Directive 2001/14	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Yes. Eisenbahngesetz 1957, 38. Bundesgesetz zur Änderung des Eisenbahngesetzes 1957, April 30 th 2004

- 1.12 In July 2006, the new railway law was put into force. The current version of Änderung des Eisenbahngesetzes 1957, des Bundesbahngesetzes und des Bundesgesetzes zur Errichtung einer "Brenner Basistunnel Aktiengesellschaft" (BGBl. I Nr. 125/2006) can be found on the Austrian Government website.
- 1.13 The new railway law shall contribute to a greater liberalisation and better rights for users. The most important parts of this law concern the safety certification rules and the strengthening of the regulator's competencies. Furthermore it will implement

European Directives 2004/49, 2004/50 and 2004/51 into Austrian national law. Additionally access rights on other railway networks, ports and freight terminals will be granted.

- 1.14 The new legal framework will likely cause a higher level of administrative work, not only for railway companies but also for the relevant official bodies. The interfaces between infrastructure and transport companies may become more transparent. The affected companies will have to undertake more detailed preparatory work prior to commencing operations. Especially the security and preparation issues demand attention.
- 1.15 It is early to say if the new legal framework will influence the demand for rail-related services in Austria. This will also depend on the expected growth in volumes as a result of the new legal framework. On the other hand, many of the new rules mainly concern safety and security issues, which in fact don't seem the "core problem" of the railway sector in general. It is not known whether or not the efficiency of regulatory framework will be improved.
- 1.16 As mentioned the regulator's (SCG - Schienen-Control GmbH) functions will change. It can be expected that the SCG position will not be strengthened to become a strong regulatory body but will focus on the monitoring of market development and the assessment of customer satisfaction. In particular, in case of complaints from the customers the regulator can demand information from the companies. SCG furthermore has the right to participate (as an observer) in hearings regarding the timetabling process and eventual access difficulties.
- 1.17 Summarising, the law will make the interfaces between railway infrastructure and railway transport companies become more transparent. The affected companies will have to undertake more preparatory work before starting operations, specifically with regard to security and safety issues.

Access conditions

- 1.18 The 2006 Network Statement was valid from December 2005 by ÖBB Infrastructure Operating AG (ÖBB Infrastruktur Betriebs AG). Attached to it, the product catalogue ("Produktkatalog") 2006 describes all the services offered by the infrastructure manager regarding open access and as well as their relevant prices.
- 1.19 The Network Statement sets out the current state of the network (classes of routes, number of routes, steep routes, kind of traction, etc.) In addition, further links to information sources are given with regard to network working hours and train parameters (weight, length, speed, energy supply, etc.) Details concerning restrictions to the network are provided separately. The major construction projects for the coming years are also provided.
- 1.20 The access conditions are not always clear in certain facilities where a separate agreement needs to be entered with the facility owner. With most services, a contract must be signed with ÖBB; for example, for maintenance services, a contract needs to be entered into with ÖBB Traktion.

The minimum access package and other services

1.21 The Network Statement gives basic information about who possesses access rights and what conditions have to be met for access to the network as well as to connected infrastructure.

Charging for services

1.22 The product catalogue mentions the following available services and their prices. This section does not contain the charges for minimum access.

- Station stops for passenger trains: This service covers the access to and utilisation of the platforms as well as other necessary assets to board and alight at stations. Moreover access to passenger information systems is allowed where it is provided at the stations. Five categories of stations are defined. The relevant charges vary from €0.98 for stations of "category 4" to €5.45 for stops in stations like Wien West. All stations of the supplementary network ("category 5") are free of charge.
- Shunting: This kind of service is offered at eight sites called "shunting yards at main network knots", they are: Bruck a. d. Mur, Graz, Hall/Tirol, Linz, Salzburg Gnigl, Villach Süd, Wels and Wien. The standard service package on main shunting sites is listed in the following table. Shunting services can also be obtained outside the above mentioned marshalling yards. The supply is dependent on the locally available resources. A minimum duration of five hours per operation is set. In some cases, synergies can lead to a fall in the time required. The prices included below do not include the cost of traction, which has to be provided by the railway company. Further services like weighing, labelling, sealing, cleaning are included elsewhere. A list of other potential marshalling yards is also included; however contact details of people responsible for these sites needs to be obtained separately.

TABLE 1.4 PRICES FOR SHUNTING SERVICE ELEMENTS ON MAIN SHUNTING SITES

Service Element	Price (€)
Preparation of the traction vehicles (per unit)	15.90
Train composition and decomposition (per wagon)	2.30
Hours of operation to compose/decompose of passenger trains	78.75
Preparation of passenger train run (per hour/staff)	10.65
Addition of further wagons (per wagon)	3.25
Coupling of wagon groups (per group)	6.00
Special treatment of wagons (per wagon)	2.35
Complete test of the brakes (no maintenance) (each)	15.90

Source: ÖBB Product Catalogue

- Stabling: This service type covers the following functions: the stabling of vehicles, the rental of rail assets and (if appropriate) the use of public loading/unloading rail assets. The prices for these services are shown in the table

below. Stabling fees have to be paid if the facility is used for more than 24 hours. This is not valid for the loading/unloading of wagons, for periods where the marshalling yards are being used, in case of disrupted operations or if passenger trains have to wait after an agreed manoeuvre.

TABLE 1.5 PRICES FOR PARKING SERVICES

Service Element	Price (€)
Parking fee per vehicle (per day)	2.25
Rental of metre track per day	0.19
Rental of metre track per month	4.00
Rental of metre track per year (in case of committed at least 10 months)	40.00
Use of loading track. Loading/unloading (per wagon)	0.40

Source: ÖBB Product Catalogue

- Utilisation of other assets: The use of other assets comprises facilities to pre-heat passenger trains and weighing points, where these services are available. There are currently 73 sites where the pre-heating of trains is possible. The supply of energy has to be organised separately, as well as the use of the necessary staff.

TABLE 1.6 CHARGES FOR THE USE OF OTHER FACILITIES

Service Element	Charge (€)
Use of heat-up facilities (per link)	0.70
Use of weighing facilities (rail bridge) (per year)	12,000.00
Use of weighing facilities (rail bridge) (per month)	1,200.00
Use of weighing facilities (rail bridge) (per day)	60.00
Use of weighing facilities (run scale) (per year)	48,000.00
Use of weighing facilities (run scale) (per month)	4,800.00
Use of weighing facilities (run scale) (per day)	240.00

Source: ÖBB Product Catalogue

- Prices of other services: Assistance to other railway companies by offering "other services" through the infrastructure manager is possible depending on the availability of staff.

TABLE 1.7 CHARGES FOR OTHER SERVICES

Service Element	Charge (€)
Use of staff for operational charge (per hour)	47.60
Use of head of rail operations (per hour)	45.70
Use of staff in signal boxes (per hour)	36.50
Use of staff for shunting services (per hour)	35.00
Use of staff for wagon services (per hour)	36.60
Use of communicator/managing director (per hour)	36.50
Use of staff for support services at stations (per hour)	34.50
Use of head for shunting services with vehicle operations (per hour)	37.20
Use of staff of security services	25.60

Source: ÖBB Product Catalogue

Stakeholder analysis

Problems/complaints

- 1.23 During our analysis, no specific problems or complaints were identified in the market for rail-related services; however, some industry issues remain. The supply of new locomotives is still complicated and second hand locomotives are not available. A real market for used machines has not been created; instead redundant machines of ÖBB class 1142 have been sold to the Swedish railways.
- 1.24 The major player in the Austrian rail market ÖBB is still under strong political influence. The strong focus on decentralisation is an issue of political discussions and will probably change in future. The incumbent has also to face a number of commercial challenges such as the fostering of growth in its rail business, profitability and the removal of deficits, as well as the internationalisation of its freight business (not only) towards Eastern Europe.
- 1.25 The level of competition within the railway sectors seems to be quite poor. Small railway companies usually cooperate with the incumbent in case of long distance freight transport. Railion is still cooperating with RCA and hands over all trains at the border stations and does not run own trains in Austria like in Switzerland or Italy. So the pressure to initiate operational changes in order to improve the intermodal and intramodal performance of the rail (freight) sector is not very high.

Stakeholder views

- 1.26 The future perspectives for rail-related services can be judged as generally positive, if the sector was put into the position to prove its ability to provide services to their clients - passengers as well as freight - at least at the same level of quality and attractive products as other transport modes. If the framework (legal, fiscal and so on) is not appropriate the sector cannot demonstrate its (new) capability. So firstly there must be the political understanding to foster the railway sector effectively for example by setting an adequate framework so that private investors develop the necessary

confidence to invest. In the second phase the sector has to fulfil its potential. As long as the railway sector in general is understood to be too complex, costly (see details on prices above) and unreliable (at least in comparison to other modes), clients and investors will continue to stay away from railway business.

- 1.27 A large number of stakeholders stated that the railway market is not functioning very well. In actual facts, there are small improvements in terms of growth and intramodal competition and the network access conditions have been improved during the last years. However, in this document some details regarding the access and the following use of rail infrastructure still are not explained; so the cost of procedures and the homologation of vehicles remain an issue of discussion. So open points of the Network Statement have to be addressed by each applicant, if it has the necessary technical and rail-operational knowledge.
- 1.28 The necessary procedure for applicants in order to prepare the network access has improved anyway. There are a lot of available documents and transparency was improved without an equivalent increase in complexity.
- 1.29 The new railway law ("Eisenbahngesetz") will set a new framework, being its main issue the implementation of new safety rules and procedures. It is hoped that this will increase growth in the sector as the railway sector in general is already considered as one of the safest transport modes.
- 1.30 The regulatory framework is stated to be too weak to create a real level playing field. There is in fact a very close political relationship between ÖBB and the major shareholder, the Austrian State. The SCG, the regulatory body in Austria, has gained new responsibilities through the amendment of the railway law, which was initiated with the implementation of the 2nd Railway Package and the finalisation of the implementation of the 1st Railway Package. The SCG now can get more involved in discussions regarding deregulation issues, but practically has no effective lever to impose sanctions in case of discrimination. However, it can also play an important role as a mediation body. Finally, the levers at SCG's disposal to contribute to a level playing field for all Austrian competitors mainly comprise options of soft monitoring and discussion attendance but no possibility for direct intervention.
- 1.31 There has not been much development in the rail transport market and the new legal framework concerning rail-related services has not been tested yet. If rail-related services will follow the overall trend in transport services, a small increase in demand can be expected. The further development of private companies will also be decisive; the more their market share increases, the better the outlook for additional demand for rail-related services may become.
- 1.32 A change in inter and intramodal competition may also influence the outsourcing as well as in-sourcing trend. The faster competition develops, the faster companies will be forced to improve their methods of production, through, for example, the division between owned and leased locomotives, wagons and staff.
- 1.33 Growing competition will also contribute to change the current construction of the value creation chains. The direction in which this will happen is not clear. Even today there are signals regarding the non-asset based business, the redefinition of market

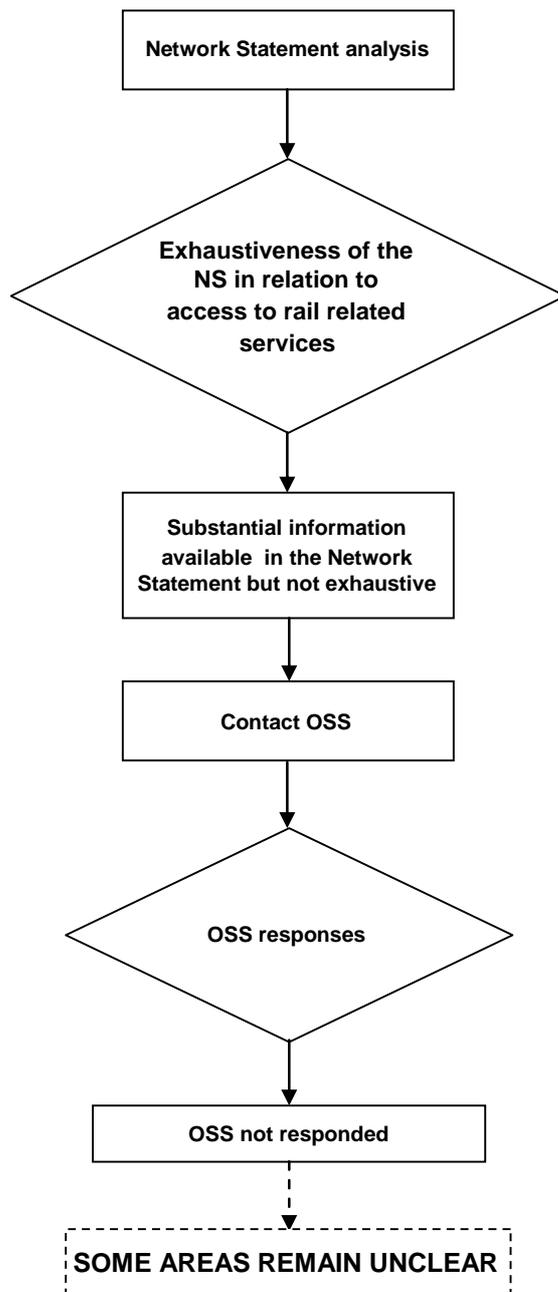
positions (pure carrier vs. holistic logistics solutions) and outsourcing/in-sourcing. If the current trend of limited intramodal competition in railway sector continues, there will be no significant potential for new rail-related services. One aspect outside the rail industry is the size of the relevant market. As the railway business is still mainly understood to be focused on large transport volumes and long distances the single operator as well as the railway sector in general has difficulties in operating efficiently and by this competing successfully with other rail and road operating companies.

- 1.34 The lack of intermodal competition is also a result of:
- The small market size; private companies can only reach very small market volumes (See the local activities of SLB for example);
 - Lack of capital for international operations. Municipal WLB expanded operations reasonably but private LTE developed comparably moderately;
 - No effective protection due to a missing powerful regulator;
 - In many cases only the incumbents receive subsidies to run trains in combined transports (information obtained from ERFA)
 - Homologation and certification issues as set out in the Railimplement report;
 - Difficulties in access and high cost of shunting yards, as in the majority of cases in house shunting cannot be done cost-effectively by new entrants. In fact, the number of in house resources is limited and this does not allow them to have multiple activities (e.g. wagon inspectors, traction) at the various shunting yards.
 - Ambiguities in relation to State Aid to the incumbent;
 - Lack of private initiatives and entrepreneurial activity.
- 1.35 One of the most important obstacles in Austria is the lack of a powerful regulator. As ÖBB has no interest in seeing a strong regulatory body, its influence made sure that politicians decided to form a regulatory framework which allows the SCG not to act as an efficient body in avoiding discrimination. This can be seen as an important obstacle to the development of a competitive market as we have been told that the operators do not have a strong enough body to appeal to.

Case study

- 1.36 For the case study we contacted the One Stop Shop in Austria to obtain further information on the access conditions, the figure below sets out the process we followed for this network as well as the progress in terms of obtaining further data.

FIGURE 1.6 CASE STUDY PROCESS



- 1.37 As can be seen from the figure above, the Network Statement does not include complete information with respect to access to rail-related services, the product catalogue provides further information but this is not exhaustive. To fully comprehend the access conditions we contacted the OSS for Austria, but it has not responded to our survey. As a result, we conclude that there are some areas of information relating to access conditions that remain unclear.

2. BELGIUM

Introduction

- 2.1 Belgium has implemented into national law all the EU Directives, nevertheless, we understand that its application on the ground is totally different, and new entrants have much difficulty in receiving a safety certificate. There is only one rail freight operator, D&L Cargo, in addition to the incumbent operator, SNCB.
- 2.2 The table below sets out who provides the rail-related services in Belgium.

TABLE 2.1 RAIL-RELATED SERVICES BY PROVIDER

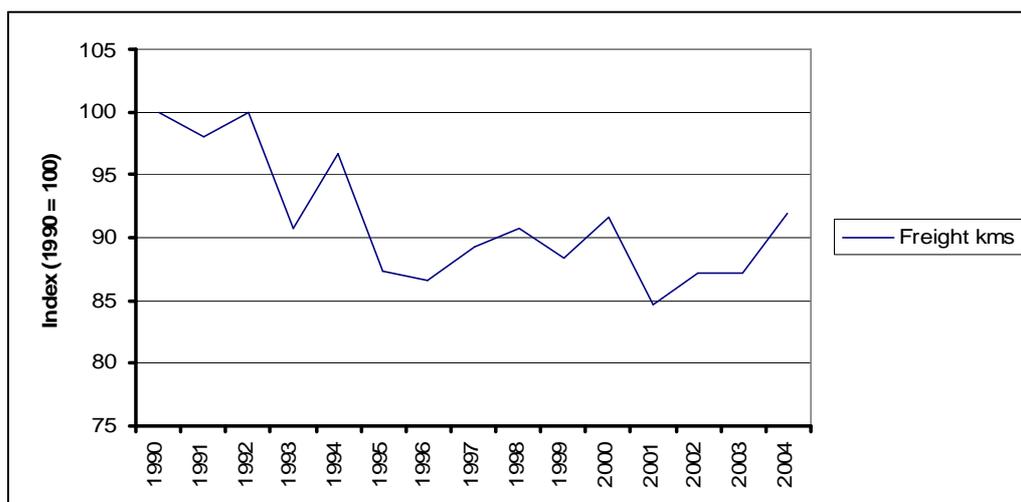
Service	Provider
Electricity for traction	Infrabel
Diesel fuel for locomotives	Each operator independently
Locomotive pushing services	Each operator independently
Back-up services	Each operator independently
Services in marshalling and shunting yards	Infrabel
Train formation services	Infrabel
Services in freight terminals	Infrabel
Telematics services for freight operations	N/A
Services in passenger stations	SNCB
Computer reservation services for passenger transport	Each operator independently
Training facilities	Each operator independently
Leasing of rolling stock and staff	Leasing companies
Maintenance	Each operator independently
Rolling stock cleaning	Each operator independently
Services in storage sidings	Infrabel
Provision of on-board train protection systems; telecom and communications services	Manufacturers
Services in border stations	Infrabel
Technical inspection services	Infrabel

Market information

Market Shares

- 2.3 Freight traffic in Belgium saw a steep decline between 1990 and 2001, follow this date, it once again began to increase. Almost 75% of the freight traffic in Belgium is international due to its relatively small size and to the major ports on its coasts.

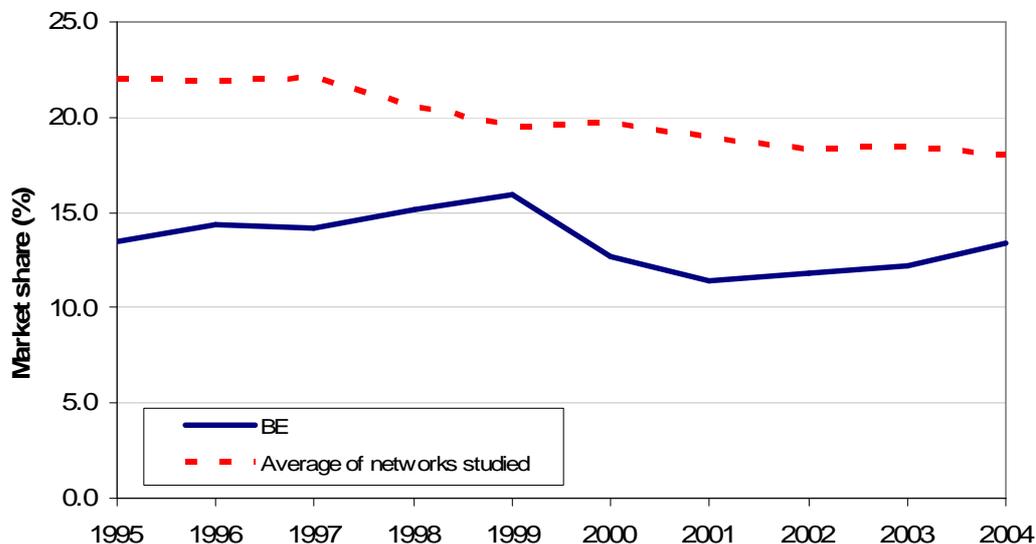
FIGURE 2.1 FREIGHT TRENDS



Source: UIC

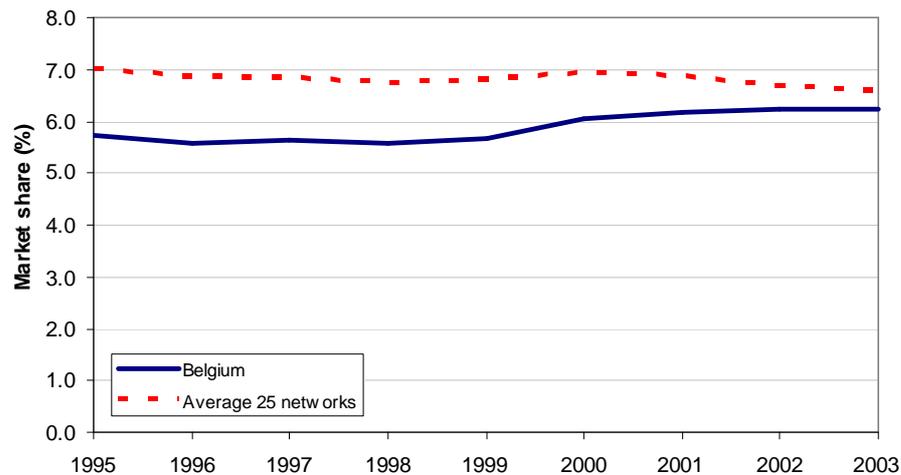
2.4 The share of rail freight transported when compared to all modes of transport has seen a gradual fall since 1992 and followed the general trend in the volume of freight transported, the figure below displays the data since 1995, which show an increase between 1997 and 1999 and also an increase in recent years.

FIGURE 2.2 RAIL FREIGHT INTERMODAL MARKET SHARE



Source: UIC

2.5 The market share for rail passenger services when compared to other land based modes of transport has remained fairly steady in recent years with a slight increase in the last two years of our analysis (shown in the figure below).

FIGURE 2.3 RAIL PASSENGER INTERMODAL MARKET SHARE

Source: European Commission and Steer Davies Gleave analysis

Market participants

Passenger

- 2.6 SNCB remains the sole passenger railway undertaking in Belgium. No new entrants are expected in the short-term. The only other passenger operators in Belgium are the international services Thalys and Eurostar which SNCB has a stake in.

Freight

- 2.7 SNCB and four other railway undertakings have licenses for rail freight transportation in Belgium. These other companies are SC Intercontainer Interfrigo, CMI Traction, Trainsport and D&L Cargo. D&L Cargo holds approximately 3% of the current market share, which has resulted as a result of acquiring a percentage of SNCB's freight market. The other companies that have received a licence are planning to start services soon, while we have been informed that there are other operators that are requesting a licence to operate on the Belgian network.

New entrants

- 2.8 In addition to the operators mentioned above that have obtained a licence, a number of operators have obtained a safety certificate to operate in Belgium, these operators are D&L Cargo, SNCF and Rail4Chem. Among these only the certificate of SNCF is valid throughout the entire Belgian network; the other two are restricted to certain areas of the network.

Implementation into national law of the provisions relating to access to railway services

TABLE 2.2 EU LEGISLATION TRANSPOSED INTO NATIONAL LAW

EU Legislation	Title	Implemented (and when, in which piece of legislation)
Directive 2001/14	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Yes: Arrêté Royal dated 12 March 2003 "Arrêté royal relatif aux conditions d'utilisation de l'infrastructure ferroviaire" modified by the Arrêté Royal dated 11 June 2004 "Arrêté royal modifiant l'arrêté royal du 12 mars 2003 relatif aux conditions d'utilisation de l'infrastructure ferroviaire"

2.9 The royal decree of 12 March 2003 mentioned above refers specifically to rail-related services in Articles 15, 16 and 17 and in Annex II, while the charging for these services is included in Article 62. This decree, and in particular articles 16 and 17 were subsequently modified by Article 10 of the royal decree of 11 June 2004, there was also a modification to Article 62, but this did not affect the reference to charging for rail-related services.

Access conditions

2.10 The main rail-related service facilities in Belgium are operated either by the infrastructure manager or by the incumbent railway undertaking. The fact that some of the facilities are managed by the railway undertaking may be a problem for other operators trying to access the facility.

2.11 Infrabel's Network Statement includes information regarding rail-related services. The appendices to the Network Statement set out the minimal services description as well as the equipment that is available in the facilities as well as their related prices. Any railway undertaking which has been granted access to the rail network, can be granted access to rail-related services. The procedure is the same as for the capacity allocation of the rail network.

The minimum access package and other services

2.12 The minimal services offered by Infrabel are the following:

- Processing of requests for infrastructure capacity;
- The right to use the capacities granted;
- Use of the junctions and switches of the network;
- The services necessary for the running of trains, including signalling, traffic control, traffic management, communication, and the provision of information concerning the running of the trains;
- Any other information necessary for the implementation or operation of the

service for which the capacities are requested.

2.13 Infrabel must provide access to the following:

- Electrical installations and lines;
- Access to fuelling stations on the network;
- Access to passenger stations;
- Access to freight terminals;
- Access to the marshalling and shunting yards;
- Train formation yards;
- Holding sidings;
- Access to maintenance facilities.

2.14 The following is a list of the additional services which can be provided by Infrabel:

- Supply of traction current: there are indicative prices, but more precise prices are based on the path requested and the train used;
- Supply of fuel: not provided;
- Services after the daily working schedule: an agreement must be reached between the railway undertaking and Infrabel;
- Exceptional consignments and dangerous goods: not offered.

2.15 Connected services offered by Infrabel:

- Access to telecommunication network is only provided if included in an agreement between Infrabel and the railway undertaking;
- Checking of rolling of stock is not provided;
- Any additional information cannot be provided by Infrabel.

Charging for services

2.16 The approach that is used for charging for access to service facilities and to the services themselves is different to the determination of the minimum access package charge. Access to rail-related facilities is charged for according to the level of competition on the network, while charging for the complementary and ancillary services depends on the effective use of the service if there is only one user. This is a direct reference to the contents of the national law and the EU Directive.

2.17 The Network Statement provides formulas for the calculation of access to facilities and for the calculation of the price of marshalling. This shows a degree of transparency and cost reflectivity as the charge relates directly to the location in which the service is being supplied. This is an example in which the infrastructure manager has taken in the law and provided more detail in the Network Statement to the benefit of all operators.

Problems/complaints

2.18 From the information that we have been provided from stakeholders in Belgium, it seems that the main problems with the market remain related primarily to the setting

up of the rail business and of operations. In addition we have been informed that the charges for shunting services in some ports are substantially higher than in similar facilities elsewhere. This may be due to the number of resources that are used in the provision of the service, also higher than elsewhere, which may be an indication of the relative efficiency of the service provided.

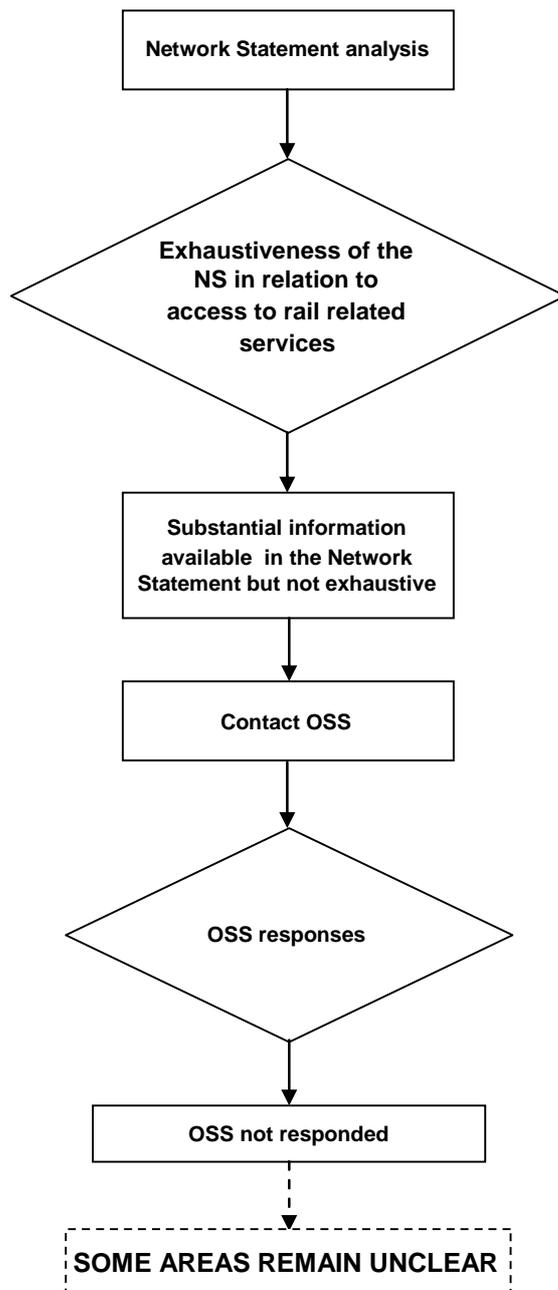
Stakeholder views

- 2.19 As we mentioned in the main report we have not been able to contact all the new entrants that we planned to as a result of their reluctance to participate. We have however had a wide discussion with a number of stakeholders in the market that do not point to any specific problems with rail-related services.
- 2.20 Access to ancillary facilities is defined by bilateral negotiation with the infrastructure manager, Infrabel, or with IFB for access to terminals. We have been told that the infrastructure manager is scrupulously fair to all operators to avoid any kind of complaints to the local authorities or to the European Commission.
- 2.21 We have also been told that although there is a lot of information in the appendices of the Network Statement, there is no published information on charges or on detailed conditions for access and, as a result, we envisaged little transparency in the overall framework.
- 2.22 The new entrants we spoke to focus mainly on the problems in relation to starting operations, such as obtaining a licence, covering insurance costs and obtaining rolling stock. This last point is of particular importance to them as they have problems obtaining second hand rolling stock and the price of leased rolling stock is often prohibitive.

Case study

- 2.23 For the case study we contacted the One Stop Shop in Belgium to obtain further information on the access conditions, the figure below sets out the process that we followed for this network as well as the progress in terms of obtaining further data.

FIGURE 2.4 CASE STUDY PROCESS



2.24 As can be seen from the figure above, the Network Statement does not include complete information with respect to access to rail-related services. For further information we contacted the OSS but they have not responded to our survey. As a result we have concluded that for access conditions there are some areas that remain unclear.

3. BULGARIA

Introduction

- 3.1 The railway network of Bulgaria consists of about 4,300 km railway lines, 4,055 km of which is standard gauge (1,435 mm), the rest being narrow-gauge (960 mm). About 960 km (22% of the whole network) is double track and 2,640 km, about 61.4% is electrified. The major part of the railroad network is designed for speeds of 80 – 100 km per hour, with only 150 km of the lines have a design speed of 130 km per hour.
- 3.2 BDZ EAD was established in 2002 as part of the requirements in relation to accession into the EU. In this context, Bulgaria complied with the relevant EU Directives and followed the practice of many European countries and consequently a new Railway Transport Act was adopted by Parliament and entered into force on 1 January 2002. According to this Railway Transport Act, the National Company Bulgarian State Railways was to be divided into two separate enterprises: the operating company (BDZ EAD) and an infrastructure company (SRIC).
- 3.3 Although several carrier licenses were issued both by Bulgarian Railway administration; and new carriers have entered the railway sector, competition in the Bulgarian railway market can still be described as poor. This also follows for the market for rail-related services, where supplementary services like technical maintenance of wagons, processing of train documents, shunting and other services like operations with cargo, provision of electricity, provision of fuel and cleaning of the rolling stock are still provided by BDZ. A full list of the services and their providers can be found in the table below.

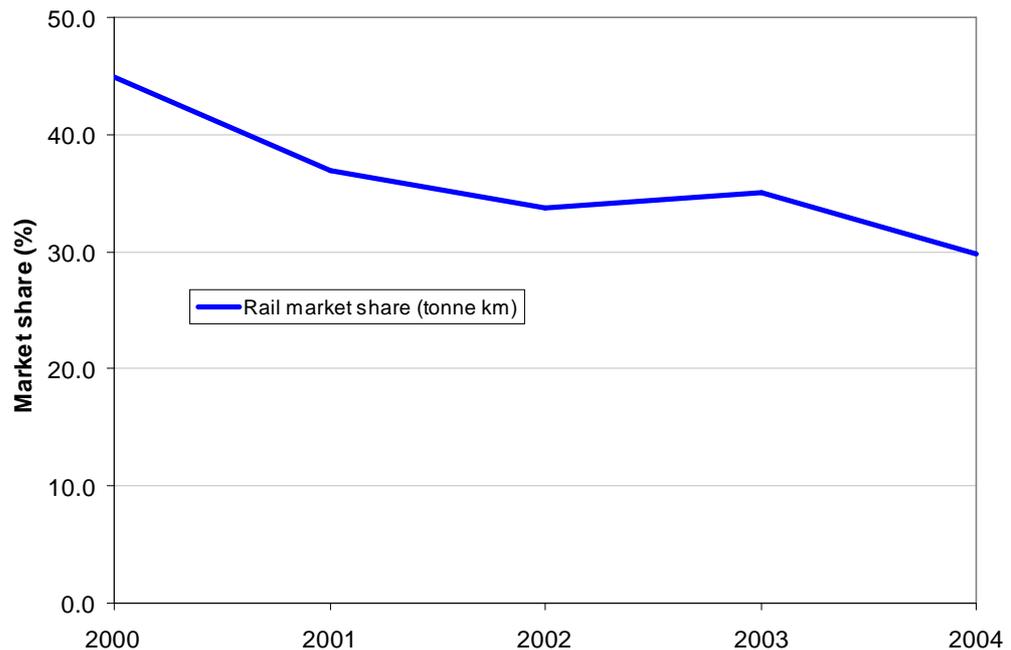
TABLE 3.1 RAIL-RELATED SERVICES BY PROVIDER

Service	Provider
Electricity for traction	BDZ (The infrastructure manager)
Diesel fuel for locomotives	BDZ (The infrastructure manager)
Locomotive pushing services	BDZ Bulgarian Railways
Back-up services	BDZ Bulgarian Railways
Services in marshalling and shunting yards	BDZ Bulgarian Railways
Train formation services	BDZ Bulgarian Railways
Services in freight terminals	BDZ Bulgarian Railways
Telematics services for freight operations	BDZ Bulgarian Railways
Services in passenger stations	BDZ Bulgarian Railways
Computer reservation services for passenger transport	BDZ Bulgarian Railways
Training facilities	BDZ Bulgarian Railways
Leasing of rolling stock and staff	BDZ Bulgarian Railways
Maintenance	BDZ Bulgarian Railways or closely related providers
Rolling stock cleaning	BDZ Bulgarian Railways
Services in storage sidings	BDZ Bulgarian Railways
Provision of on-board train protection systems; telecom and communications services	BDZ Bulgarian Railways Manufacturers of the equipment
Services in border stations	BDZ Bulgarian Railways
Technical inspection services	BDZ Bulgarian Railways

Market information

- 3.4 Organisational changes have been made to improve the position of the Bulgarian railway sector. At the beginning of 2002, the Bulgarian State Railway Company was decentralised and restructured. With the new Law on Railway Transport, the former State Railroad Company is split into two commercial entities - National Company "Railroad Infrastructure" and National Company BDZ. The National Company "Railroad Infrastructure" is responsible for managing the railroad infrastructure and National Company BDZ manages the transport of cargo and passengers. Access to the railroad infrastructure, control over the government procurement activities, issuance of licenses for transport of passengers and cargo, collection of fees, registers of the rolling stock etc. are performed by the Executive Agency Railroad Administration (EARA). The EARA activities are financed by the Ministry of Transport and Communications
- 3.5 Given BDZ's difficult financial situation, track conditions have deteriorated over the last five years. As a result, track speeds have been reduced (speed restrictions affect some 750 km, about one-third of the length of main lines), safety is becoming a concern and operating and maintenance costs are increasing.

- 3.6 Since 1997, the Government has taken significant steps to improve the efficiency of the State Railway under the umbrella of the Bank/EBRD sponsored Railway Rehabilitation Project. This included investments in infrastructure and rolling stock, major reductions in personnel, and divestiture of almost all ancillary activities. Based on the Railway Law in 2002 the Government separated the infrastructure and rail service arms of BDZ into two new independent companies complying with the main EU railway regulations.
- 3.7 The law also created the base for the opening of the railway infrastructure to competing rail service suppliers. All relevant regulations have been formulated and a powerful Railway Administration Executive Agency has been created to regulate the railway sub-sector. After the separation, the railway sector has gradually improved its performance. The losses have been substantially reduced from €49.7 million in 2001 to €19.49 in 2004. After 2003 the railway operator has achieved a gradual increase of the freight and passenger shipments.
- 3.8 Bulgaria has an extensive transport infrastructure but it is in generally poor condition. Road and rail transport are the two most important modes of transport. In the freight area, road transport, which has a share of about 55% of the combined road plus rail market, largely complements rail transport, focusing on shorter distance, higher value, and more time sensitive shipments. In the passenger area, on the contrary, road transport competes aggressively with rail transport and has gained a share of about 70% of the intercity transport market.
- 3.9 At the moment there are two licensed operators in the country – Bulgarian State Railways (BDZ EAD) as a national operator for passengers' and goods' transportation, and Bulmarket - DM OOD as a regional freight operator. The licensed operators are obliged to follow the national standards and requirements for technical operation and safety transportation, so that the operators can be monitored by relevant state authorities.
- 3.10 Since 1990, the amount of freight moved by rail, measured in tonne-km, has fallen dramatically, from just over 14 billion tonne-km to just over 5 billion tonne-km in 2004. Furthermore, in the last 5 years, as shown in the figure below, the market share of rail freight when compared to other land based forms of freight transport has also decreased dramatically however it still remains above the industry average.

FIGURE 3.1 RAIL FREIGHT INTERMODAL MARKET SHARE

Source: European Commission and Steer Davies Gleave analysis

- 3.11 The same downward trend has also been experienced in the rail passenger market where since 1990, the market has contracted from just below 8 billion passenger-km per annum to just below 2.5 billion passenger-km. And the same has happened to the market share of passenger services.

Implementation into national law of the provisions relating to access to railway services

- 3.12 The three main actors in the railway market in Bulgaria, i.e. the railway undertaking (BDZ EAD), the infrastructure manager (SRIC) and the Ministry (including EARA) are fully independent. Their administration is independent, their accounts are independent and they do not form a railway holding. Their links and relations fully comply with the EU Directives 2001/12/EC, 2001/13/EC and 2001/14/EC.
- 3.13 The table below sets out the national legislation that implemented Directive 2001/14/EC with respect to rail-related services.

TABLE 3.2 EU LEGISLATION TRANSPOSED INTO NATIONAL LAW

EU Legislation	Title	Implemented (and when, in which piece of legislation)
Directive 2001/14	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Railway Transport Act; Ordinance No 41 on the conditions for use and access to the railway infrastructure /State Gazette 64, 02.07.2001/ which are in line with the provisions of the Directive 2001/14.

- 3.14 The second phase of the rail transport restructuring was completed at the end of 1999 with the division and accountancy separation of the "railway infrastructure" enterprise within the State railway company. A Law was adopted as part of the third phase of restructuring the sector (which entered into force in 2002) and is the basis for the sector's unbundling and ended the state monopoly on transport of passengers and goods by rail. BDZ (Bulgarian Railways) has become a state-owned joint stock company. It has its own accounts and budget, and prepares its own business plan.
- 3.15 Bulgaria has adopted an ordinance on the design and construction of railway lines, stations, level crossings and other constituents, contributing to the transposition of the interoperability rules.
- 3.16 In the railway sector, Bulgaria has also made good progress, not only in aligning its legislation with the Directives (including the latest railway rules), but also in restructuring the railway company. All the institutions needed to implement the relevant rules are in place. It is important that these changes are now implemented, for instance, by ensuring that the independence of the management of railway undertakings is strengthened; by strengthening the railway administration; by the implementation of an efficient and fair rail infrastructure charging scheme and the preparation of the business plans for the two newly created companies, which are both in a difficult financial position.

Access conditions

- 3.17 The framework regarding the access conditions is set in the Network Statement which is only partly available in English. The legislative framework for the market opening process is made up of the following legal acts that have also been translated into English language:
- Railway Transport Act /State Gazette № 97, 2000/;
 - Ordinance № 41 on the conditions for use and access to the railway infrastructure /State Gazette № 64, 02. 07. 2001/;
 - Ordinance № 42 on licensing of railway operators for transportation of passengers and/or goods and on licensing of experts, issuing safety certificates, /State Gazette 67, 31. 07. 2001/;
 - Ordinance № 43 on railway transport of passengers, luggage and pouches implementing COTIF Convention /State Gazette № 86, 05.10. 2001/;

- Ordinance № 44 on railway transportation of goods implementing COTIF Convention /State Gazette 91, 23.10. 2001/;
- Ordinance № 46 on carriage of dangerous goods by rail /State Gazette 107, 11. 12. 2001/;
- Ordinance on the terms and procedure for assignment and performance of the obligations to provide public carriage services in the railway transport
- Rules of procedure of Executive Agency Railway Administration/State Gazette 61, 10. 07. 2001/

3.18 Regarding the access to the railway infrastructure the following article are of major relevance:

- ORDINANCE No. 41, Article 8 which forces the National Railway Infrastructure Company to prepare a document on the actual conditions of the railway network (the Network Statement). This document shall contain the infrastructure parameters, information about the conditions for providing access to it, the applicable fees, the principles and criteria of capacity allocation, the restrictions on the infrastructure use, the time limits and procedures for submitting applications for capacity allocation, etc
- ORDINANCE No. 41, Article 9 states that the access to the national railway infrastructure has to be provided according to the existing laws to all the railways companies who have a licence and a safety certificate.

3.19 If the required access or required path is not provided, then, the applicant railway undertaking must appeal to SRIC and/or EARA. The procedures for complaints and arbitration are standardised and follow the general (all situations) complaints and arbitration rules included in the COTIF regulations.¹

3.20 The Infrastructure Company is responsible for providing all the updated information on the condition of the network to all operators and EARA. Our analysis and research has identified the fact there is very little information with respect to access conditions for rail-related services.

The minimum access package and other services

3.21 The framework regarding the services included in the provision of railway infrastructure is set in ORDINANCE No. 41, Annex to Articles 7 (2) and 17 (2)

I. Main services provided to railway enterprises:

1. Handling of applications for use of infrastructure capacities.
2. Right of use of allocated capacities.
3. Use of tracks at railway stations and of sidings to industrial lines.
4. Signalling, control, traffic dispatching, communications and provision of information on train traffic.
5. Other information necessary for putting in service or operation of the services, which the relevant capacity has been allocated for.

¹ The rules contained in Articles 12-16 of the Convention referring specifically to Arbitration

6. Use of the catenary for electric traction, where necessary.
7. Fuelling infrastructure.
8. Use of distribution railway stations.
9. Use of railway stations for train composition.
10. Use of railway stations for train parking.
11. Use of maintenance centres.

II. Additional and accompanying services

Additional services

1. Provision of traction power supply.
2. Preliminary warming up of passenger cars.
3. Fuel supply and creation of conditions for shunting.
4. Execution of contracts for carriage of dangerous goods, including control activities, assistance for the movement of special train compositions.

Accompanying services

1. Provision of access to the telecommunication network.
2. Provision of additional information.
3. Provision of technical control on the rolling stock, etc.

Charging for services

- 3.22 The charging framework for the usage of the public railway infrastructure is set in RAILWAY TRANSPORT ACT, Art. 35. (1) Carriers shall pay infrastructure charges to the State Railway Infrastructure Company for using the railway infrastructure. However, there is no information with respect to the prices for rail-related services.

Stakeholder analysis

Problems/complaints

- 3.23 There is currently no evidence of problems or complaints in the Bulgarian rail sector specifically in relation to rail-related services. This, however, may be due to the fact that the market is still going through the full process of liberalisation and as such there has not as yet been substantial entry which may lead to a registering of complaints in this area.

Stakeholder views

- 3.24 The Stakeholder opinions we were able to gather relate to the condition of the railway infrastructure as well as the critical financial situation of Bulgarian Railways. Bulgaria will soon begin to invest in its transport infrastructures to attract investment and boost competitiveness before planned European Union membership in 2007. Stakeholders state that Bulgaria could lose a crucial geo-strategic advantage if it does not modernise its outdated railways.
- 3.25 The incumbent operator is developing a strategy to finance investments in stations. The strategy contains the possibility of allowing the future concessionaires to use the lands near the stations, provided that they repair the stations and maintain the nearby

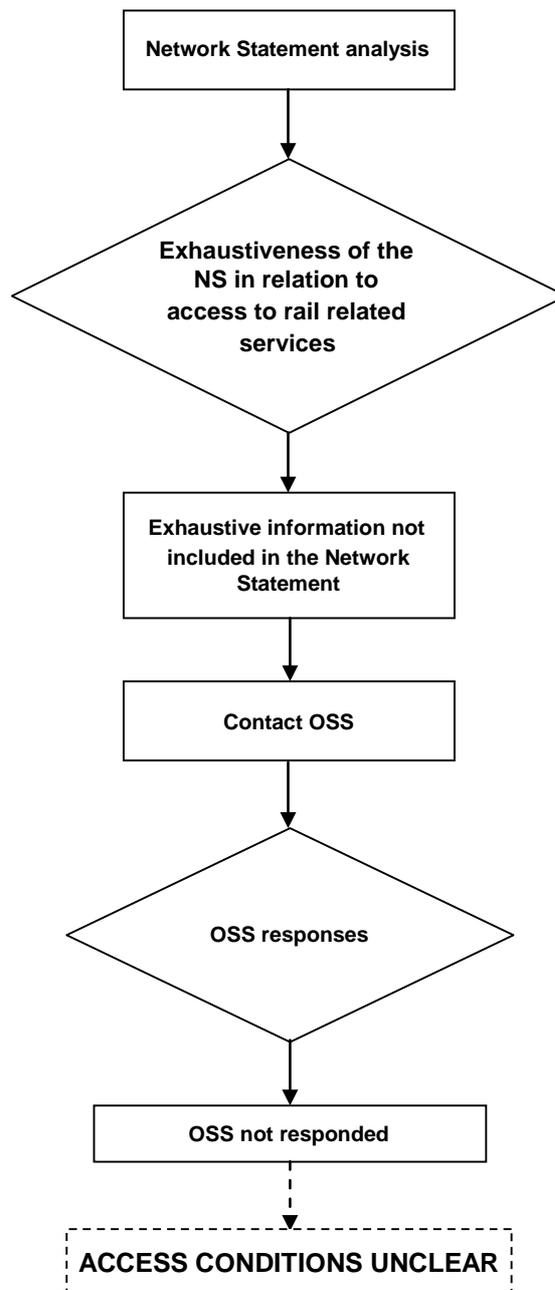
area. The negative financial situation of Bulgarian Railways is underlined by the fact that Bulgaria's National Railway Infrastructure Company (NRIC) will have to sell the Pioner and Serdika train stations in Sofia to service its debt with the local company Evrometal.

- 3.26 In 2005 NRIC undertook to settle its obligations towards Evrometal resulting from the entering into a two-year contract at a fixed interest rate of 7%. The liability was cancelled through an agreement that stated that Evrometal would receive a share of NRIC's future earnings from the sale of real estate properties, and facilities comprising the Pazardjik-Varvara and Oryahovo-Cherven Bryag railway sections and of 5,824 carriages. Evrometal said no payments had been made as yet under the debt buyout contract.
- 3.27 Stakeholders further mentioned that poor infrastructure quality is one of the main reasons for lack of entry into the market. Failure to perform routine maintenance, combined with the inability to purchase new equipment, has resulted in a rapid and noticeable deterioration of the infrastructure. For example, an estimated 10,000 switches are life expired and nearly 85% of BDZ's maintenance equipment is obsolete. Furthermore, the network also requires new signalling equipment, overhead wires, communications systems and radio equipment.
- 3.28 The description of the current situation of the Bulgarian railway sector shows why most of the rail-related services mentioned are still supplied by the monopolist. Some of them possibly could be provided by other suppliers. No changes are expected in the level of competition in the market as a whole or specifically in relation to the infrastructure available for rail-related services and the historical situation seem to imply that supply of rail-related services can only come from the incumbent company. Prices for the usage of rail-related services have not been defined as yet.

Case study

- 3.29 For the case study we contacted the One Stop Shop in Bulgaria to obtain further information on the access conditions, the figure below sets out the process that we followed for this network as well as the progress in terms of obtaining further data.

FIGURE 3.2 CASE STUDY PROCESS



- 3.30 As can be seen from the figure above, the Network Statement does not include detailed information with respect to access to rail-related services. We then proceeded to contact the OSS to obtain further information but they have not responded to our survey. As a result we have concluded that the access conditions are unclear.

4. CZECH REPUBLIC

Introduction

4.1 The railway market of the Czech Republic has taken the first steps towards liberalisation. The main railway operator České dráhy dominates the market but there are 6 other railway operators and around 50 transport operators.

4.2 The various rail services and their providers within the Czech Republic are given in the table below.

TABLE 4.1 RAIL-RELATED SERVICES BY PROVIDER

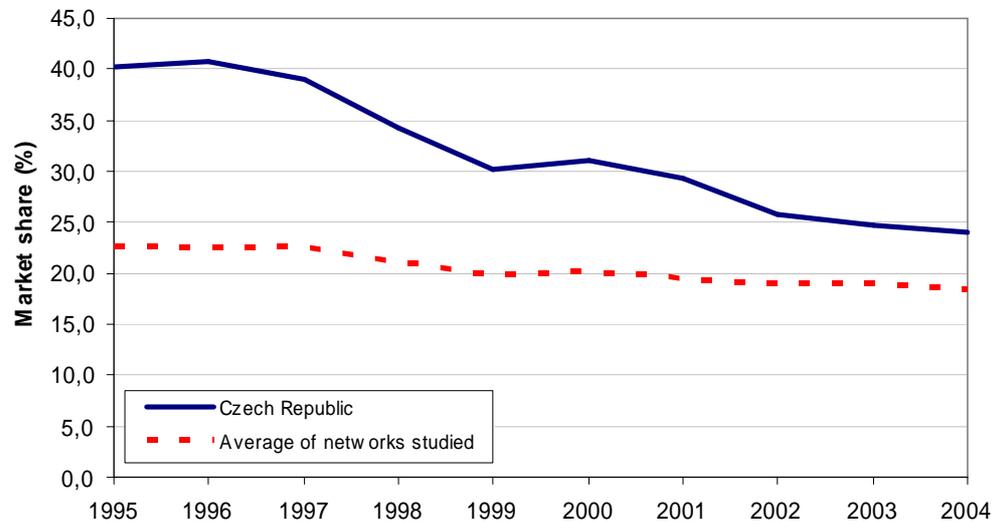
Service	Provider
Electricity for traction	RIA the infrastructure manager
Diesel fuel for locomotives	Each operator
Locomotive pushing services	Each operator
Back-up services	Each operator
Services in marshalling and shunting yards	RIA enables access; services required are based on individual contracts
Train formation services	No information available
Services in freight terminals	Each operator
Telematics services for freight operations	Each operator
Services in passenger stations	Each operator in cooperation with IM
Computer reservation services for passenger transport	Each operator
Training facilities	Each operator
Leasing of rolling stock and staff	Manufacturers , the leasing of staff is allowed by Czech law
Maintenance	Operator/Manufacturer
Rolling stock cleaning	Each Operator
Services in storage sidings	Each Operator
Provision of on-board train protection systems; telecom and communications services	Equipment Manufacturer (according to prevailing technical standards)
Services in border stations	Infrastructure manager in cooperation with other operators (depending on the network stretch)
Technical inspection services	Infrastructure manager

Market information

4.3 Rail freight performance in the Czech Republic has been steadily decreasing since it became a separate State and was in 2004 just above 15 billion tonne-km. Furthermore, as the figure below shows, the market share for rail freight has also been decreasing when compared to other forms of land based transport; in fact, its share has fallen

from a value close to 40% in 1996, to just under 25% in 2003. It is important to note, however, that this figure remains above the average of the networks being studied.

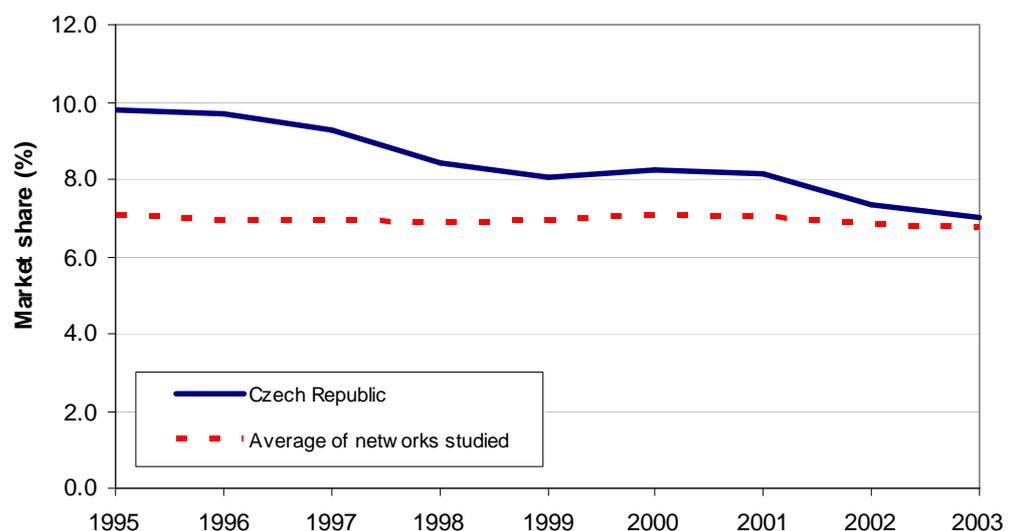
FIGURE 4.1 RAIL FREIGHT INTERMODAL MARKET SHARE



Source: European Commission and Steer Davies Gleave analysis

- 4.4 A similar picture is also emerging in the passenger market where performances measured in passenger-kms has decreased substantially. As seen in the figure below, the same is true for the market share of rail passenger services which is now close to the average of the networks being studied.

FIGURE 4.2 RAIL PASSENGER INTERMODAL MARKET SHARE



Source: European Commission and Steer Davies Gleave analysis

- 4.5 There are currently 18 licensed railway undertakings, of which 8 were licensed in 2005 and one railway undertaking (ZS Brno) in February 2006. Furthermore, 45

railway undertakings have a national licence and safety certificate.

- 4.6 The Czech Ministry of Transport reports that the market share of the new entrants (private companies) in the freight railway market is approximately 11% based on total tonnage carried.
- 4.7 The nation-wide and regional rail systems are formed by standard-gauge tracks except for the regional railroad “Tremesna ve Slezsku – Osoblaha” which has a narrow track gauge of 760 mm.
- 4.8 The Czech railway operator Viamont cooperates with German railway company Rail4Chem for the transportation of grain from the Czech Republic to North Sea Ports. Viamont takes the trains to Bad Schandau/Germany, where the wagons are handed over to Rail4Chem that takes them to the Port of Rotterdam. Viamont won a 5-year concession in a tendering process in 2005 to start passenger train operation from 1st January 2006 on the stretch Karlove Vary – Mariánské Lázně. The contract volume was reported to be 400,000 train-km per year. Viamont offered the lowest price. It is understood that the public authorities will save 5.9 million CZK per year on subsidies and the company plans to offer other railway services on various routes in the Karlove Vary region.
- 4.9 České dráhy, a.s., was established pursuant to Act No. 77/2002 Coll. as of 1st January 2003 as the successor of the state enterprise České dráhy, státní organizace. The Company is engaged in the provision of public transport services and other supplementary and related services both to passengers and railway transport operators. In addition to that, Czech Railways offers its customers a comprehensive set of services in other fields, primarily railway research, testing and telematics services.
- 4.10 Czech Railways is the largest national railway transport operator and the contractual operator of the majority of railway lines in the Czech Republic. The main customers of Czech Railways include the Czech Government represented by the Transport Ministry and the individual regions of the Czech Republic as contractors in the field of public passenger transport. With regard to cargo transport, the company strives to expand its activities in terms of provision of logistic solutions for transport of bulk cargo and intermodal transport units, namely containers.

Implementation into national law of the provisions relating to access to railway services

- 4.11 The following table summarises the EU legislation and the current state of implementation in Czech Republic.

TABLE 4.2 EU LEGISLATION ENACTED IN LEGISLATION IN CZECH REPUBLIC

EU Legislation	Title	Implemented (and when, in which piece of legislation)
Directive 2001/14	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Yes, Act on Rail Systems no. 266/1994 Coll. As amended by Act no. 301/2004 and no. 351/2004

4.12 The main details covering rail-related services can be found in Act no. 351/2004.

Access conditions

4.13 The Network Statement issued by the Railway Infrastructure Administration is available in its updated version of 20 April 2006. There is very little information in relation to access conditions for rail-related services; any information both in terms of conditions for access and prices can only be obtained through the entering into a contract with the facility owner.

The minimum access package and other services

4.14 The Railway Network Statement contains the following information of the minimum access package offered by the infrastructure manager.

- Communication equipment and services for information transmission;
- Control and blocking equipment including technical safety and control means for rail traffic management systems in railway stations and on the lines;
- Electrical equipment including the equipment for power supply of electrical traction vehicles (traction power supply and switching stations, traction line);
- Equipment for pre-heating of trains;
- Buildings and equipment for the organisation control and blocking of rail traffic and of satisfaction of transport needs; and
- Provision of services connected with passenger transport including utility networks necessary for their operation.

4.15 Additional services in terms of rail safety and inspection will be in the responsibility of the Rail Safety Inspectorate as a subordinate authority to the Ministry of Transport. The Inspectorate is responsible for the following duties:

- Investigations relating to abnormal events in rail operations according to the relevant regulations;
- Investigations relating to shortcomings compromising the safety of rail system operations or rail transport operations, their causes and the identification of the responsible persons according to the pertinent legal regulations;
- To perform follow-ups checks to ensure the fulfilment of the measures imposed.

4.16 An overview of marshalling yards indicating the location and the average daily performance is given in the table below.

TABLE 4.3 MARSHALLING YARDS IN CZECH REPUBLIC AND DAILY PERFORMANCE IN SHUNTED WAGONS

<i>Marshalling yard (district) name</i>	<i>Daily performance in shunted wagons</i>
Beroun	538
Bohumín-Vrbice	600
Brno-Maloměřice	987
Břeclav-přednádraží	1072
České Budějovice	1246
Česká Třebová	1463
Český Těšín	1004
Děčín hl.n.	558
Havlíčkův Brod	660
Hradec Králové	639
Cheb	422
Kralupy nad Vltavou	590
Liberec	336
Most nové nádraží	1374
Nymburk hl.n.	2186
Olomouc přednádr.	876
Ostrava-Kunčice	913
Ostrava levé	1169
Ostrava pravé	1680
Pardubice	638
Plzeň hl.n.	830
Praha-Libeň	1033
Přerov pravé	822
Třinec	675
Valašské Meziříčí	808

Source: Railway Network Statement Czech Republic

4.17 Services offered at public railway stations include:

- Access to platforms;
- Access to premises for passengers;
- Access to passenger information systems;
- Illumination of premises for passengers; and
- Sanitary facilities.

Charging for services

4.18 The Ministry of Finance takes the decisions on price regulation of the rail infrastructure. The Railway Infrastructure Administration (RIA) is responsible for negotiating the charges for the rail system utilisation and for the collection of fees for the utilisation in the rail system.

4.19 The common procedures of price regulation work following these principles:

- The RIA suggests maximum fees (“price cap regulation”) and submits them to the Ministry of Transport;

- The Ministry of Transport submits the proposal including necessary comments to the RIA and publishes the approval in a commercial journal;
- The RIA authorizes Czech Railways to enter into a contract with the designated railway operator; and
- The RIA charges a fee for this service to the railway operator.

4.20 The charging for railway services depends on an individual contract procedure with the infrastructure manager or a designated service provider. We were not able to find further details with regards to charging for rail-related services.

Stakeholder analysis

Problems/complaints

4.21 We were not informed of any problems or complaints in relation to the provision of rail-related services in the Czech Republic. Some rail operators stated that the market opening process is progressing well but there are still major distortions in modal share due to high investment costs relating to the upgrading and expansion of the road network which set the railway network at a competitive disadvantage.

Stakeholder views

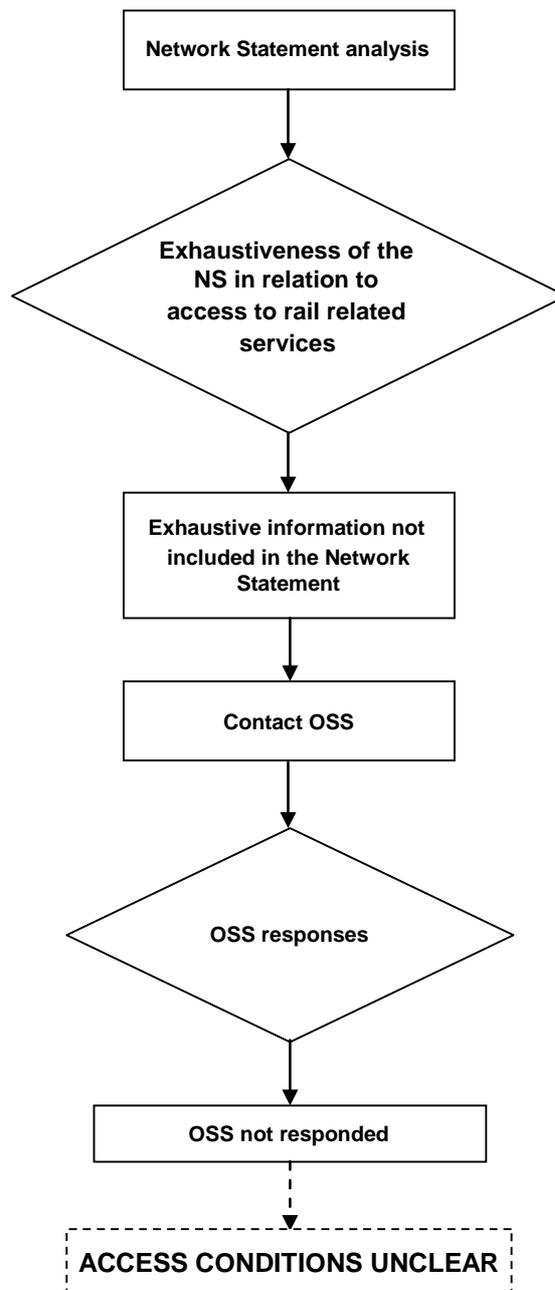
4.22 A large number of participants in the railway sector including the main railway companies, manufacturers and various companies specialised in rail-related services were contacted for our analysis. The amount of information we were able to obtain was very scarce and did not focus on the core topic of railway services. In a small number of cases, the stakeholders explained that they did not want to participate in the study. We did however manage to obtain some useful and relevant numerical information including some from the statistical office of Czech Republic.

4.23 Stakeholders explained that in general the deregulation of the railway market in the Czech Republic is progressing well. Several private companies have requested operating licenses and have obtained them. A typical example of a successful railway undertaking is METRANS a.s. specialised in cross-border container transport through its self-operated terminals in Czech Republic and neighbouring countries.

Case study

4.24 For the case study we contacted the One Stop Shop in Czech Republic to obtain further information on the access conditions, the figure below sets out the process that we followed for this network as well as the progress in terms of obtaining further data.

FIGURE 4.3 CASE STUDY PROCESS



- 4.25 The Network Statement did not include detailed information with respect to access to rail-related services and we tried to obtain further information on the access conditions by contacting the OSS but they have not responded to our survey. As a result we must conclude that access conditions are unclear.

5. DENMARK

Introduction

- 5.1 Despite the continued role of DSB, the incumbent operator, the liberalisation of the Danish railway market has gone very far since 1997. In this year the track infrastructure in the regional and national network was separated from the incumbent rail operator DSB; and Rail Net Denmark, the infrastructure manager was created. In 2003 the National Rail Authority was established as regulatory body.
- 5.2 The rail freight market was opened in Denmark in 1999 with the sale to Railion of the DSB freight division and the creation of Railion Denmark.
- 5.3 In 2000, the possibility for third parties to provide passenger railway transport was introduced with the condition that the capacity of the infrastructure was sufficient to allow the operation of more trains. The incumbent DSB has the obligation to provide with rolling stock any eventual competitor winning a public transport service bid.
- 5.4 Long distance, inter city and regional services are operated by the incumbent which negotiates public service contracts with the Ministry of Transport. As opposed to local transport services, most long-distance and regional services are not subject to public tendering.

Market information

- 5.5 There are currently 25 licensed companies operating on the Danish network of which 20 railways transport operators, of these, 12 railway undertakings operate passenger and 8 freight services.

TABLE 5.1 FREIGHT RAILWAY UNDERTAKINGS

Freight railway undertakings	
1	Dansk Jernbane ApS (DJ)
2	Lemvigbanen
3	Lokalbanen
4	Lollandsbanen
5	NEG (Norddeutsche Eisenbahngesellschaft)
6	Nordjyske Jernbaner
7	Railion Denmark A/S
8	Vestbanen

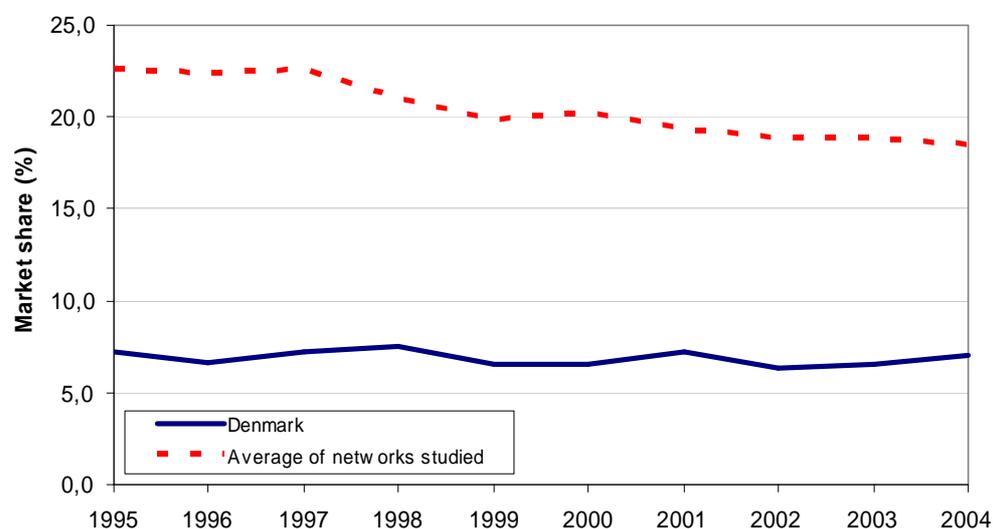
Source Banedenmark

TABLE 5.2 PASSENGER RAILWAY UNDERTAKINGS

Passenger railway undertakings	
1	Arriva
2	DSB
3	DSB S-tog
4	Flensburg Express
5	Lemvigbanen
6	Lokalbanen
7	Lollandsbanen
8	Nord Ostsee-Bahn (NOB)
9	Nordjyske Jernbaner
10	Odderbanen - Hads-Ning Herreders Jernbane
11	Vestbanen
12	Vestsjællands lokalbaner

Source *Banedenmark*

- 5.6 Only 11% of land-based freight transportation is undertaken by the railways in Denmark. Furthermore rail freight does not play a significant role in Danish rail, making up only the 5% of the total share of rail transportation.

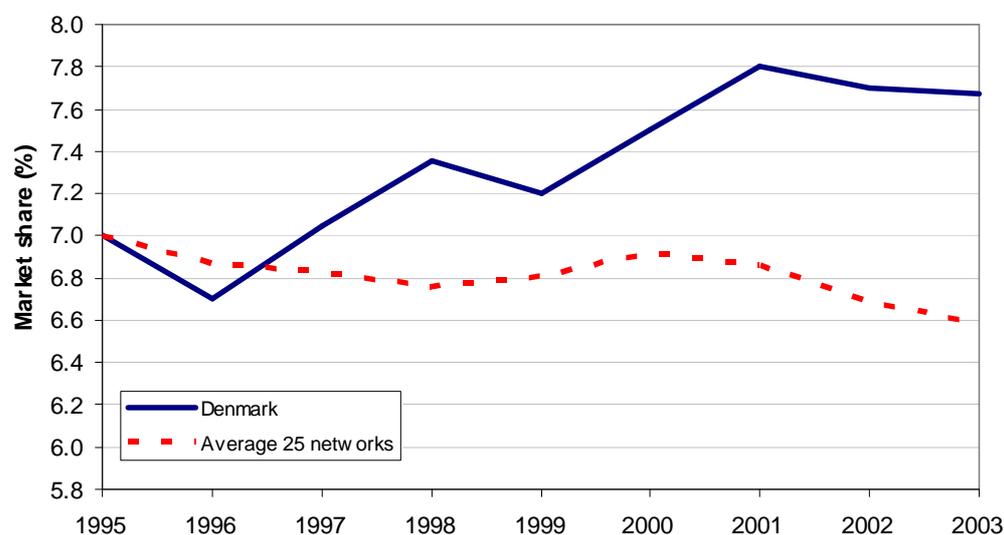
FIGURE 5.1 RAIL FREIGHT INTERMODAL MARKET SHARE

Source: *European Commission and Steer Davies Gleave analysis*

- 5.7 Passenger rail transport has gradually increased in the last ten years. DSB, the incumbent operator still accounts for about 90% of the passenger train-km (besides the Copenhagen suburban services, the S-Bane).
- 5.8 The other 11 above mentioned companies, with the exception of Arriva, operate local

transport services. They are owned and managed by local or regional authorities. All passenger railway services are currently subsidised; these subsidies are provided according to the number of tickets sold. It can be seen from the figure below that the intermodal market share of passenger services has increased substantially in recent years.

FIGURE 5.2 RAIL PASSENGER INTERMODAL MARKET SHARE



Source: European Commission and Steer Davies Gleave analysis

Implementation into national law of the provisions relating to access to railway services

- 5.9 The law that has transposed into national law the *First Railway Package* is Act 155 of 12 March 2003.

TABLE 5.3 EU LEGISLATION TRANSPOSED INTO NATIONAL LAW

EU Legislation	Title	Implemented (and when, in which piece of legislation)
Directive 2001/14	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Yes (Act 155 of 12 March 2003)

- 5.10 Further legislation related to the regulation of access to railway services include the Act on Railways and the:

- Consolidated Act n. 1171 of 12 December 2004, including relevant administrative rules and regulations;
- Consolidation Act n. 59 of 2 February 2004 on allocation of rail infrastructure capacity;
- Consolidation Act n. 1065 of 10 December 2003 on rail charges and on environmental subsidies for rail freight transport;
- Consolidation Act n. 1311 of 14 December 2004 on rail charging rates and

environmental subsidy rates for rail freight transport;

- Consolidation Act n. 977 of 16 December 1998 on liability to accept delivery at freight terminals;
- Consolidation Act n. 560 of 21 June 2000 on liability to accept delivery on stations with future alterations.

Access conditions

The minimum access package and other services

5.11 The table below sets out the list of essential services included within the minimum access package.

TABLE 5.4 ESSENTIAL SERVICES

Services	Description
Infrastructure capacity and	Rail Net Denmark allocates train paths annually and provides track facilities and other necessary infrastructure facilities.
Timetable	The railway undertakings receive an agreed number of copies of the timetable, divided into Timetable Freight trains, Timetable West, Timetable East and Time table S-trains.
Technical and operational directions	The infrastructure manager provides when agreed with the railway undertakings the necessary technical and operational
Train path punctuality and information	The infrastructure manager may deliver calculations and information on train path punctuality.
Data on operational matters	Railway undertakings can receive data on operational matters. All costs are paid by the railway undertaking.
Cleaning, winter services and maintenance on areas owned by the infrastructure manager	The infrastructure manager performs ordinary cleaning, winter services and maintenance on areas and stations that it owns.
Operational information to the passengers	When agreed with the railway undertaking, the infrastructure manager provides all necessary information to the passengers.
Electricity for traction	The infrastructure manager delivers traction on all mainline and suburban lines. The RU pays consumption related charges.
Train preparation facilities	The infrastructure manager provides areas for train preparation, marshalling and train formation, including energy supply for electricity and heat, stationary braking systems etc, where these exist. The railway undertaking pays consumption related charges.
Stations	Stations owned or managed by railway undertakings must be at the disposal of other operators on equal and non-discriminating terms.
Combined terminals	Combined terminals owned by railway undertakings and connected to the national rail network are at the disposal of other operators. This applies for combined terminals located in direct connection to track sections where the operator in question has been allocated a train path.

Source: *Banedenmark Network Statement 2006*

5.12 In addition to these, there are a number of additional services that the infrastructure manager must provide upon request. Below is a list of additional services provided by the infrastructure manager:

- Memorandum of Understanding (MoU), certain extraordinary conditions;
- Operational information services, special services;
- Supplementary technical and operational stipulations;
- Correction of timetable;
- Graphics;
- Carriage weights, leasing of traction units;
- ATC-equipment;
- Data in paper form;
- Auxiliary train preparation;
- Assistance for undertakings;
- Requisition of substitute conveyance;
- Operationally related dispensations;
- IT;
- Radio connections;
- Pilot;
- Infrastructure remote control;
- Course in tunnel safety and border operation.

5.13 Finally, the infrastructure manager may provide the following ancillary services to those operators that request these services:

- Provision of telematics solutions to freight forwarders; and
- Sale of commercial advertising spaces and other media in relation to the railway infrastructure.

5.14 The following table sets out the providers of rail-related services in Denmark.

TABLE 5.5 RAIL-RELATED SERVICES BY PROVIDER

Service	Provider
Electricity for traction	Banedenmark
Diesel fuel for locomotives	Each operator independently
Locomotive pushing services	Each operator independently
Back-up services	Each operator independently with the assistance of Banedenmark
Services in marshalling and shunting yards	Each operator independently
Train formation services	Incumbent operators
Services in freight terminals	DSB
Telematics services for freight operations	Each operator independently
Services in passenger stations	Each operator independently
Computer reservation services for passenger transport	Each operator independently
Training facilities	Independent public companies
Leasing of rolling stock and staff	ROSCOS
Maintenance	Each operator independently
Rolling stock cleaning	Each operator independently
Services in storage sidings	Incumbent operators
Provision of on-board train protection systems; telecom and communications services	Manufacturers of the equipment
Services in border stations	Incumbent operators
Technical inspection services	Notified bodies

Charging for services*Essential services*

- 5.15 The railway undertakings are charged according to the distances travelled, the capacity and with an additional fee for the operation on the national railway infrastructure and with link tolls in the event of crossing the Storebælt or Øresund crossings. These infrastructure charges can be the same for all trains or differentiated between freight trains and passenger trains.
- 5.16 The Strategic Rail Authority sets the kilometre fees, capacity fees and additions to the kilometre fees. The rates for link tolls on Great Belt- and Øresund links are set by the Ministry of Transport and Energy.
- 5.17 The current rates for rail charges and environmental subsidies in 2005 are set out in the Consolidated Act no. 1189 (Consolidated Act on rates for rail charges and for environmental subsidies for freight transport by rail).
- 5.18 Kilometre charges including supplementary charges for operation on the Danish rail network (except the Korsør-Nyborg and Øresund Coast – Swedish border lines)

amount to DKK 1.84 (€ 0.25) per train-kilometre covered (ex. 25% VAT).

Additional and ancillary services

- 5.19 Tariffs applied to the provision of the additional and ancillary services are not included in the Network Statement. The following table lists the prices for some of the additional services described in the page above.

TABLE 5.6 PRICES FOR ADDITIONAL SERVICES

Service	Cost
Re-loading of displaced consignment (Weighing charge)	DKK 160 (€ 21.5) per wagon
<u>Shunting at the departure station</u>	
For continuous transport by means of dock line	DKK 110 (€ 14.75) per wagon
For extraordinary shunting	DKK 1600 (€ 214.5) per hour
<u>Shunting at the destination station</u>	
For continuous transport by means of dock line	DKK 110 (€ 14.75) per wagon
For extraordinary shunting	DKK 1600 (€ 214.5) per hour
Other services ordered by the customer (closing of doors, sweeping of wagons, installation of stanchions, etc.)	DKK 350 (€ 47) per hour

Source: Steer Davies Gleave analysis

Stakeholder analysis

Problems/complaints

- 5.20 We were not informed of any current problems or complaints in relation to the provision of rail-related services in the Denmark. We are aware that the new entrant passenger operator, Arriva, had substantial difficulties in getting drivers in the initial months of operation as the drivers were not willing to transfer to the new operator. This problem was subsequently resolved but the service suffered numerous months of difficulties.
- 5.21 As in some Scandinavian networks, driver training is no longer done in-house by DSB, but it is now done by two public schools separated from the incumbent operators, one in Copenhagen, one in the south of Denmark. These training centres are the only institutions allowed to provide driver training. All railway undertakings wishing to train their drivers in Denmark have to send their staff to these centres.

Stakeholder views

- 5.22 We have spoken to a number of stakeholders in the Danish market and have not been alerted to any specific problems. The industry participants that we spoke to generally thought that the liberalisation process was proceeding well and that there were not concrete problems with access to rail-related services.
- 5.23 We were informed that both DSB and Railion are obliged to provide access to third parties to stations and terminals and do so to avoid complaints. Furthermore, the

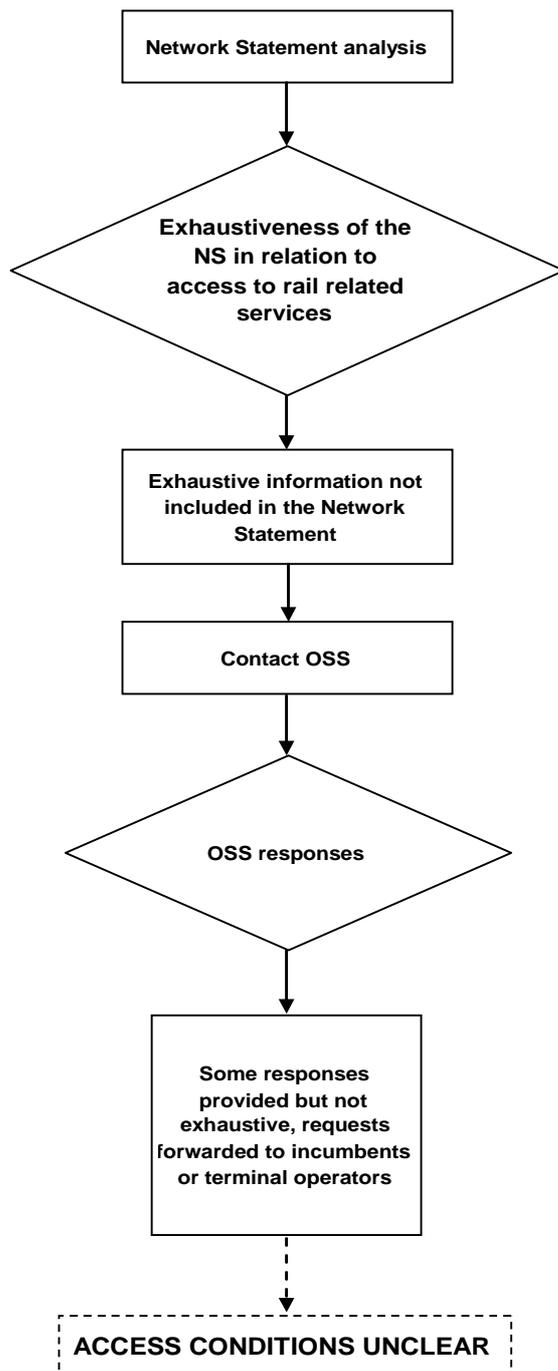
stakeholders mentioned that there is currently no market for marshalling and shunting services and that these services need to be provided along with access to the facilities. The terms for access are not always clear, however we have been told that the relationship between the incumbent and the new entrants is generally very good; this is also shown by the cooperation between these two parties in the common ticketing services.

- 5.24 Each operator undertakes maintenance operations on their own facilities; in the event of extraordinary or major maintenance services, DSB undertakes these services under contract. Currently, DSB undertakes maintenance activities also for Swedish and German operating companies.
- 5.25 We received one general complaint from a stakeholder regarding the Network Statement, and more specifically the fact that it is only available in Danish; in order to facilitate entry into the market, this should also be published in another language.

Case study

- 5.26 For the case study we contacted the One Stop Shop in Denmark to obtain further information on the access conditions, the figure below sets out the process that we followed for this network as well as the progress in terms of obtaining further data.

FIGURE 5.3 CASE STUDY PROCESS



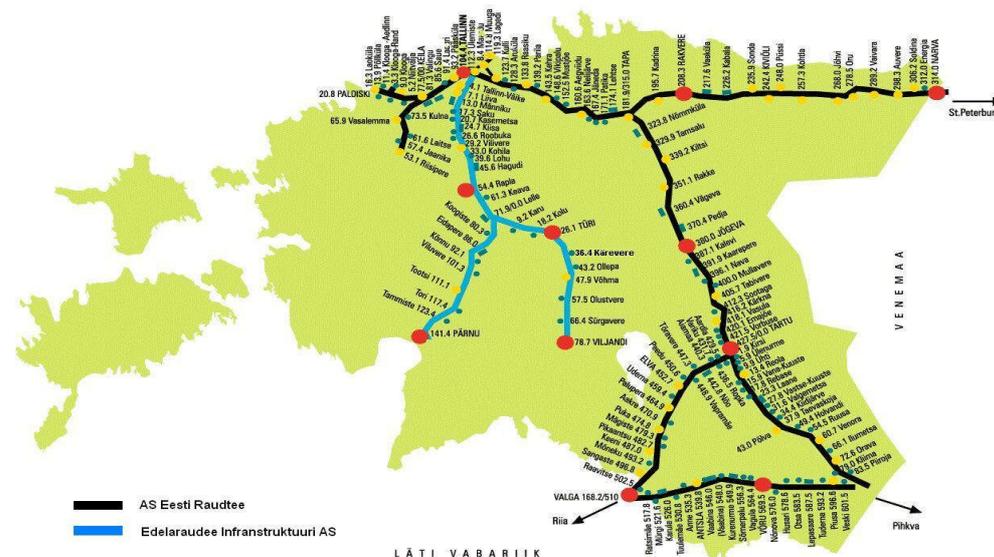
- 5.27 As can be seen from the figure above, access conditions to rail-related services are unclear. The Network Statement does not include specific information to facilitate access to these services and the OSS is not able to provide more detailed information than those included in the networks statement. The Infrastructure manager does not have enough staff to provide this information which is usually provided by the Incumbent or terminal operators. Detailed information about access to terminals and services can therefore only be provided by those entities that operate these facilities.

6. ESTONIA

Introduction

- 6.1 The Republic of Estonia is a small country with a population of around 1.35 million inhabitants and the Capital Tallinn. The total length of railway lines in Estonia is 1,200 km. All bigger towns and centres are linked by the railway network which covers the whole mainland of Estonia. So far, the percentage of the passenger transport by railway has been relatively small, but in recent years it has grown.

FIGURE 6.1 RAILWAY MAP OF ESTONIA



Source: Estonian Railway Inspectorate

- 6.2 Railways play an important role in Estonia especially with respect to transit traffic from Russia to Estonia. The most important goods carried on the network are oil and its derivatives, grain, fertilizer, and timber. In 2004, 65.6 millions tonnes of cargo was transported by railways, of which 37 million tonnes was transit traffic. The various industry participants are set out in the table below.

TABLE 6.1 RAILWAY RELATED ORGANISATIONS AND ACTIVITIES

Organisation	Field of activity
Ministry of Economic Affairs and Communications	Planning the development of the activity, elaboration of the legal framework
Railway Inspectorate	Monitoring of the national market, national regulator
AS Eesti Raudtee	Railway infrastructure manager and railway freight operator on the infrastructure of <i>AS Eesti Raudtee</i>
Edelaraudtee Infrastruktuuri AS	Railway infrastructure manager
AS Edelaraudtee	Railway freight operator on the infrastructure of <i>Edelaraudtee Infrastruktuuri AS</i> and passenger transport operator on the infrastructures of <i>AS Eesti Raudtee</i> and <i>Edelaraudtee Infrastruktuuri AS</i>
AS Elektriraudtee	Passenger transport operator on the infrastructures of <i>AS Eesti Raudtee</i>
AS GoRail	Passenger transport operator on the infrastructures of <i>AS Eesti Raudtee</i>
AS Spacecom	Freight operator on the infrastructure of <i>AS Eesti Raudtee</i>
Westgate Transport OÜ	Freight operator on the infrastructure of <i>AS Eesti Raudtee</i>

Source: Railimplement

6.3 The following table summarises the rail-related services and their providers in Estonia.

TABLE 6.2 RAILWAY RELATED SERVICES BY PROVIDERS

Service	Provider
Electricity for traction	Eesti Raudtee (The infrastructure manager)
Diesel fuel for locomotives	Each operator
Locomotive pushing services	Each operator
Back-up services	Each operator independently
Services in marshalling and shunting yards	Each operator (But should be guaranteed by Eesti Raudtee)
Train formation services	Operator
Services in freight terminals	Not specified
Telematics services for freight operations	Currently not in use; coordination with IM
Services in passenger stations	Each operator
Computer reservation services for passenger transport	Each operator
Training facilities	Each operator
Leasing of rolling stock and staff	ROSCOS and operators
Maintenance	Operator/Manufacturer/ROSCO
Rolling stock cleaning	Operator
Services in storage sidings	Eesti Raudtee and Operator
Provision of on-board train protection systems; telecom and communications services	Equipment Manufacturer
Services in border stations	Eesti Raudtee and operator
Technical inspection services	infrastructure manager /Railway Inspectorate

Market information

- 6.4 There are 30 railway undertakings in Estonia with an operating license; of these 3 have a passenger operating license and 27 have a freight transport license. Freight transport operator AS Veotrans received a new freight transport license in 2006 after changing its name to Eurodek OU.
- 6.5 Rail freight transport shows a slight upward trend in the period 2001-2005. Transport performance in goods carried on the national network increased from 726 million tonne-km to 747 million tonne-km in 2005 (by approximately 3%). International freight transport also showed an upward trend measured in transport performance, increasing from 7,831 million tonne-km in 2001 to 9,892 million tonne-km in 2005 (increasing by approximately 26.3%).
- 6.6 In relation to passenger transport, 5.15 million passengers were transported in 2005 and 5.05 million in 2004. 3.23 million passengers travelled by Elektriraudtee AS while 120,000 passengers travelled internationally on the Tallinn-Moscow line in 2004.

TABLE 6.3 PASSENGER TRANSPORT IN ESTONIA 2002-05 (IN MILLION)

Operator	2002	2003	2004	2005
AS Elektriraudtee	3,42	3,25	3,18	3,23
Edelaraudtee AS	1,5	1,58	1,74	1,79
AS EVR Ekspress / AS GoRail	0,11	0,11	0,12	0,13
Total	5,03	4,94	5,04	5,15

Source: Uniconsult

- 6.7 The transport performance indicators for major railway cargo operator Eesti Raudtee are shown in the following table below.

TABLE 6.4 MAIN COMPANY DATA OF EESTI RAUDTEE 2001-2003

Performance indicator	2001	2002	2003
Net tonne-km (mil)	8,199.4	9559.1	9256.9
Average distance hauled	211.8	227	219
Domestic freight volumes (mil. tonnes)	5.5	3.7	3.8
Domestic freight volumes (mil. tonnes)	38.5	38.4	33.2

Source: Eesti Raudtee

- 6.8 The public transport network in Estonia is well developed in the capital Tallinn but its density and the level of service is less developed in other areas. This is as a result of low population density in the rural parts of Estonia. Elektriraudtee is a major supplier of public passenger transport and operates electric traction services. The main indicators of Elektriraudtee are presented in the table below.

TABLE 6.5 PERFORMANCE FIGURES OF ELEKTRIRAUDTEE

Performance indicator	2000	2001	2002
Operating costs (EEK mil.)	69.72	65.39	72.54
Subsidies (EEK mil.)	73.39	62.00	58.50
Passenger-km (mil.)	75.10	75.25	79.00

Source: Elektriraudtee AS

- 6.9 AS Edelararaudtee, as a public passenger railway operator, manages 219 km of main lines and 79 km of station tracks. No electrified or double track sections are available. The network comprises 72 level crossings of which 18 are equipped with bars and or traffic/lights
- 6.10 Eesti Raudtee is the biggest railway operator in freight transport and has a near monopoly position in the Estonian market for long distance Russian transit cargo. Eesti Raudtee can benefit from economies of scale which act as an economically induced market barrier for new entrants.

- 6.11 As of the end of 2003 there were 44 railway freight terminals in Estonia of which 35 are property of AS Eesti Raudtee and 9 are the property of AS Edelaraudtee.
- 6.12 Diesel traction is the main form of traction in Estonia and has a market share of about 96% ; it is the backbone of railway transport in Estonia.
- 6.13 According to information provided by AS Eesti Raudtee, leasing of rolling stock plays an important role in reducing operational costs and expanding the capacities. In 2004, a programme to acquire 500 tank wagons started, these new wagons will be leased out to major customers with the objective of attracting additional freight volumes and to preserve the current market share.

Implementation into national law of the provisions relating to access to railway services

- 6.14 The Estonian Parliament passed the New Railway Act in March 2004. With the enforcement of the law, the Directives 2001/12/EC, 2001/13/EC and 2001/14/EC were transposed into Estonian National law.

TABLE 6.6 EU LEGISLATION ENACTED IN ESTONIA

EU Legislation	Title	Implemented (and when, in which piece of legislation)
Directive 2001/14	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Yes Railways Act § 55 (Distribution of capacity and procedure of co-ordination) Railway Act § 58 (Basic services, extra services and assistance services ensuring access Railways Act § 59 (Agreement on use of railway infrastructure and usage fee) Railways Act § 51 (Disclosure of conditions of access to railway infrastructure) Railways Act § 52 (Schedule of capacity distribution) Railways Act § 64 (Settlement of complaints) Railway Act § 58 (Basic services, extra services and assistance services ensuring access)

- 6.15 We have been informed that some secondary legislation with particular reference to rail-related services still needs to be implemented.

Access conditions

- 6.16 The Estonian Railway Network Statement solely focuses on technical conditions and on various procedures of capacity allocation for train operators. As with a number of

other networks, the access conditions are only available within individual contracts that operators need to enter into with the facility owners; there is no published information.

The minimum access package and other services

- 6.17 The minimum access package and other services cannot be obtained from the Railway Network Statement, furthermore, the Railways Act passed in November 2003 does not give clear insight into the access conditions for railway related services as well as their charging. This section discusses the relevant sections of this act.
- 6.18 Rail-related services can be divided into three different categories, namely “*The minimum access package*”, “*extra services ensuring access*” and “*assistance services for access*”:
- “**Minimum access package**” covers the review of applications for capacity, the granting of use of distributed railway capacity, the use and operation of railway junctions, the provision of waiting platforms, track, safety and communication equipment, railway traffic control, and the forwarding of the information necessary for the use of railway capacity to rail transport undertakings.
 - “**Extra services ensuring access**” covers the use of power substations, power transmission lines, traction substations, plants for transforming and carrying electric power for train haulage, traction current transmission lines, the provision of traction power, the illumination of railway civil engineering works, the use of buildings and civil engineering works necessary for providing services to passengers, freight terminals, marshalling yards, train formation equipment, specific purposes, maintenance facilities and other utility works.
 - “**Assistance services for access**” relates to passenger train pre-heating, the granting of use of feeder lines leading to civil engineering works necessary for the provision of rail transport services with the aim of providing refuelling, train formation and other services, inspection of carriage of hazardous loads on the basis of special contracts, provision of access to telecommunications networks, technical inspection of rail vehicles, forwarding of other information to rail transport undertakings as well as other similar services;
- 6.19 It seems that the use of all rail-related services is tied to contracts that are individually negotiated with the infrastructure manager namely Eesti Raudtee and thus are not transparent both in terms of the access conditions and prices. Optional services outside those mentioned above will be not supplied by the infrastructure manager.
- 6.20 According to the Railway Act the infrastructure manager shall ensure the different kinds of services to all railway operators on equal grounds. The railway infrastructure manager could choose not to provide the extra services ensuring access only if a rail transport undertaking has access to alternative means and facilities. Therefore, all potential railway operators in Estonia are granted the right to have access to all railway related services as pointed out in the category extra services ensuring access. These services must be provided by the infrastructure manager except on those occasions where the potential railway operator has the opportunity to operate alternate facilities. A potential market distortion could arise when a major market player, acting as railway freight operator and infrastructure manager simultaneously, comes into competition in the field of provision of “extra services ensuring access” with a new

and smaller entrant having access to their own facilities.

- 6.21 We could not find any evidence that locomotive pushing services play a significant role in the Estonian Railway market. If necessary, this kind of service will be provided mainly by AS Eesti Raudtee, AS Elektriraudtee, AS Edelaraudtee itself by any kind of agreement.
- 6.22 Estonia has a special technical school, the Transportation technical school, this school offers a three year training program for the following fields:
- Train drivers;
 - Staff responsible for rolling stock inspection;
 - Staff responsible for assembling trains;
 - Staff responsible for dispatching command and control.
- 6.23 AS Eesti Raudtee operates 11 Technical Maintenance Points (TMP) focusing on the inspection of wagons, commercial inspection, current maintenance and preparation of wagons. The TMPs are located in Muuga, Maardu, Ülemiste and Kopli and are responsible for the commercial inspection of arriving trains. The TMP in Tapa conducts the commercial inspection of the trains leaving Estonia. The TMP in Valga takes care for the conduction of the commercial inspection of the trains leaving to and arriving from Latvia.
- 6.24 Application of telematics services in Estonia consists in the participation in research programmes for example TEDIM that relates to logistics corridors, supply chain management, overall logistics services and logistics service management. In the freight market, the implementation of telematics application services is currently at a very early stage. Currently, there are 250 standards in Estonia. The Bureau of Standards and Technical regulations is obliged to coordinate and organise the different requirements of the EU and their implementation in Estonia.
- 6.25 AS Eesti Raudtee provides the following operation systems in railway freight transport, which forms an initial stage for further telematics applications, these systems are:
- KVIS Development (a database system for sales and transport related contacts)
 - Wagon tracking & Tracing system
 - Concorde XAL
 - General information system integrating wagon based accounting and station work management
- 6.26 Currently there are no plans to introduce ERMTS or GSM-R related systems or the relevant on board train protection and train telecommunication systems. This is because:
- Estonia joined the EU in 2004 and plans to implement the technical requirements in stages;
 - Estonia's railway traffic links are essentially linked to the neighbouring countries Russian Federation, Latvia and Lithuania. It is necessary that a coordinated

approach is used.

- The step-by-step implementation of the TEN railway networks in the Baltic countries will boost the implementation process but this will be more realistic after 2010.

Charging for services

- 6.27 The Network Statement does not include any kind of charging/user fees for services to be provided by the infrastructure manager. The relevant information to answer this question needs to be drawn from the Railway Act which however does not provide details in relation to charging. Fees for the use of railway infrastructure in terms of basic services and extra services ensuring access consist of the costs for granting access to the infrastructure plus a reasonable mark-up.
- 6.28 Ancillary services will be calculated solely based on the direct costs (the direct costs for the service volume consumed) of providing such services if only one potential bidder offers this service. Furthermore the fees collected from the consumption of this service shall be collected only in relation to the current amount of the service consumed.
- 6.29 The principal approach for the calculation of the user fees in terms of basic services, extra and ancillary services is determined in the methodology for the calculation of user fees for railway infrastructure to be issued by the Ministry of Economic Affairs and Communications. If an applicant finds that the railway infrastructure manager has treated the applicant in a discriminating or unfair manner, the applicant has the right to approach the Ministry of Economic Affairs and Communications for assistance.

Stakeholder analysis

Problems/complaints

- 6.30 The stakeholders interviewed in our sample did not mention any problems or complaints in terms of access to rail-related services. This does not mean that there are no problems prevailing in Estonia in these fields. As a matter of fact, this may be the result of the position held by the major railway operator and infrastructure manager Eesti Raudtee; the fact that it dominates the market and the access to the relevant services and their facilities may be a reason for new entrants or current railway operators to be unwilling to revealing the contents of individual contracts.

Stakeholder views

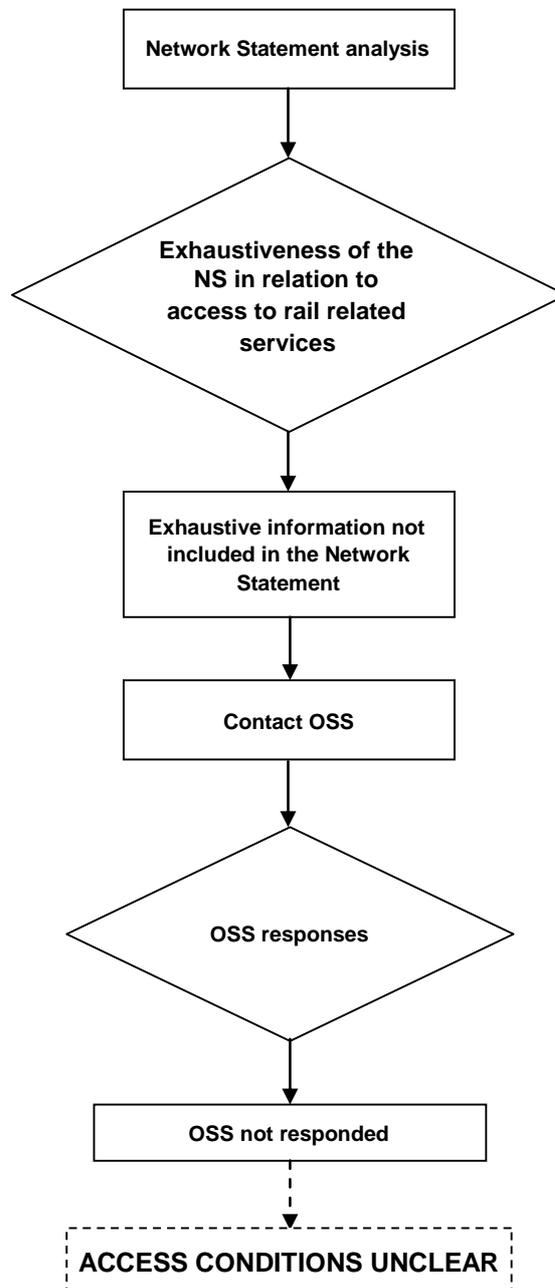
- 6.31 We approached the various industry stakeholders in Estonia on a number of occasions to discuss any potential issues surrounding rail-related services. Unfortunately, all the operators declined to provide views on the market and limited their answers to providing statistical information; we believe this is a result both of the point made in the problems/complaints section as well as the current market situation in Estonia and especially the impending privatisation of the operators.

Case study

- 6.32 For the case study we contacted the One Stop Shop in Estonia to obtain further

information on the access conditions, the figure below sets out the process that we followed for this network as well as the progress in terms of obtaining further data.

FIGURE 6.2 CASE STUDY PROCESS



- 6.33 The Network Statement does not include detailed information with respect to access to rail-related services. We proceeded to contact the local OSS to obtain further information however they did not respond to our survey. As a result we have to conclude that the access conditions are unclear.

7. FINLAND

Introduction

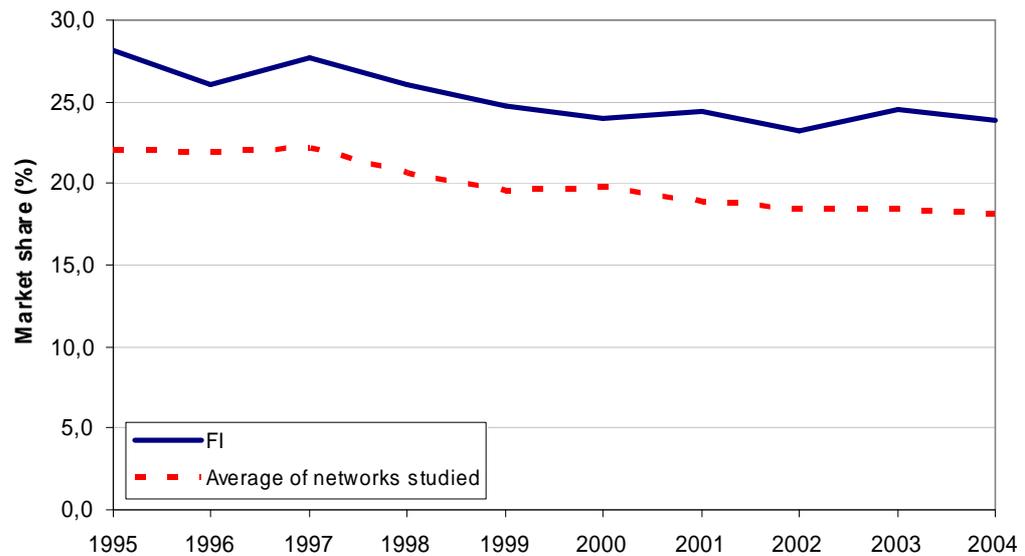
- 7.1 The Finnish railway market is currently going through a slow process of liberalisation. Despite the splitting of the incumbent operator and the infrastructure manager in 1995 and the full implementation of the First Package directives into the national legislation in 2003², no new entrant freight operators have sought access to the Finnish rail-freight market to undertake international freight services.

Market information

Market shares

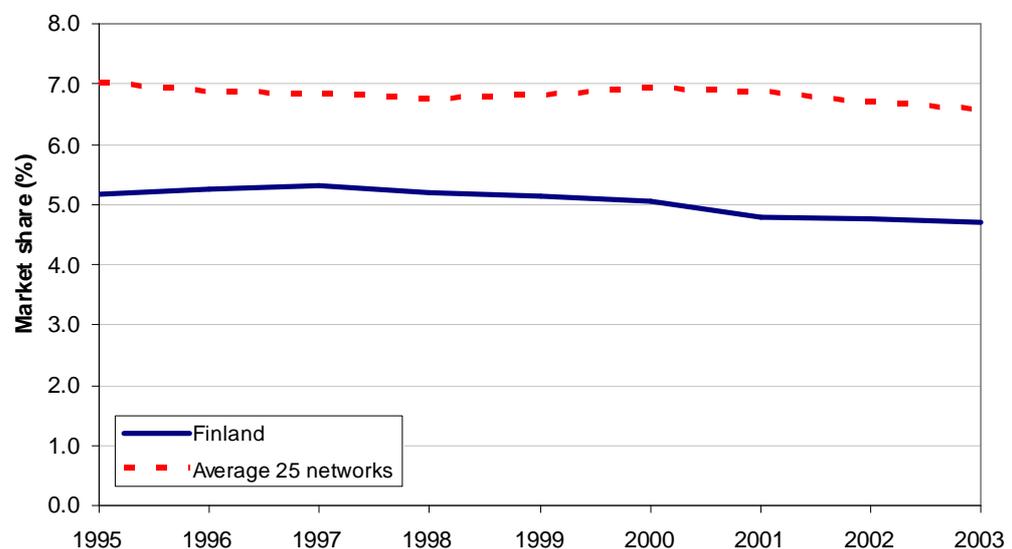
- 7.2 The incumbent VR is still the unique railway undertaking operating freight as well as passenger transport services in Finland.
- 7.3 A new section of railway line running directly between Lahti and Kerava was opened on the 1st September 2006. The new infrastructure will serve passenger and freight traffic between Finland and Russia, which, according to data received from the incumbent operator, is gradually increasing. It will serve high-speed train traffic that is expected to start operating between Helsinki and St. Petersburg in the coming years.
- 7.4 This and other infrastructure interventions concerning the links connecting eastern Finland and Helsinki are expected to generate an increase in the traffic after the opening of the market in 2007, especially between Finland and Russia with whom VR and currently the Ministry of Transport and Communication have established close cooperation. The infrastructure manager estimated that by 2012 there will be 2 large operators and 2–6 small undertakings in the market in addition to VR Cargo. The market share of new operators will be about 8 %.
- 7.5 For the past 10 years the rail freight market has been steadily shrinking. The intermodal market share of rail freight remains however at high percentages if compared to that of the other countries analysed in the study as shown in the table below.

² The Finnish Parliament implemented all three of the First Infrastructure Package of Directives on 7th March 2003 with *Railway Act* n. 198.

FIGURE 7.1 RAIL FREIGHT INTERMODAL MARKET SHARE

Source: European Commission and Steer Davies Gleave analysis

- 7.6 Following on from the experiences of the absolute figures, the market share of passenger transport when compared to other forms of land based transport has also decreased. As the figure below shows, the market share remains below the average of the countries analysed in the study.

FIGURE 7.2 RAIL PASSENGER INTERMODAL MARKET SHARE

Source: European Commission and Steer Davies Gleave analysis

Implementation into national law of the provisions relating to access to railway services

- 7.7 The law that implemented the First Infrastructure Package of Directives in Finland

was the Railway Act n. 198 dated 7th March 2003 and the related Government decrees 206 and 207 dated 13th March 2003. More specifically, these laws state the general requirements for rail-related services as set out in Directive 2001/14/EC.

- 7.8 The infrastructure manager RHK is in charge of maintaining and developing the rail network and previously was also responsible for the safety of rail traffic and the allocation of infrastructure capacity. The safety role as well as the administration of rail traffic has now been taken up by the newly established Finnish Rail Agency (Rautatievirasto) according to the requirements of the 2nd Package of Directives. .
- 7.9 The Finnish Rail Agency will supervise and develop the interoperability of the railway system and grant safety certificates to railway companies. Its responsibilities will also include ticket inspection and the evaluation of staff with rail safety responsibilities.

TABLE 7.1 EU LEGISLATION TRANSPOSED INTO NATIONAL LAW

EU Legislation	Title	Implemented (and when, in which piece of legislation)
Directive 2001/14/EC	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Yes Railway Act supplemented by Regulation 206/2003 (Regulation on timetable period and application for railway capacity)

- 7.10 The directives included within the Second Package were transposed into national law in July 2006.

Access conditions

- 7.11 Only one railway undertaking is currently operating in Finland. The opening of the freight market in 2007 has led to some operators expressing an interest in entering the market. All services are run by the incumbent and there are currently no rules disciplining access to services. According to the legislation, in the event that it is a railway undertaking operating the services, that undertaking is obliged to provide them subject to the payment of a reasonable fee. Within this framework the operators have to enter into a private contract with the undertaking providing the service. In the event an operator does not agree with the level of fees charged, complaints are to be submitted firstly to the competition authority and secondly to railway agency.

The minimum access package and other services

- 7.12 The 2007 Network Statement of Ratahallintokeskus (RHK), published in accordance with the *Railway Act* 198/2003 and Government Decree 206/2003 states that the infrastructure manager has to provide railway undertakings with the following essential services included in the minimum access package:

- processing of applications for track capacity by the Rail Agency;
- the right, for rail operators, to use the track capacity allocated to them by the Rail Agency;
- use of the network including marshalling yards, stabling tracks and other tracks;

- use of the Rail Agency's electricity grid for trains operating in accordance with the two previous points on electrified parts of the network, as defined in the Network Statement;
- traffic guidance; and
- passenger information and station announcement systems on the network, as defined in the Network Statement.

Additional and ancillary services

7.13 According to the Network Statement and the quoted laws, RHK does not provide the electricity. The traffic operator shall conclude an agreement with a service provider. RHK does not provide refuelling facilities.

7.14 The Rail Agency may, on a commercial basis, provide rail operators with network-access services as well as additional services in addition to the use of the network and ancillary services. These services may take the form of technical inspection of rolling stock and use of buildings and land administered by the Rail Agency.

Obligation to provide services by railway undertakings

7.15 According to Section 34 of the Railway Act 206/2003, railway undertakings, international groupings of railway undertakings and companies or other associations providing services for railway traffic shall be obliged to supply the required services and track access to service facilities referred to in Annex 2, paragraph 2 of the Directive 2001/14/EC, on an equal and non-discriminatory basis, following the payment of a relevant fee to railway operators. However, this obligation is effective only if the services are supplied by only one company or other association and cannot reasonably be obtained by other means.

7.16 Provisions concerning the services and track access referred to in the mentioned section of the Railway Act are laid down by Government Decree 206/2003, which also identifies the following list of services:

- use of electrical supply equipment;
- refuelling;
- use of passenger stations;
- use of freight terminals;
- use of marshalling yards;
- use of train formation facilities;
- use of land and facilities for upkeep of depot sidings and rolling stock
- use of maintenance facilities and other technical facilities and devices such as sand distributors, water and electrical connections for rolling stock, radiation devices, tank wagon filling gauge and brake testing equipment.

7.17 The table below sets out the providers of rail-related services in Finland.

TABLE 7.2 RAIL-RELATED SERVICES BY PROVIDER

Service	Provider
Electricity for traction	Operator
Diesel fuel for locomotives	Operator
Locomotive pushing services	Operator
Back-up services	Operator
Services in marshalling and shunting yards	Operator
Train formation services	Operator
Services in freight terminals	Operator
Telematics services for freight operations	None
Services in passenger stations	RHK has information service responsibility (in addition to cleaning and snow clearing on the stations they own), operator has the other services
Computer reservation services for passenger transport	Operator
Training facilities	Operator
Leasing of rolling stock and staff	None
Maintenance	RHK
Rolling stock cleaning	Operator
Services in storage sidings	Operator
Provision of on-board train protection systems; telecom and communications services	RHK gives specifications
Services in border stations	Operator
Technical inspection services	RHK

Charging for services

- 7.18 The legal framework for the basic infrastructure charge is described in the Railway Act 198/2003, Railway Infrastructure Tax 605/2003 and the Ministry of Transport and Communication Decree on the basic infrastructure charge 208/2003.

Essential services

- 7.19 The basic infrastructure charge covers the minimum access package, including track access to service facilities on the state-owned rail network. The table below describes the tariffs charged for the Essential Services (Minimum Access Package and related services).

TABLE 7.3 BASIC TARIFFS FOR YEAR 2006

Tariff component	Description
Basic charge	Freight traffic 0.1227 €cent/gross tonne-kilometre
	Passenger traffic 0.1189 €cent/gross tonne-kilometre
Infrastructure tax	Freight traffic
	-electric 0.05 €cent/gross tonne-kilometre
	-diesel 0.1 €cent/gross tonne-kilometre
	Passenger traffic 0.01 €cent/gross tonne-kilometre
Investment tax (for line section Kerava-Lahti)	Freight traffic 0.5 €cent/gross tonne-kilometre
	Passenger traffic 0.5 €cent/gross tonne-kilometre

Source RHK. Network Statement 2007

Additional and ancillary services

- 7.20 No particular statement is made in the Network Statement 2007 on the charging structure of the additional and ancillary services. According to Section 34 of the Railway Act 198/2003, railway undertakings obliged to deliver these services to other transport operators have the right to be paid for the delivered service. The payment shall be however equivalent for all railway undertakings and reasonable in relation to the cost of the services.

Stakeholder analysis

Problems/complaints

- 7.21 According to the opinion of the incumbent, VR, the provision of rail-related services does not present any particular problem, as there is only one operator in Finland the question on the market for rail-related services is not relevant at the moment. The minimum access package does not cover all basic needs in the incumbent's opinion, even if charges are deemed as acceptable. According to the infrastructure manager the charges applied to the services are too low to recover the investment costs.

Stakeholder views

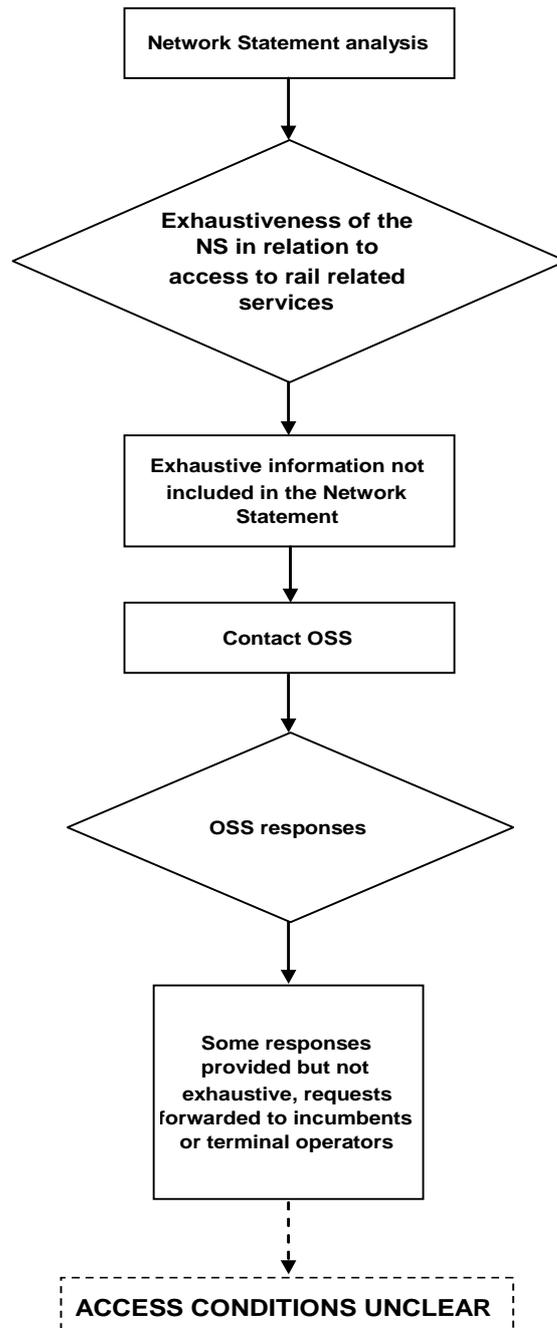
- 7.22 According to VR there is currently no market for another operator. In the event a new operator would enter the market, some problems may arise from an operational stand point. RHK, the infrastructure manager, has only 100 employee and several services are still undertaken by VR or are *de facto* outsourced to VR. RHK is the owner of the infrastructure and of the majority of the stations, but some stations belong to VR.
- 7.23 About 70-80% of terminals are TERFN terminals in Finland. There are also private storage sidings owned by the clients of the incumbent. No problems or complaints have been notified and according to the incumbent the relationship with clients is positive. Capacity could be a problem if there is an expansion in the numbers of operators, both in terms of physical and operational barriers.
- 7.24 The services at border stations take a minimum 20 minutes between Finland and

Russia and 30 minutes between Finland and Sweden because of the track change. The cleaning of the rolling stock is outsourced to ISS.

Case study

7.25 For the case study we contacted the One Stop Shop in Finland to obtain further information on the access conditions, the figure below sets out the process that we followed for this network as well as the progress in terms of obtaining further data.

FIGURE 7.3 CASE STUDY PROCESS



- 7.26 As can be seen from the figure above, access conditions to rail-related services are unclear. The Network Statement does not include specific information to facilitate access to these services and the local OSS was not able to provide more detailed information than those included in the Network Statement. The infrastructure manager does not have enough staff to provide this information, which is actually provided by the incumbent or terminal operators. Detailed information about access to terminals and services are found in the individual contracts that the operators enter into with the facility owner or service provider.

8. FRANCE

Introduction

- 8.1 Liberalisation in France is progressing slowly and to date only two new railway undertakings, VEOLIA CARGO and EuroCargoRail, operate freight services on the national network. The incumbent operator on this network is SNCF and the infrastructure manager is RFF.
- 8.2 The rail-related services in France are mainly provided by SNCF and RFF, although VEOLIA CARGO owns and operates numerous facilities. The table below sets out who provides the rail-related services in France.

TABLE 8.1 RAIL-RELATED SERVICES BY PROVIDER

Service	Provider
Electricity for traction	Energy suppliers through RFF
Diesel fuel for locomotives	SNCF (own and run the facilities)
Locomotive pushing services	Each operator independently
Back-up services	Each operator independently
Services in marshalling and shunting yards	RFF on main tracks, All operators on secondary tracks
Train formation services	Each operator
Services in freight terminals	Mainly SNCF except private terminals
Telematics services for freight operations	N/A
Services in passenger stations	SNCF
Computer reservation services for passenger transport	SNCF
Training facilities	Each operator independently
Leasing of rolling stock and staff	ROSCOS
Maintenance	Each operator independently
Rolling stock cleaning	Each operator independently
Services in storage sidings	Mainly SNCF except private storage sidings
Provision of on-board train protection systems; telecom and communications services	Manufacturers of the equipment
Services in border stations	SNCF
Technical inspection services	RFF

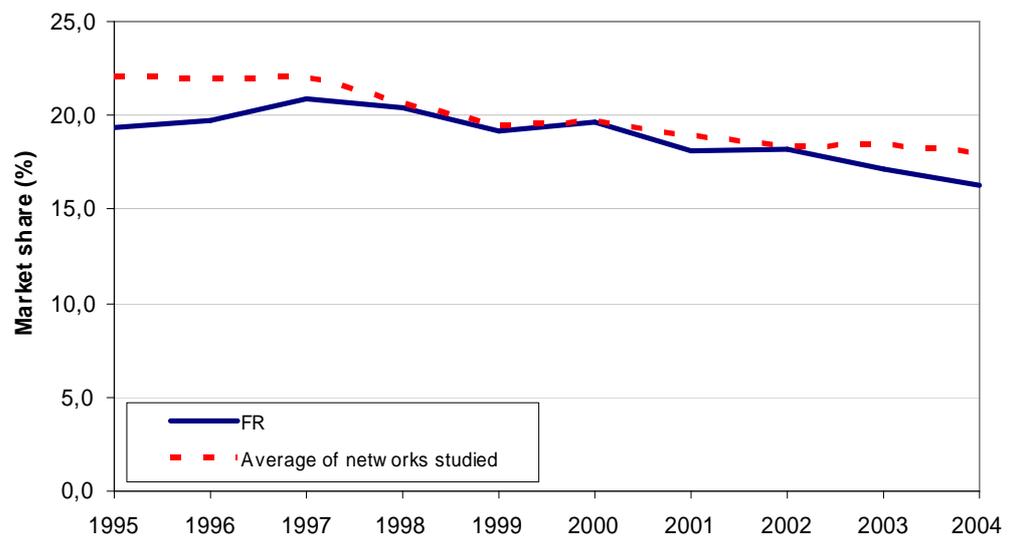
Market information

Market Shares

- 8.3 Only 17% of freight transportation is undertaken by railway operators. Around 50% of rail freight traffic is international. SNCF, the incumbent operator, plays a major role

with a market share close to 100%, providing over 45 million tonnes-kilometres per year, while VEOLIA CARGO for the moment undertakes only 600,000 tonnes-kilometres. It is important to indicate that VEOLIA CARGO's traffic was previously provided by SNCF, thus there was no increase in the market for railway freight transportation as a result of VEOLIA CARGO's introduction to the market. The figure below sets out the change in market share of rail freight transport.

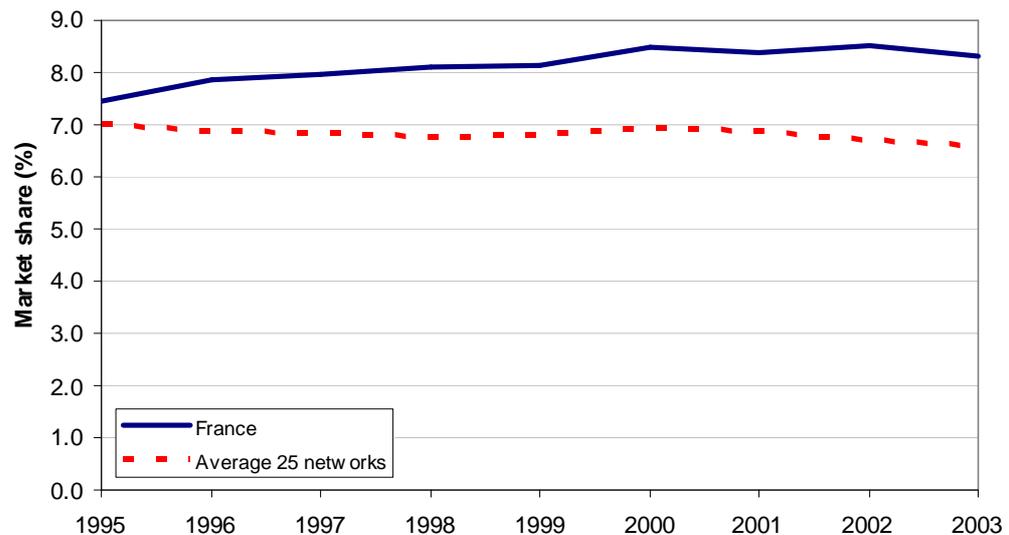
FIGURE 8.1 RAIL FREIGHT INTERMODAL MARKET SHARE



Source: Railimplement

- 8.4 SNCF remains the sole provider of non-urban railway passenger services in France (except for Thalys and Eurostar, both part owned by SNCF). Although large parts of the network remain under the control of regional authorities, these are not allowed to contract with parties other than SNCF, thus it is not likely that new entrants will be operating passenger transportation in the short term. Nevertheless, it is important to state that Connex was granted in 2005 a licence for operating passenger transportation in France, even before the application of the EU Directive on the matter. The figure below shows the market share for rail passenger services when compared to all land based transport.

FIGURE 8.2 RAIL PASSENGER INTERMODAL MARKET SHARE



Source: Statistics pocketbook 2005 and Steer Davies Gleave analysis

New entrants

- 8.5 There are two active railway undertakings in freight transportation, apart from SNCF, VEOLIA CARGO, a subsidiary of Connex and EuroCargoRail, a subsidiary of EWS International (a British freight operating company).
- 8.6 VEOLIA CARGO worked initially as a subcontractor to SNCF until 13 June 2005, when it ran its first independent freight train. VEOLIA CARGO is active in France, Germany and the Netherlands, it owns its own freight facilities and depots, and it also has its own training facility in Paris, the “Veolia Campus”, which provides on average four graduates per year. Nevertheless, it is important to note that VEOLIA CARGO is able to provide for its own services through its own facilities, because of the financial capabilities of its parent company.
- 8.7 In November 2005, EuroCargoRail obtained a licence from the French Ministry of Transport. It has now entered the market offering services in France and from France to other countries in continental Europe.
- 8.8 Europorte 2, a subsidiary of Eurotunnel, was granted a licence in 2003; however, it is unable to start operations because of the severe financial situation of Eurotunnel and because it is facing some difficulties in receiving the safety certificate.

Implementation into national law of the provisions relating to access to railway services

TABLE 8.2 EU LEGISLATION TRANSPOSED INTO NATIONAL LAW

EU Legislation	Title	Implemented (and when, in which piece of legislation)
Directive 2001/14	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Yes, Decree 2003-194, dated 7 March 2003.

8.9 In particular, Article 3 of the decree mentioned in the table above refers specifically to rail-related services. France has gone further than many of the other networks being analysed by allowing full domestic cabotage for freight services as of 31 March 2006.

Access conditions

8.10 Réseau Ferré de France's (RFF) Network Statement includes some detailed information regarding rail-related services. Both the minimal services description and their related prices are explained. It is considered important for the railway undertaking to demand access to rail-related services, within the time it requests capacity on the rail network. Any railway undertaking that has been granted access to the rail network can be granted access to rail-related services.

The minimum access package and other services

8.11 The minimal services offered by RFF are the following:

- Processing of requests for infrastructure capacity;
- The right to use the capacities granted;
- Use of the junctions and switches of the network;
- The services necessary for the running of trains, including signalling, traffic control, traffic management, communication, and the provision of information concerning the running of the trains;
- Any other information necessary for the implementation or operation of the service for which the capacities are requested.

8.12 The following are described as the minimal services offered by RFF:

- Use of electrical installations and lines. Railway undertakings can purchase electricity from the electricity provider through the use of RFF's installations and lines. Nevertheless, RFF can provide directly electricity;
- Access to marshalling yards: RFF can provide the operation of switching installations of the yard and the braking and stopping of wagons. It is fundamental for the service that the request is done as soon as possible, otherwise RFF might not be able to provide the service with the adequate level of efficiency;
- Prolonged stabling on holding sidings: Prolonged en-route stabling of more than one hour is permitted only if the request is made with substantial notice. RFF does not assure that such service will be available for last minute requests. The

prolonged stabling of wagons loaded with dangerous goods is only accepted under the conditions fixed by the regulations in force and on specially assigned tracks;

- Rail installations of combined transport terminals.

8.13 The following is a list of the additional services which can be provided by RFF:

- Supply of fuel, sand, emergency repairs of rolling stock, weighing, etc.: it is stated that all these services are provided in collaboration with SNCF, the incumbent railway operator. These services are governed by the provisions regulating its general service supply, which make them available to any interested undertaking.
- Exceptional and dangerous goods: RFF can perform a routing study that takes into account both the physical availability of the network and the impact on all other movements. The particular technical, operational, and financial arrangements applicable to each of the types of transport concerned are communicated to the railway undertaking by Réseau Ferré de France and, before the exceptional loads or the dangerous goods are actually moved, are transcribed in the particular conditions of the contract stipulated.
- Access to the telecommunications network: railway undertakings might obtain access to such services as of 2007 on lines with GSM-R coverage in most of the stations areas outside the buildings. Beyond the minimum telecommunications services represented by ground-train radio and transmission of signals via ERTMS on equipped lines.

Charging for services

8.14 Prices for most services are clearly presented in the Network Statement. This section lists the charges for all the services not included in the minimum access package.

8.15 For the use of electric traction installations, RFF charges, for all electric trains that use the network, a charge equal to the product of the distance travelled on the elementary sections used and a unit price of €0.214 per train-km (VAT excluded). For power transmission, RFF charges, for all electric trains that use the network, a fee equal to the product of the distance travelled on the lines used and a unit indicative price (in Euro, exclusive of VAT per electrified kilometre per train) indicated in the following table. This charge may be adjusted periodically to reflect the costs borne by RFF. Notably due to the evolution of electricity public charging.

TABLE 8.3 CHARGE FOR TRANSMISSION & DISTRIBUTION OF TRACTION POWER

Fee per electrical train-kilometre	Unit price (€, excl. VAT)
High speed national and international trains	0.454
Other national and international passenger trains	0.344
Ile de France regional passenger trains	0.445
Other regional passenger trains	0.218
Freight trains	0.416
Other trains	0.082

8.16 The charges for access to combined transport sites vary according to the location.

TABLE 8.4 CHARGE FOR ACCESS TO INTERMODAL TERMINALS

Name of terminal	Region	Monthly tariff per train (€)
AGEN	AQUITAINE	776.80
AMIENS	PICARDIE	999.66
ANGERS	PAYS DE LA LOIRE	888.23
ANGOULÊME	POITOU-CHARENTES	666.44
AVIGNON COURTINE	PROVENCE-ALPES-CÔTE D'AZUR	7,306.41
CLERMONT- FERRAND	AUVERGNE	2,442.90
COGNAC	POITOU CHARENTES	977.37
DAX	AQUITAINE	888.23
GEVREY	BOURGOGNE	594.86
GRENOBLE	RHÔNE-ALPES	1,731.89
HENDAYE	AQUITAINE	1,665.04
HOURCADE	AQUITAINE	9,667.60
LE HAVRE PLAINE	HAUTE-NORMANDIE	1,599.24
LE HAVRE SOCQUENCE	HAUTE-NORMANDIE	776.80
LE MANS	PAYS DE LA LOIRE	666.44
LIMOGES	LIMOUSIN	166.51
LOMME	NORD-PAS DE CALAIS	3,941.33
MAISONS-ALFORT POMPADOUR	ILE-DE-FRANCE	6,348.95
MARSEILLE CANET	PROVENCE-ALPES-CÔTE D'AZUR	7,672.53
MONTPELLIER PRES D'ARENE	LANGUEDOC-ROUSSILLON	1,110.03
MULHOUSE	ALSACE	888.23
NANCY CHAMPIGNEULLES	LORRAINE	2,109.69
NANTES	PAYS DE LA LOIRE	2,353.76
NICE	PROVENCE-ALPES-CÔTE D'AZUR	1,706.42
NOISY-LE SEC	ILE-DE-FRANCE	7,983.47
ORLEANS	CENTRE	955.09
PARIS CHAPELLE	ILE-DE-FRANCE	2,442.90
PAU	AQUITAINE	888.23
PERPIGNAN	LANGUEDOC-ROUSSILLON	6,239.90
RENNES	BRETAGNE	2,426.98
SETE	LANGUEDOC-ROUSSILLON	211.11
SOTTEVILLE	HAUTE-NORMANDIE	1,554.67
STRASBOURG CRONENBOURG	ALSACE	3,686.64
TOULOUSE FENOUILLET	MIDI-PYRENEES	4,197.08
TOULOUSE ST-JORY	MIDI-PYRENEES	4,219.36
TOURS	CENTRE	888.23
VALENTON 1	ILE-DE-FRANCE	13,901.82
VALENTON 2	ILE-DE-FRANCE	3,396.58
VENISSIEUX	RHÔNE-ALPES	9,282.39
VESOUL	FRANCHE-COMTE	2,398.33

Source: RFF Network Statement, 2006

- 8.17 The charge for access to marshalling yards is the same for all 42 facilities and is equivalent to €34,391.30 (excluded VAT) per marshalling yard per month. Furthermore, the charge for the use of the facilities within the marshalling yards is of €17,196 (excluding VAT) per marshalling yard per month. The charge for access to sidings is equal to the product of the number of kilometres of sidings to which access is requested and the unit price of €53.29 per km per month. For the stabling of a freight train for a period of more than hour, RFF charges an amount equal to €10.83 (excluding VAT).
- 8.18 The preparation of studies for exceptional consignments and consignments of dangerous goods is free in some cases, while in other cases a charge is set in separate contract with the railway undertaking. The charge for access to the telecommunications network is of €66 (excluding VAT) per month per user.
- 8.19 The following table is a list of the charges for access to some additional facilities.

TABLE 8.5 ACCESS CHARGES TO ADDITIONAL FACILITIES

Name of facility	Manner of calculation	Unit price (excluding VAT)
"Futuroscope" station	Fixed monthly fee, in consideration of the investment made by Réseau Ferré de France.	63,988
Elementary section 58069 "Saint-Jean de Védas-Montpellier" ¹	Fixed monthly fee, in consideration of the investment made by Réseau Ferré de France.	13,787.50
Elementary section 34009 "Le Havre-Faisceau alluvionnaire" ²	Fee per path-km, in consideration of the investment made by Réseau Ferré de France.	25.86
Elementary section 38080 "Montérolier-Buchy-Motteville" ²	Fee per path-km, in consideration of the investment made by Réseau Ferré de France.	0.80

Source: RFF Network Statement, 2006

Notes: 1) This fee applies as from the putting into service of Line 2 of the Montpellier tramway on this section, 2) These fees apply from the commencement of rail services from Port 2000 at Le Havre.

Stakeholder analysis

Problems/complaints

- 8.20 We were informed that some operators had difficulties in accessing to price quotations from RFF regarding electricity charges. These operators have significant problems in providing their clients with quotations, since a major component of their costs is not available.

- 8.21 Although diesel can be bought by private providers, it is not easy for private operators to undertake the fuelling of their locomotives; they can either do it at their own facilities, at the client's facilities or at SNCF's fuelling points. It is relatively difficult for new entrants to invest in new facilities because of financial constraints, and it is not always possible to undertake diesel fuelling at the client's facility, either because of logistical difficulties, or because of constraints set by clients. Diesel can be purchased at the fuelling station of SNCF's facilities, yet we were informed that prices for their use are much higher for new entrants. Furthermore, the access conditions in some cases are unclear, for example when rolling stock is passed to SNCF for fuelling, often there is no clear timescale provided for when it will be returned making it difficult for an operator to correctly plan its business.
- 8.22 We understood that SNCF plays a major role in RFF's activities, such as not only access to the rail network but also to facilities; in fact, competitors have to divulgate their capacity intentions to SNCF, thus undermining free and equal competition. Furthermore, it seems from our discussions with key stakeholders that on the ground there is no real transparency regarding priorities when conflicts arise and capacity is given to new entrants only where not requested by SNCF. This is not only a result of the timetabling process but also of the daily operations in terminals.

Stakeholder views

- 8.23 Interviews were conducted with the major stakeholders in French railway industry. All stakeholders we interviewed agreed on the fact that SNCF, through operating RFF's and its own facilities, is the sole provider of rail-related services to third-parties.
- 8.24 Another common point of view was that it would be unlikely that a new provider of rail-related services could emerge, because we were informed that such activities are not profitable, and facility operators receive elevated public contributions in order to run this business. For example, Novatrans received almost €4 million in subsidies in 2004, down from about €4.9 million in 2003,³ these subsidies equate to about 3.5% of total annual income. It is true that in some other networks the freight terminal operators benefit from subsidies (such as the freight facilities grants), but they are usually time limited and much smaller than these annual payments.
- 8.25 Yet, we were told that the maintenance business might be of interest to manufacturers of rolling stock as they are in a better position to make the necessary investment and as many of them are now offering rolling stock for lease (or sale) on a "wet lease" basis where the maintenance activities related to the new rolling stock are the responsibility of the manufacturer. Therefore, it can be considered as a strategic and ancillary service to the manufacturing business.
- 8.26 SNCF's facilities are mainly used for the three following activities: parking, filling of diesel and sand, and maintenance. SNCF is indeed willing to provide these services to other operators. However, as far as we understood from all the interviewed stakeholders, capacity in the facilities is allocated giving priority to SNCF. Only after

³ Taken from the Novatrans Annual Report 2004.

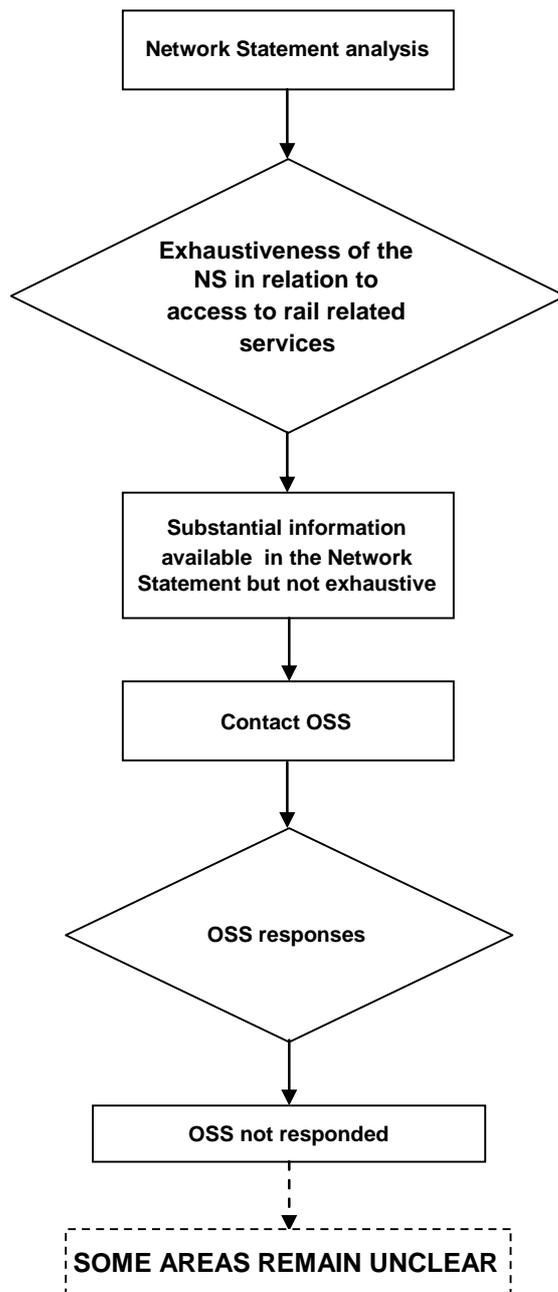
SNCF has received its required capacity, then other operators can be served.

- 8.27 SNCF stated that there is currently no problem at all regarding conflicts. The use of its facilities tends to be particularly high all year round, in particular during peak periods, but there is the possibility of some capacity to be offered to other operators. SNCF has no plan or rule in the event that a conflict arises, yet it stated that first priority would be granted to SNCF. Furthermore they stated that there should be no problems regarding conflicts for diesel or sand filling, yet conflicts may arise for maintenance services.
- 8.28 The stakeholders we spoke to explained that the new entrants would tend to provide services through their own facilities, as is case of VEOLIA CARGO. But it is very important to note that this requires a high investment and set up costs, which would be a significant cost for new entrants. VEOLIA CARGO was able to provide such investment through its holding company.
- 8.29 Furthermore, VEOLIA CARGO has its own training facility, the Veolia Campus, in Paris. Previously, VEOLIA CARGO had some of its personnel trained in SNCF's training facility of Dourges, but we have been informed that VEOLIA CARGO has had problems with externally staff trained. Furthermore, we have been told that SNCF's costs for providing this training is much higher than if the service was done in-house.
- 8.30 SNCF is not willing to invest in new facilities for providing services to other operators since, as stated, this business not only is not profitable, but might compromise other activities by drawing away scarce resources.
- 8.31 VEOLIA CARGO provides rail freight services between France and Germany, while SNCF operates in cooperation with other incumbent operators. However, neither of the two French operators faced problems at border stations or in accessing the rail networks, and no time is lost at borders.
- 8.32 SNCF owns several training facilities, the most important one in the city of Rennes. There is no fixed number of graduations per annum, as these are based on the recruitment needs. Other operators can use SNCF's training facilities and there are applications from other operators to send their personnel at SNCF's training facilities, it seems that it is probable that these applications will be accepted.
- 8.33 All operators are currently installing telematics services, since the request for this service has been on the rise. SNCF stated that, in partnership with RFF, they would provide this service to other operators upon the payment of a fee.

Case study

- 8.34 For the case study we contacted the One Stop Shop in France to obtain further information on the access conditions, the figure below sets out the process that we followed for this network as well as the progress in terms of obtaining further data.

FIGURE 8.3 CASE STUDY PROCESS



- 8.35 As can be seen from the figure above, the Network Statement, while including substantial amounts of information does not include complete information with respect to access to rail-related services. In order to get a better understanding of the access conditions, we approached the local OSS but they have chosen not to respond to our survey. As a result we must conclude that some areas remain unclear.

9. GERMANY

Introduction

- 9.1 The German railway market has undergone considerable development in the last months. The most important change relates to the creation of a new legal framework, established with delay in order to meet the expectations and full requirements of the First Railway Package.
- 9.2 In Germany the rail-related services are undertaken by a number of companies, these are shown in the table below.

TABLE 9.1 RAIL-RELATED SERVICES BY PROVIDER

Service	Provider
Electricity for traction	DB Netz (infrastructure manager)
Diesel fuel for locomotives	DB Netz
Locomotive pushing services	Each operator independently
Back-up services	Each operator independently (requirement)
Services in marshalling and shunting yards	Marshalling yards yet almost exclusively used by Railion
Train formation services	Each operator
Services in freight terminals	Each operator (mostly via DUSS GmbH, daughter company of DB Netz and Stinnes)
Telematics services for freight operations	Each operator
Services in passenger stations	Each operator
Computer reservation services for passenger transport	Each operator (factually not existent beside DB AG)
Training facilities	Retraining: each operator Training institutes mainly by DB Bildung
Leasing of rolling stock and staff	Private lessors, Separate leasing of staff
Maintenance	Operator, manufacturer, lessor
Rolling stock cleaning	Operator (subcontractor)
Services in storage sidings	Operator (subcontractor)
Provision of on-board train protection systems; telecom and communications services	Manufacturers of the equipment
Services in border stations	DB Netz and operator

Market information

- 9.3 There has not been much growth in the passenger market. In 2005 across all transport modes there was a slight increase in demand, equivalent to a growth rate of 1.1%. The rail sector increased marginally faster (2.5% in regional transport and 0.5% in long distance transport) compared to other modes.

TABLE 9.2 PUBLIC PASSENGER TRANSPORT 2005 IN GERMANY

Transport sector	2005		2004		Change 2005 to 2004	
	Persons	Pkm	Persons	Pkm	Persons	Pkm
	Mil.				%	
Bus and Rail ⁴	10,195	126,530	10,092	124,408	1.0	1.7
Regional transport lines	10,070	91,210	9,968	90,270	1.0	1.0
Number of trips ⁵						
with rail	2,004	40,850	1,955	40,168	2.5	1.7
with tram	3,483	15,500	3,358	14,987	3.7	3.4
with bus	5 262	34,860	5,264	35,115	- 0.0	- 0.7
Long distance bus travel	9	1,660	9	1,743	- 3.8	- 4.9
Long distance Rail travel	116	33,660	115	32,395	0.5	3.9
Air transport	147	N/A	137	N/A	7.3	N/A
Total	10,342	N/A	10,229	N/A	1.1	N/A

Source: Uniconsult. Note: 2005 figures are forecasts

- 9.4 In long distance passenger transport the incumbent company DB AG still has a close to 99% market share due to limited activities of interregional transport services like those of Veolia or the seasonal transports of GVG. In the regional transport market, the market share of the incumbent is about 88%.
- 9.5 The general market development in the freight segment is illustrated in the table below. Road and rail have seen a reduction in tonnes transported in 2005, barges and vessels have improved their position. The volume of transport services (tonne-km) has increased in all modes. The rail sector achieved an increase of 3.4% in comparison to 2004.

⁴ Companies > 250.000 passengers per year with regional transport lines and bus based long distance transport with > 250.000 passengers per year as well as all companies with rail based long distance passenger transport.

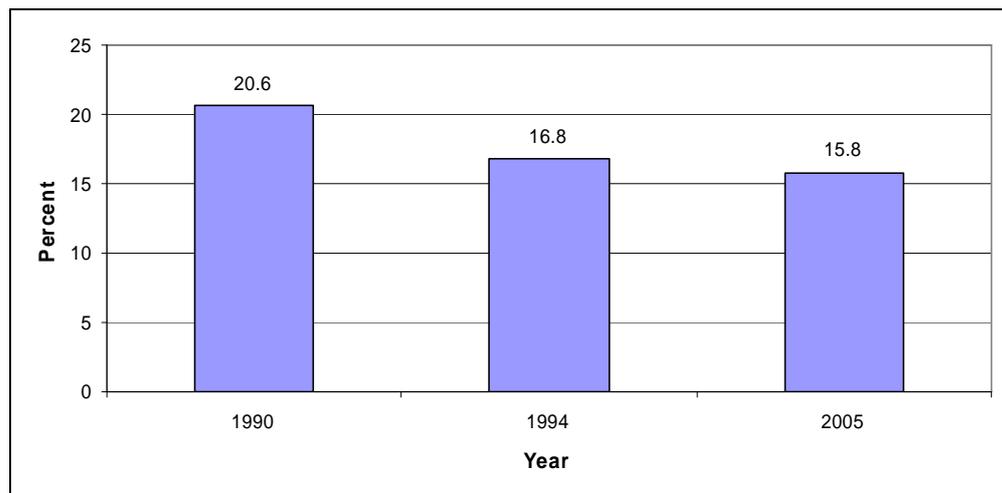
⁵ By including changing passengers the accumulated passenger figure according to different used transport modes is larger than the passenger figure for the line based regional transport in total.

TABLE 9.3 FREIGHT TRANSPORT IN GERMANY 2005

Transport sector	2005		2004		Change 2005 to 2004	
	Tonnes	tkm	Tonnes	tkm	Tonnes	tkm
	Thousands	Mil.	Thousands	Mil.	%	
Road	3.021.300	394.000	3.043.100	383.600	- 0,7	2,7
Of which:						
<i>Domestic trucks</i>	2.716.200	270.700	2.750.000	266.700	- 1,2	1,5
Railway	305.600	89.340	310.261	86.409	- 1,5	3,4
Barge	239.200	65.720	235 861	63.667	1,4	3,2
Seagoing vessels	279.500	N/A	268.205	N/A	4,2	N/A
Pipelines (crude oil)	96.400	16.920	93.798	16.236	2,8	4,2
Airline	2.900	N/A	2.677	N/A	8,6	N/A

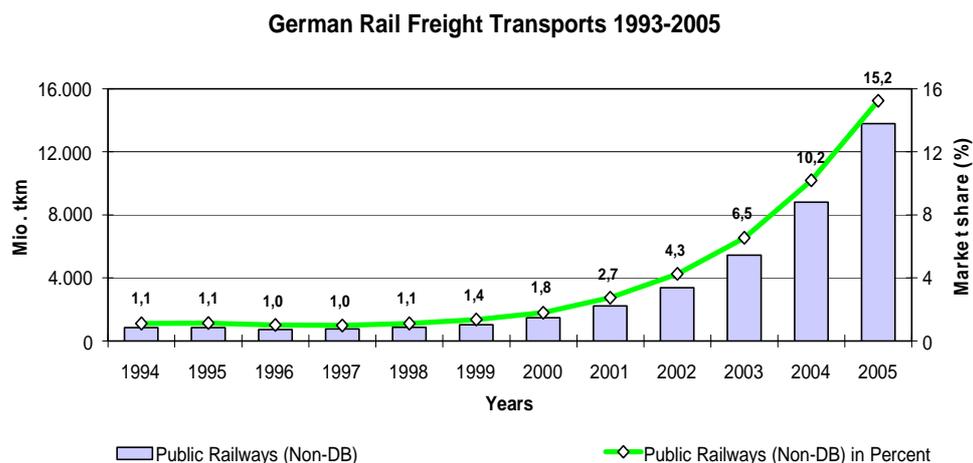
Source: Uniconsult Note: 2005 figures are forecasts

- 9.6 From 2000 to 2005 the market volume increased by about 8% in terms of train-km, however, in the same period the tonne figures increased by about 4%. The current forecasts predict that the railway sector will not outstrip the overall freight market growth figures. Rail freight's market share shall increase to 9.4% in 2009. On the basis of this forecast there are no State-supported growth initiatives planned in the next few years despite the intended network wide open access beginning in 2007.
- 9.7 At the beginning of 2006, 311 licensed railway undertakings were registered in Germany. Of these 263 entities were allowed to run rail freight transport services. 241 companies are in part owned by the public sector, 22 are tied to DB AG and/or other federal state railways.
- 9.8 Most of the circa 290 Non-DB companies have an insignificant impact on the market. Many licences were never used, and some companies will never start due to missing staff and equipment. In actual facts, there are only five or six companies that can be seen as market players: Rail4Chem, TX Logistik, SBB Cargo Deutschland, HGK, CTL, Veolia Cargo (former Connex Cargo Logistics).

FIGURE 9.1 MARKET SHARE OF RAIL FREIGHT IN GERMANY

Source: Uniconsult

- 9.9 The intermodal market share situation has shown only very little movement in recent years. Compared to the early 1990s, there has been a considerable decline from about 21% to less than 16% in 2004. In relation to transport volumes the rail freight segment still has a market share of about 8%.
- 9.10 Intramodal competition in the freight sector gathered momentum in the recent years. The figures below show the development until 2005. Since the beginning of the rail reform in 2000 the so called "third parties" have increased the services they offered eightfold. The market share accordingly followed suite especially in recent years increasing to more than 10%.

FIGURE 9.2 TRANSPORT SERVICES OF NON-DB-FREIGHT COMPANIES IN GERMANY

Source: Uniconsult

Implementation into national law of the provisions relating to access to railway services

- 9.11 The new General Railway Act ("Allgemeines Eisenbahn-Gesetz" (AEG)) represents a further step in Germany to enact the Directives of the First Railway Package. For the first time the AEG also included a preamble saying that these articles should contribute to foster intramodal competition, so that now judges have a guideline which they can use to interpret difficult cases.
- 9.12 With the "Third Eisenbahnänderungsgesetz" the regulatory bodies in Germany received new duties, for example the opening and closing of railway lines, ensuring the independence of the railway infrastructure managers and the setting of access charges.
- 9.13 The Bundesnetzagentur has become the regulatory body for the railways and is in charge of supervising the enforcement of the railway laws concerning the access to the rail network. This body also monitors other network industries like telecommunication and energy. The monitoring body of the "Bundesnetzagentur" now is the Federal Ministry of Economics ("Bundeswirtschaftsministerium"), whereas the German Federal Ministry of Transport ("Bundesverkehrsministerium") remains the superior professional body. Through this, the conflicting interests of the State, which is at the same time shareholder and regulator of the incumbent company DB AG (administered by the "Bundeswirtschaftsministerium") are now looked after by two distinct bodies.
- 9.14 Some new mechanisms were put into force including: the committee representing the users of railway infrastructure ("Eisenbahninfrastrukturbeirat", established in January 2006), constituted as a part of the regulatory body; the regular report of the monopoly commission prepared every two years; and finally the report of the regulatory body ("Bundesnetzagentur") which has to be made yearly and distributed to the Lower House of Parliament ("Deutsche Bundestag").
- 9.15 There are 17 members in the infrastructure committee which comprise a selection of the most well-known representatives of the railway sector. This board shall ensure that the interests of private railways are taken into consideration. There is some scepticism about the effectiveness of this committee but there is hope that it may become an important instrument to address future infrastructure development.
- 9.16 The following table provides a summary of the implementation of EU legislation in Germany.

TABLE 9.4 EU LEGISLATION TRANSPOSED INTO NATIONAL LAW

EU Legislation	Title	Implemented (and when, in which piece of legislation)
Directive 2001/14	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Yes Allgemeines Eisenbahngesetz (AEG); Verordnungen; e.g. Eisenbahninfrastruktur-Benutzungsverordnung (EIBV)

- 9.17 According to the above law, operators of railway infrastructure and service facilities

have to publish their access conditions as well as the range of services and fees according to AEG rules. The aim is to create a level playing field for all access beneficiaries.

- 9.18 The "Eisenbahninfrastruktur-Benutzungsverordnung" (EIBV) rules on the rights of infrastructure access and purchase conditions for services, which have to be provided on a non-discriminatory basis.
- 9.19 Since 2005 at DB AG a new entity the Vorstandsressort Infrastruktur und Dienstleistungen was set up. With the aim of easing the activities needed to be done for the execution of comprehensive construction projects, and the main component of the new body is DB Netz AG.
- 9.20 The main areas that are covered by the new organisation are:
- Track;
 - Stations;
 - Construction;
 - Energy;
 - Services;
 - Fleet management and Services; and
 - DB Systems GmbH.
- 9.21 The "Services" are mainly used by DB AG ; in other segments of the units described above, third parties are of increasing importance (for example "Energy").

Access conditions

- 9.22 Due to a decision made by the regulatory body on 10th March 2006, DB AG had to adjust the access conditions ruled by the "Schienennetz-Nutzungsbedingungen" (SNB). The modified procedures and conditions were put into force on 10th April 2006. Consequently, the "Nutzungsbedingungen für Serviceeinrichtungen" (NBS) regulations have been amended as a result.
- 9.23 The access conditions in Germany are generally provided by the major incumbent DB Netz AG. The most important rail infrastructure manager is still acting as an integrated company as a part of the DB AG group. Pricing and path allocation are still performed by DB AG, though subject to external regulatory supervision; the private railway association "Netzwerk Privatbahnen" is expected to file a complaint in relation to these issues.
- 9.24 The Network Statement and the relevant supplements of DB Netz AG (2006 and 2007) are very comprehensive. The main Network Statement document only has 20 pages providing general information. The necessary details concerning access charges and conditions for dedicated types of trains and network areas are contained in the separate pricing document and in the utilisation rules (SNB).
- 9.25 Besides the Network Statement there are many documents concerning the technical and organisational aspects to be addressed by applicants before accessing the network.

The minimum access package and other services

- 9.26 The implementation of the relevant Directives mainly focuses on pure network access as well as the supply of electrical energy and diesel oil. Services like additional traction for steep routes are currently not offered by the infrastructure manager. Moreover facilities like sidings, loading areas etc. are offered by the market. In general Railion lease most of these facilities, and in many cases short term lease agreements for specific periods can be entered into with third parties, depending on the traffic the incumbent wants to run.
- 9.27 Also other relevant operational procedures like train composition in marshalling yards, brake testing etc. have to be performed or contracted by each company individually. For staff training, interested railway companies can purchase training services provided by a subsidiary company of DB Netz AG.
- 9.28 Finally the insurance services, needed for network access, are generally provided by DEVK, a mutual insurance association which is very close to DB AG, but also offers its services to third parties.

Charging for services

- 9.29 As stated above, services offered by the main infrastructure manager are regulated by the SNB document. The prices valid for the 2007 timetable period and beyond for additional services are shown in the table below.

TABLE 9.5 PRICES OF ADDITIONAL SERVICES

Service	Price in Euros	Unit
Calculation of travelling times	80	Each
Train path studies	200	Each
Feasibility studies	80	Per hour
Timetable studies	80	Per hour
Train path diagrams	7	Per printed page or PDF
IT System for network disposition	1,400	Per month
Data management	70	Per hour
Training of mentor	70	Per hour
Network data supply	750.56	Per month
Statistics	107.37/28.12/6.67	Per month/week/day

Source: DB Netz. Free items not included

- 9.30 Furthermore, to facilitate the calculation of network access fees, DB Netz AG provides a software tool that can be downloaded.
- 9.31 For the utilisation of sidings, marshalling yards and other facilities, special conditions (described in four documents) were put into force setting out the scope of the services as well as the parties' general rights and obligations. In order to access the relative facility the applicant has to provide the following information:

- Service facility needed;
 - Parameter of the track needed;
 - Required service (stabling, loading, etc.);
 - Other peripheral facilities (see below);
 - Period of utilisation (date, time);
 - Contact details of the person(s) responsible for the request, in case that clarifications are needed.
- 9.32 Railway companies are expected to use their own staff and rolling stock when using marshalling yards, also 38 siding locations are identified in supplement 1 of the NBS document, each facility has different equipment available.
- 9.33 The formula below calculates the user charges for the access to facilities. It comprises six components which are dependent on the infrastructure offered as well as the individual consumption of services.

$$\begin{aligned}
 & \text{Length of tracks} \times \text{Price per metre of track} \\
 + & \text{Length of catenary} \times \text{Price per metre of catenary} \\
 + & \text{Number of switches by category} \times \text{Price per category of switches} \\
 + & \text{Number of peripheral facilities} \times \text{Price per peripheral facility} \\
 \pm & \text{Service related components} \\
 + & \text{additional costs / consumption costs} \\
 = & \text{User charge}
 \end{aligned}$$

- 9.34 The published prices can be changed by the infrastructure manager in the event of modernisation or enhancement. Also general changes regarding costs can be a reason to modify user charges. The price setting shall consider also the intermodal competitiveness of the rail transport sector.
- 9.35 The following figures show the cost components set in 2004 that are not dependent on the length of the used track and have to be paid according to the utilisation.

TABLE 9.6 COST COMPONENTS REGARDING DIFFERENT QUALITY LEVELS (INDEPENDENT OF TRACK LENGTH)

Price / Track and Year	Quality Level I (EUR)	Quality Level II (EUR)	Quality Level III (EUR)	Quality Level IV (EUR)	Quality Level VI (EUR)
One-sided connection	9,203.25	5,368.56	2,045.18	3,000.00	3,200.00
Two-sided connection	18,406.51	10,737.13	4,090.36	6,000.00	6,400.00

Source: DB Netz

- 9.36 The price to be paid depends on the length of track to be used. The infrastructure manager differentiates between tracks with and without catenary. With catenary, the cost per metre/year is € 16.36, without catenary the price is € 14.83.
- 9.37 The following table shows the different standards and categories as well as the prices

charged by the infrastructure managers for access to other ancillary facilities. Categories and prices will remain mainly unchanged in the near future. The exception is the electric pre-heating for passenger trains which will no longer be offered from December 2006.

TABLE 9.7 PRICES FOR DIFFERENT LEVELS OF ANCILLARY FACILITIES IN 2004

Level of configuration	Price per year (€)	Reference unit
Semi-automatic speed control	3,000	Track
Automatic speed control	8,000	Track
gradient balancing braking systems with disappearing buffer	12,500	Track
gradient balancing brakes	10,000	Track
wagon movement facilities	9,000	Track
Locally operated radio controlled brake test facilities	4,000	Pillar
Radio controlled brake test facilities	9,000	Pillar
Static or dynamic track scale	30,000	Track scale
Parking lot with meadow soil protection	3,500	Parking lot (22 m)
Parking lot with tank soil protection	9,000	Parking lot (22 m)
Restroom recovery and cleaning-up facilities	6,500	Unit
Internal cleaning arrangements		According to configuration
(Electrical pre-heating assets for trains (DB Energie))		On request

Source: DB Netz

- 9.38 If a customer needs new installations for energy and water supply they need to pay €1,000 for each interface and €150 to 200 per metre for cables and pipes. Older installations can be used, but they are offered with a 50% discount.
- 9.39 For those railway companies which are in the position to contract for more than one year, discounts are available. This is possible only for larger companies, which can guarantee further transport contracts (typically lasting only 6 months). For a two years contract there is a 2% discount, for a six years contract 6%. However, a surcharge must be paid if service facilities are used only for a very short time. The surcharges for a utilisation period less than one year are calculated on the basis of the part-time user premium, see the table below.

TABLE 9.8 SURCHARGES FOR SHORT-TERM USE OF SERVICE FACILITIES 2004/2007

Duration of Utilisation	Part of premium	Surcharge (%)
1 month	1/12 of the premium per year	20
1 day	1/365 of the premium per year	35
1 hour	1/24 of the premium per day without	50

 surcharge

Source: DB Netz

- 9.40 Energy is provided by DB Energie (DB Energie GmbH), a 100% subsidiary of Deutsche Bahn AG. Since 1st January 2004, potential users of the network can purchase energy from third parties. Electric energy is the main form of traction energy within Germany. The DB AG Group's network is 34,218 km long, of which 56.5% is electrified, about 90% of the transport services use electric traction energy. The current price for electrical energy on the network is 0.0581 €/kWh plus VAT. In addition to this, supplement 4 of the framework contract for the supply of electric energy sets out the prices for the delivery of electric power supply.

TABLE 9.9 PRICES FOR ELECTRIC POWER SUPPLY (FOR TRACTION) 2006

Period	High tariff (HT)		Middle tariff (MT)		Lower tariff (LT)	
	From	To	From	To	From	To
Hours	05:30	09:00	09:00	16:00	00:00	05:30
Hours	16:00	19:00	19:00	22:00	22:00	24:00
<u>Operating tariffs (€)</u>						
€/kWh	0.1146		0.0886		0.0776	
<u>Surcharges according to § 14.3 Abs. 1 EEG (case of hardship) (€)</u>						
€/kWh	0.0004		0.0004		0.0004	
<u>Surcharges according to § 14.3 Abs. 1 EEG (other clients) (€)</u>						
€/kWh	0.0012		0,0012		0.0012	
<u>Rebate for regenerative supply (€)</u>						
€/kWh	0.044		0.04		0.034	

Source: DB Netz

- 9.41 In addition to the figure mentioned above a charge of +11.11% has to be paid to cover the total cost of the federal compensation directive relating to renewable energy sources. This translates to a final average charge of 0.0969 €/kWh.

TABLE 9.10 ALLOCATION SURCHARGES

Category	Surcharge (€/kWh)	Description
Between 0 and 100.000 kWh	0.0032	Preliminary price subject to possible compensation fees
> 100.000 kWh	0.0005	As long as the proportion of total energy cost does not exceed 4% of the total turnover in the last year
> 100.000 kWh	0.00025	As long as the proportion of total energy cost does exceed 4% of the total turnover in the last year

Source: DB Netz

- 9.42 If clients consume more or less energy than contracted an adjustment for those

quantities is made: € 0.075 per kWh in case of overuse and € 0.01 per kWh in case of underutilisation. If regenerative braking equipment is present on the locomotives, a refund is applied equivalent to 0.01 €/kWh. The equipment for regenerative braking can be leased for € 190 per annum. The table below shows the discounts that are available for contracts of different lengths.

TABLE 9.11 POTENTIAL DISCOUNTS IN CASE OF DEDICATED ENERGY VOLUMES PER YEAR

Duration of the contract to deliver electric energy	Level of discount concerning the contracted volume of energy
2 years	2 %
3 years	3 %
4 years	4 %
5 years	5 %
6 years	6 %
7 years	7 %
8 years	8 %
9 years	9 %
10 years	10 %

Source: DB Netz

- 9.43 Also a rebate in relation to dissipated energy volumes in all of the different tariff zones can be granted by the infrastructure managers. If more than 50 GWh are consumed, a rebate of 1% is granted. The level of rebate can reach at most 4%.

TABLE 9.12 POTENTIAL REBATES ACCORDING TO DISSIPATED ENERGY VOLUMES PER YEAR

Volume of dissipated energy per year [GWh]	Level of possible rebates
≥ 50	1 %
≥ 100	2 %
≥ 200	3 %
≥ 500	4 %

Source: DB Netz

- 9.44 The provision of diesel is ruled in Supplement 3 of the contract concerning the rail tank-service facilities. For the year 2006 the charge is € 0.056 per litre for diesel and € 0.28 per litre for heating oil. Furthermore, at some tanking locations also motor oil and industrial water are offered respectively for € 2.70 per litre and € 0.01 per litre.
- 9.45 The access conditions for passenger stations in Germany are regulated separately by the "Allgemeine Bedingungen für die Nutzung der Infrastruktur von Personenbahnhöfen der DB Station&Service AG (ABP) published on the 10th April 2006. This document has been amended by the "price list 2006", which includes the

prices for 8,137 train stops in Germany operated by Deutsche Bahn.

- 9.46 The stations are categorised in six classes. The applied categories and types are shown in the table below. Category 1 comprises 21 main stations, a total of 60 stations are included in category 2; these include main interchanges and airport links. Category 3 stations (250) are typically located in medium-sized towns. Category 4 comprises about 600 stations in large cities where passengers and commuters can change between different public local transport systems. Category 5 consists of about 1,300 stations located in smaller towns with various types of facilities.

TABLE 9.13 CATEGORIES AND TYPES OF PASSENGER STATIONS OF DB AG

Category	Type
1	Fernverkehrsknoten
2	Fernverkehrssystemhalt
3	Regionalknoten ggf. mit Fernverkehrshalt
4	Hochfrequenzierter Nahverkehrssystemhalt / Nahverkehrsknoten
5	Nahverkehrssystemhalt
6	Nahverkehrshalt

- 9.47 The criteria applied for the classification of stations are:
- number of passengers divided into long distance and regional transport services;
 - number of train stops divided into long distance and regional transport services;
 - whether there are connections available for long distance and regional transport;
 - Existence of different train types in the station; and
 - Local features like tourist attractions, number of inhabitants etc.

- 9.48 With this new charging system the total number of station charges has been reduced from 5,400 to 96 (16 Federal States by 6 categories); they all reflect the conditions of service in each State and are calculated with regard to two possible train lengths: the multiple for trains of less than 180m is 1; for trains longer than or equal to 180m the multiple is 2.

Stakeholder analysis

Problems/complaints

- 9.49 Non-discriminatory access remains an issue of discussion in Germany. Daily business in most cases seems not to be the problem, but the potential impact of possible discrimination and incomplete information regarding rail operations remain issues. In fact, some information concerning the use of stations or sidings can be obtained only from the incumbent.
- 9.50 There have been complaints, expressed for example in the German Parliament's transport committee ("Verkehrsausschuss"), in relation to the lack of transparency of the financial flows between the owner/operator of the infrastructure and the State, which cannot be externally monitored in enough detail. Some stakeholders present at

the Verkehrsausschuss have mentioned that they believe that public money is not being spent on infrastructure expansion or modernisation but to cover the losses of certain businesses. In addition the network development mainly follows the requirements of DB Netz's largest customers, typically those within DB AG Group. Initiatives like "Mora C" - the new orientation of services at underutilised sidings, undertaken in 2001 - illustrate the complementary behaviour of transport and infrastructure companies in DB AG Group. "Mora C" was a Railion's project and was started to increase efficiency in DB's freight business.

- 9.51 The main aim of this review was to focus on direct trains more than in the past. As a result, the services offered for regional operations and the local service of sidings was reduced significantly. Accordingly the infrastructure managers closed down the large amounts of infrastructure; between 2000 and 2005 the number of sidings declined from 5724 to 4004 (-30%). The interests of the municipal and private railway operators were not considered, so third parties were probably not given the opportunity to enhance their market position by entering some of the affected local markets to offer shippers alternative rail transport services.
- 9.52 As a result, the infrastructure manager seems to have modified the infrastructure to meet the commercial requirement of the entire DB AG group. Furthermore, this action means that the infrastructure available for the whole railway market has diminished, and the reopening of sidings can be ruled out for several years. As a further result, the railway market on the whole lost potential business.
- 9.53 This is contrary, to achieving an industry wide approach that ensures that the whole market's views are taken into consideration before any substantial decisions are made.
- 9.54 Another example of the lack of cooperation on the part of the infrastructure manager is that it does not provide any assistance to small operators in relation to using steep routes by offering pushing services. Services in marshalling yards are also not currently available. Also the new access conditions require potential users to perform composition, shunting etc. on their own. These requirements do not help the growth of intramodal competition and in general rail market growth.
- 9.55 The advisory board of railway infrastructure users ("Eisenbahninfrastrukturbeirat"), created to reflect the interests of all players active in the railway market, will probably provide a positive contribution in order to solve this problem and support adequate and fair network solutions.
- 9.56 Finally, it is important to mention a Court decision regarding the pricing policy of DB Energie (company member of DB AG Group in charge for the sale of energy). Rail4Chem complained about the difference in prices of electricity for traction between the companies of DB AG Group and other operators, and refused to pay this difference.
- 9.57 Following an interim decision that sided with Rail4Chem, in September 2006, the Higher Regional Court of Frankfurt decided that Rail4Chem had to pay the difference in prices to DB Energie for the year 2002 amounting to about €86,000 plus interest. The Court argued that in Germany there is no legal provision allowing companies outside the DB AG Group to be treated equally to those inside the Group and therefore

that the Railion price advantage of 7-8% was acceptable.

- 9.58 Some weeks later the 1st Cartel Senate of the Higher Regional Court of Frankfurt decided that the charging framework originally in place for the first train path pricing system (TPS 98) cannot be considered discriminatory for new entrants. Rail4Chem refused to accept the former pricing models which allowed only Railion (former DB Cargo) to benefit fully from the available discounts, due to their service volume. The Court argued that a market dominating company has a certain scope of discretion regarding pricing policy for those companies within its own group. Rail4Chem was accordingly compelled to pay the complete open accounts plus interest as invoiced by DB AG and a revision was not allowed. This case will now be looked at by the Federal Supreme Court.

Stakeholder views

- 9.59 From the perspective of the incumbent DB AG the manner in which Germany has implemented the EU Directives regarding the opening of the railway market complies with the requirements of an independent market organisation granting open access to all interested companies.
- 9.60 From the perspective of new entrants and service providers the question of separation of the infrastructure from service operations remains a key issue. However, the network access conditions have been improved lasting recent years. Some details are still not formalised, but can be defined with the infrastructure manager if the applicant already has a good knowledge of railway market and operations.
- 9.61 Nevertheless, the operators stated that the procedures required by the infrastructure managers are still too complex, time consuming and expensive (for example the timetabling procedures), and some important information, such as detailed information on the condition of the infrastructure is difficult to obtain. As an example, some infrastructure managers include the use of catenary within the train path charges, while others expect applicants to pay this separately. The priorities of services differ according to the infrastructure manager; this as well as different access charging regimes are to a certain extent hurdles to the effective operation of services. In general the transaction costs are seen as considerably high; this has a negative affect on the competitiveness of rail sector towards the other transport modes.
- 9.62 A further important comment by the stakeholders relates to the number of fuelling facilities, controlled only by DB Energy, which has fallen by about 50% in recent years. Mobile fuelling is not allowed for environmental reasons. As diesel traction makes up a significant proportion of rail freight transport, this issue should not be underestimated. As far as possible, operators try to avoid this problem by using sidings and facilities owned by municipal railways. It is important to note however that the supply of services within these fuelling facilities is seen by the operators as efficient and non-discriminatory.
- 9.63 The service availability in the railway sector in general meets the market needs; In fact, alternative sources can be found with relative ease for a number of services. Nevertheless, not all market segments are open; for example marshalling yards are mainly used by Railion, and new entrants perform shunting operations mainly on local

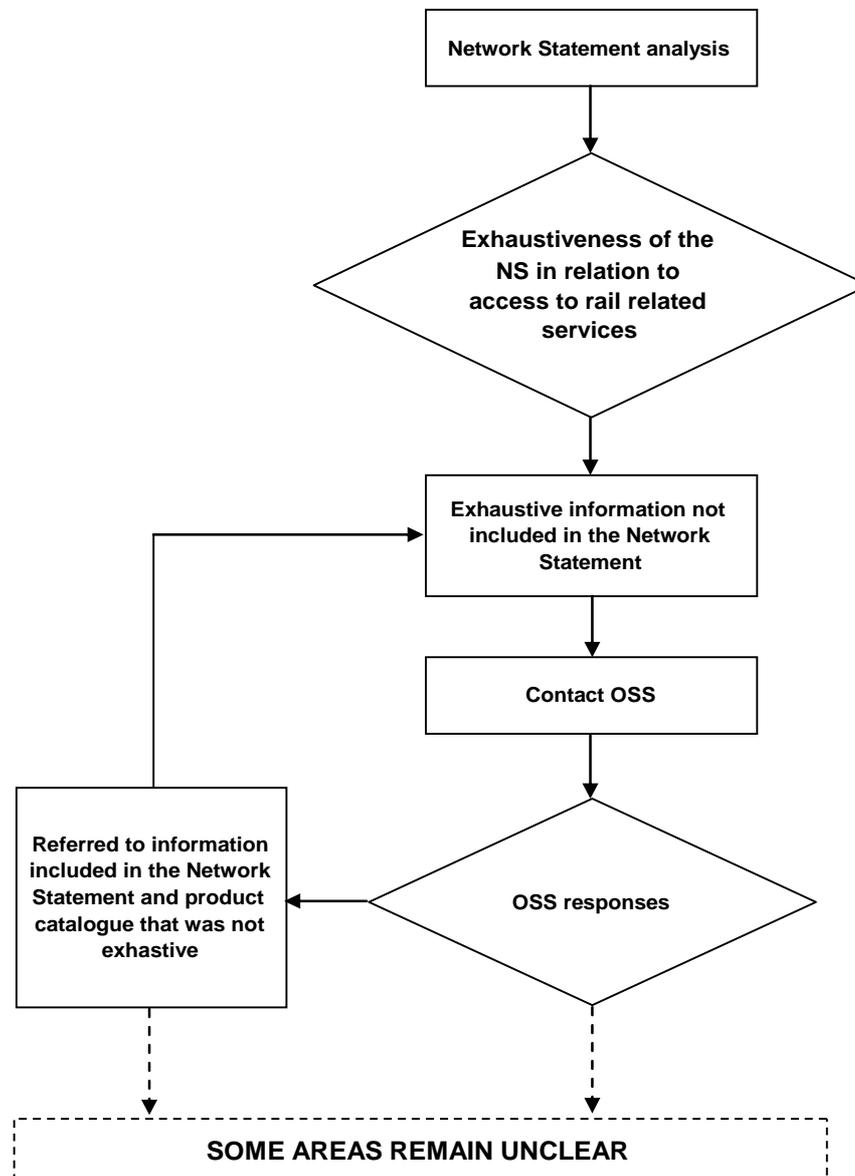
sidings or tracks, as DB Netz continues to reduce the total size of the network.

- 9.64 Furthermore the availability of certain types of wagons needed to serve dedicated market segments like steel, metal, coal products, other bulk and flat cars for containers is limited. Private lessors generally do not offer these types of wagons in leasing as a result of high investment risks, as the duration of transport contract is typically less than 6 months while life cycle of wagon is about 25 years. In addition, the lessors would have to face conflicts of interest with the incumbent, due to the potential of losing the largest operator as a potential client.. On the other hand, private railways are too small (in size and available capital) to invest the necessary amount of capital and face the relative risks. That is the reason why today in most segments the incumbent is the only provider of rolling stock.
- 9.65 Staff availability may become an issue in the coming years. Currently many staff members of former national operators are available; however, due to the reduction in training activities of DB AG and the insufficient training programmes performed by the private sector, the supply is decreasing. As a result, many private operators are considering creating their own training facilities to meet future demand.
- 9.66 Private entities complain also because of the information gap that exists particularly in relation to the number of and the opening times of sidings. This is as a result of the lack of coordination between the main entities looking after these facilities, that are DB Netz, Aurelis, and DB Real Estate.
- 9.67 Maintenance depots are currently operated by the incumbent and by municipal and a few private entities. Stakeholders have mentioned that in some cases there are restrictions on services in these depots but that the situation was improving also due to the fact that the new locomotives require maintenance in dedicated facilities.
- 9.68 In relation to the measuring of energy supply there are some doubts whether or not there is a level playing field. All applicants for network access must have, according to the general terms and conditions of DB Energy, on-board units installed on the traction vehicles to measure electricity consumption. This is an extra cost for all companies which seems not to be required for older DB locomotives.
- 9.69 Terminals for combined transport in Germany are mainly owned by DUSS - "Deutsche Umschlagsgesellschaft Schiene-Straße". DUSS itself is a subsidiary of DB Netz and Railion. These terminals have to provide open access due to the fact they are publicly co-funded. The terminal operators mainly follow the needs of their major clients by providing tailor-made solutions as far as possible. As a result, new entrants typically do not get the same level of attention as the core client. Stakeholders also referred that information on the prices and flexibility of access to these facilities was not available. Furthermore there is often a difference between the manner in which new entrants are treated at facilities where Railion is the dominating operator and where it is not.
- 9.70 The operators providing cross-border services stated that there is no specific demand for services at border stations. In general locomotives and locomotive drivers continue to run through to the final destination after the border crossing. Train stops and/or the change of locomotives and locomotive drivers are in principle possible.

Case study

- 9.71 For the case study we contacted the One Stop Shop in Germany to obtain further information on the access conditions, the figure below sets out the process that we followed for this network as well as the progress in terms of obtaining further data.

FIGURE 9.3 CASE STUDY PROCESS



- 9.72 As can be seen from the figure above, access conditions to rail-related services are unclear. The supplemental documents to the Network Statement contain substantial amounts of additional information but this is not exhaustive and the OSS is not able to provide more information other than those included in the Network Statement or provided by other information sources such as the infrastructure manager website.

10. GREAT BRITAIN

Introduction

- 10.1 Between the years 1993 and 1997, the UK Government implemented the most radical restructuring of any national railway undertaking in the European Union. The fundamental characteristics of the resultant industrial structure still remain in place today.
- 10.2 This chapter looks firstly at Great Britain, at the end there will also be a discussion about Northern Ireland.
- 10.3 The restructuring initiative combined:
- full vertical separation of rail infrastructure management from passenger and freight train service operations;
 - transfer of ownership of most rail sector assets and services from the public to the private sector, through a competitive sale and purchase process;
 - creation of concessions for all timetabled domestic rail passenger services, operated by private companies and awarded through a competitive tendering process;
 - effective liberalisation of access to national rail infrastructure and to ancillary rail facilities such as light maintenance and fuelling depots, for freight and passenger service operators (albeit with arrangements to moderate competition for tendered passenger services, and to allow exclusive use of some freight facilities.);
 - establishment of a substantive, independent external economic regulatory body, to secure the efficient management of the national rail infrastructure network, to oversee the allocation of infrastructure capacity, and to ensure stakeholder compliance with the liberalised access regime.

Transposition of First EU Railway Package

- 10.4 The development of railway policy and the restructuring of the rail sector in Great Britain predominantly reflected national priorities and objectives. However, the resultant structure of the rail industry in Great Britain also conformed to the objectives of the European Commission's White Paper 'A Strategy for Revitalising The Community's Railways' issued in 1996, and complied in practice with much of the subsequent legislation comprising the First EU Railway Package issued in 1998, and agreed by the EU Council of Ministers in March 2001 with a deadline for implementation of March 15th 2003.
- 10.5 From 2001, rail policy in Britain was driven by the need to address the consequences of the financial and operational failure of Railtrack (the privately-owned national rail infrastructure manager), leading to the establishment of Network Rail as a not-for-profit company limited by guarantee, a private sector organisation which operates as a commercial business but without shareholders. The regulatory regime applicable to Network Rail, and the configuration of the company itself, put a much stronger focus on system operation, maintenance and renewals than its predecessor. The advantages of simplifying the governance arrangements of the rail industry to eliminate structural problems and improve efficiency also became apparent to Government. A major

review of the rail industry was launched in 2004, leading to the enactment of further legislation in 2005. The resultant organisational restructuring did not disturb the fundamental industry attributes of vertical separation, private ownership of assets and services, liberalised access to rail infrastructure, competitively tendered concessions for rail passenger services and independent economic and safety regulation.

- 10.6 The UK Government's focus on domestic rail policy issues delayed the formal transposition of the provisions of the first EU Railway Package into domestic law and, irrespective of the existing broadly compliant structure of the British railway industry, the European Commission launched legal proceedings against the United Kingdom (and some other member states) in 2003. The UK Government finally implemented the secondary domestic legislation required to complete the transposition of the First EU Railway Package in respect of rail infrastructure access arrangements⁶ and rail operator licensing procedures⁷ on the 28th November 2005.
- 10.7 Between November 2005 and April 2006, The core transposition legislation was supplemented with measures to ensure equitable access to safety critical rail training facilities;⁸ to ensure compliance with interoperability standards and procedures for high-speed and conventional rail routes and services⁹; to transpose the provisions of the First EU Railway Package to Channel Tunnel rail infrastructure¹⁰; and to introduce new arrangements for granting safety certificates to rail operational undertakings and infrastructure management bodies, and for maintaining effective safety management systems within these organisations¹¹.

Rail Industry Operational Structure

- 10.8 National rail passenger services in Great Britain are currently provided through 21 competitively tendered concessions, each operated by a discrete train operating company. There are also a number of domestic open-access rail passenger operators, 2 of whom currently run regular, timetabled services (with a 3rd, Grand Central, planning to launch services within 1 year.) Other undertakings specialise in running excursion trains and temporary services and in short-term 'spot-hire.' There are currently 5 active commercial rail freight operators, with other licensed companies also offering 'spot-hire' and support services to freight users. EU data, sourced from the Office of Rail Regulation (ORR), records that there are currently 58 licensed

⁶ The Railways Infrastructure (Access and Management) Regulations 2005: Statutory Instrument 2005 No. 3049. <http://www.opsi.gov.uk/si/si2005/20053049.htm>

⁷ The Railway (Licensing of Railway Undertakings) Regulations 2005: Statutory Instrument 2005 No. 3050. <http://www.opsi.gov.uk/si/si2005/20053050.htm>

⁸ The Railways (Access to Training Services) Regulations 2006: Statutory Instrument 2006 No.598 <http://www.opsi.gov.uk/si/si2006/20060598.htm>

⁹ The Railways (Interoperability) Regulations 2006: Statutory Instrument 2006 No.397 <http://www.opsi.gov.uk/si/si2006/20060397.htm>

¹⁰ The Channel Tunnel (International Arrangements) Order 2005: Statutory Instrument 2005 no. 3207. <http://www.opsi.gov.uk/si/si2005/20053207.htm>

¹¹ The Railways and Other Guided Transport Systems (Safety) Regulations 2006: Statutory Instrument 2006 No.599 <http://www.opsi.gov.uk/si/si2006/20060599.htm>

railway undertakings in Great Britain, although not all are actively offering passenger or freight services. In addition the Rail Directorate of the Department for Transport is empowered to act as an ‘operator of last resort’ to ensure service continuity in case of default by a private operator of a franchised passenger concession.

- 10.9 Arrangements for the provision of rail-related services in Britain reflect the structure of the domestic rail industry, as described earlier. The table below provides a generic description of the distribution of responsibilities.

TABLE 10.1 RAIL-RELATED SERVICES BY PROVIDER

Service	Responsibility for Provision
Electricity for traction	Network Rail (infrastructure manager)
Diesel fuel for locomotives	Each operator independently
Locomotive pushing services	Each operator independently
Back-up services	Each operator independently
Services in marshalling and shunting yards	Each operator independently and facility owner
Train formation services	Each operator independently
Services in freight terminals	Each operator independently and facility owner
Telematics services for freight operations	Commercial decision for individual freight operating companies
Services in passenger stations	Station facility owner (operator) and infrastructure manager
Computer reservation services for passenger transport	ATOC
Training facilities	Each operator independently and 3 rd party training providers
Leasing of rolling stock and staff	ROSCOS; manufacturers; some operators
Maintenance	ROSCOS; manufacturers; most operators
Rolling stock cleaning	Each operator independently
Services in storage sidings	Each operator independently and facility owner
Provision of on-board train protection systems; telecom and communications services	Original equipment manufacturers
Services in border stations	Only one border station on GB rail network; operated by EWS International
Technical inspection services	ROSCOS; manufacturers; some operators

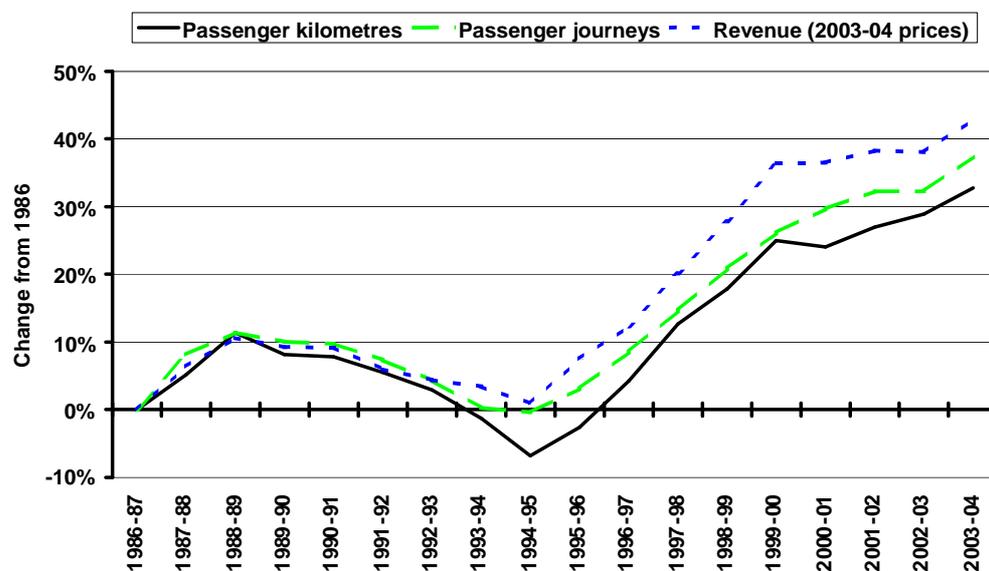
Rail passenger market structure

- 10.10 The liberalisation of access to the rail passenger and freight markets in Great Britain in 1994 was followed by sustained growth in rail freight and passenger traffic. As discussed in the Railimplement Report and summarised in figure 10.1, passenger kilometres, passenger journeys and real passenger revenue in Great Britain declined from 1987-88 until 1994-95, since then total passenger kilometres, passenger journeys

and real passenger revenue have risen by around 40%. As less than 1% of passenger journeys on the British railway system are international journeys by Eurostar services through the Channel Tunnel, the growth in passenger demand has been driven by domestic travel.

- 10.11 Moreover, as less than 1% of domestic rail passenger journeys are made on timetabled services provided by open access operators, the growth in domestic passenger travel is likely to have been stimulated at least in part by the commercial behaviour of private operators running franchised rail services, in turn responding to the obligations and economic incentives incorporated in their concession agreements. On some major corridors (for example London to Central Scotland, London to West Midlands, London to South Yorkshire), franchised operators provide competitive alternative services using different routes, and serving different intermediate locations. The growth in passenger travel and real revenue has continued since the period covered by Railimplement. In 2004/5 total national passenger revenue rose by 4.5% at current prices, and passenger kilometres rose by 3.5% over the previous year.

FIGURE 10.1 TRENDS IN RAIL PASSENGERS



Source: Office of Rail Regulation

- 10.12 As summarised in figure 10.2 below, freight tonnes lifted and freight tonne-kilometres carried by rail in Great Britain were in decline from late 1980s until 1994-5 (a period of organisational restructuring prior to the inception of the privatisation of process). The Railimplement report noted that since 1994-5, British rail freight carryings measured in tonne-kilometres had grown by some 45%. Within this trend in overall output, freight tonnage lifted had fallen by a further 9% but average haul length had risen by 59%, primarily because the dominant bulk commodity, coal for electricity generation, is increasingly imported through deep-sea ports rather than transported from domestic mines near major power stations.

International freight traffic: Transposition of the First Railway Package

- 10.13 International traffic accounts for only around 2-3% of current rail freight in Great Britain, despite the launch of rail freight services via the Channel Tunnel to France and other EU member states by British Rail (now English Welsh and Scottish Railway) in partnership with SNCF, in 1994. By means of The Channel Tunnel (International Arrangements) Order enacted on 19 December 2005, the provisions of the First EU Railway Package were applied to rail infrastructure capacity available to rail freight services through Channel Tunnel. A major problem at the time of drafting, impacting adversely on current traffic levels and potentially inhibiting the emergence of new rail market entrants and the development of future traffic opportunities, is the uncertainty over the future arrangements for use of the Channel Tunnel, given the financial restructuring of Eurotunnel, the Channel Tunnel concessionaire and rail infrastructure manager.

Rail freight market structure and dynamics

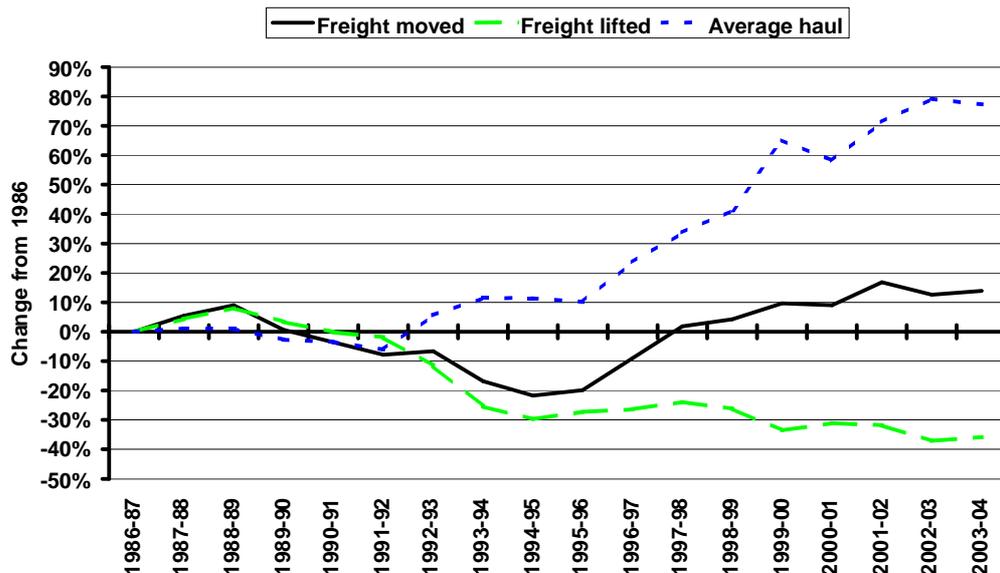
- 10.14 Since the data period covered by Railimplement, freight tonne-kilometres carried in Great Britain have continued to grow, with a 9.5% annual increase in 2004/5 compared to 2003/4, but tonnes lifted also rose by 11.5 % in total over the same period. This is not only the consequence of an increased demand for coal; whilst coal liftings increased by 21.4%, liftings of other commodities also increased by 7.0%. Since international traffic carried through the Channel Tunnel has declined during the study period, the growth in rail freight demand in Great Britain has been driven entirely by the capture of domestic traffic opportunities.
- 10.15 As mentioned earlier, 5 rail freight operating companies, all privately owned (or run as a private company)¹², currently compete within the freight market in Great Britain; in consequence, freight users have become increasingly experienced in market-testing and in benchmarking competing offers to obtain satisfactory services. A number of specialist train operators also compete with (and provide services to) rail freight undertakings to meet other related business opportunities (e.g. delivery or repositioning of passenger rolling stock, transport and operation of engineering plant, spot-hire of rolling stock or passenger excursion trains.)
- 10.16 English Welsh and Scottish Railway (EWS), formed in 1996 from the merger of 5 former subsidiary companies of British Rail and the subsequent acquisition of a smaller open access freight operator, is still the largest British freight operator, accounting for 69% of the rail freight market by turnover in 2003/4. However, since its inception, EWS has faced increasing competition in its bulk transport markets from Freightliner, originally a subsidiary company of British Rail specialising in maritime container transport; EWS has responded by developing new services to carry maritime containers and express freight, by expanding its rail passenger interests, and by developing its offers of rail industry services (e.g. rolling stock maintenance for 3rd parties.) In 2003/4, Freightliner accounted for 26% of the rail freight market by turnover, with 2 other freight operators (GB Railfreight, Direct Rail Services) of

¹² Direct Rail Services is an independent subsidiary of a public sector body

broadly equal size, accounting for almost all the balance of the market (5%).

- 10.17 Since the publication of the Railimplement Report, Advenza, the start-up rail freight operator offering a trial pallet-load service at published tariffs has exited the market through its acquisition by a specialist train operator and support service provider. Conversely, a new market entrant, Fastline Freight, has recently begun commercial services; its trains are currently operated under contract by another specialist licensed independent train operator.

FIGURE 10.2 TRENDS IN RAIL FREIGHT



Source: National Rail Trends

Legislation relating to access to railway services

- 10.18 The table below summarises the range of secondary legislation introduced by the British Government since the preparation of the Railimplement Report, to apply the provisions of the First EU Railway Package to the British railway system and, in particular, to transpose those elements ensuring access to the rail-related services defined in Annex II to EU Directive 2001/14.

TABLE 10.2 TRANSPOSITION OF FIRST EU RAILWAY PACKAGE AND RELATED EU LEGISLATION INTO BRITISH LAW

EU Directives	Title of British Legislation	Implementation date
2001/12 2001/13 2001/14 also 2004/49 2004/51	The Railways Infrastructure (Access and Management) Regulations 2005: Statutory Instrument 2005 No. 3049	November 28 th 2005
2001/13 also 2004/49	The Railway (Licensing of Railway Undertakings) Regulations 2005: Statutory Instrument 2005 No.3050	November 28 th 2005
2001/12 2001/13 2001/14 also 2004/51	The Channel Tunnel (International Arrangements) Order 2005: Statutory Instrument 2005 no. 3207	December 19 th 2005
2001/14 2001/16 also 2004/49	The Railways and Other Guided Transport Systems (Safety) Regulations 2006: Statutory Instrument 2006 No. 599	April 10 th 2006
2001/14 also 2004/49	The Railways (Access to Training Services) Regulations 2006: Statutory Instrument 2006 No. 598	April 10 th 2006
96/48 2001/16	The Railways (Interoperability) Regulations 2006: Statutory Instrument 2006 No. 397	April 2 nd 2006

Access conditions

- 10.19 The most significant change resulting from the transposition legislation, in terms of access to rail-related services, was the extension of non-discriminatory access rights (unless viable alternatives under market conditions exist) to rail operational and rail freight facilities in Britain previously exempted from access liberalisation. These exemptions had been granted to ensure stability and continuity of freight services during the rail privatisation process. The rail open access regime now includes all facilities such as terminals and ports, freight depots, marshalling yards and storage sidings. A significant number of these facilities are owned by Network Rail as infrastructure manager and leased on a medium or long-term basis to a freight operating company or freight user; others are privately owned and/or operated.
- 10.20 With minor exceptions the European Directives, on which the Railways Infrastructure (Access and Management) Regulations 2005 are based, presume open access arrangements to apply. Before introducing the British legislation, the Department for Transport undertook a stakeholder consultation programme, and subsequently published guidance explaining the scope of the regulations. The regulations require an applicant to seek access to a facility or service through commercial negotiation with

the relevant facility owner or service provider, and agree a reasonable solution. An applicant dissatisfied by the terms of the offer made, or by a refusal to engage or supply, can appeal at an early stage to the Office of Rail Regulation (ORR). ORR has produced guidance on the appeal process, including its interpretation of the viable alternative principle under market conditions. There are no detailed published access conditions for access to facilities or services but there are template agreements for stations and depots that can be obtained; these do not contain standard terms for the facilities that need to be customised for each facility.

The minimum level of service and other services

10.21 The services as defined in Directive 2001/14/EC have been applied in the following way in Great Britain. The minimum access package includes:

- handling of requests for infrastructure capacity; and
- the right to utilise such capacity as is granted and, in particular:
 - the right to use such running track points and junctions as are necessary to utilise that capacity;
 - train control, including signalling, train regulation, dispatching and the communication and provision of information on train movements;
 - all other information as is necessary to implement or to operate the service for which capacity has been granted.

10.22 Track access to services facilities and the supply of these services that must be provided include:

- where available, the use of electrical supply equipment for traction current;
- refuelling facilities;
- passenger stations, including buildings and other facilities;
- freight terminals;
- marshalling yards;
- train formation facilities;
- storage sidings; and
- maintenance and other technical facilities.

10.23 Additional services that should be offered upon request refer to:

- traction current;
- pre-heating of passenger trains;
- the supply of fuel, shunting and all other services provided at the access services facilities referred to in paragraph (2); and
- tailor-made contracts for:
 - control of the transport of dangerous goods;
 - assistance in running abnormal trains.

10.24 The ancillary services that may be offered to the railway undertakings include

- access to the telecommunication network;
- the provision of supplementary information;
- technical inspection of rolling stock

The rail-related services

10.25 Given the unique position of the GB market in terms of market opening the rail-related services (as shown in the first table in this chapter), it is necessary to explain in further detail the role of the different parties in providing rail-related services. These details are provided below:

- Electricity for traction: This is bought in bulk by the infrastructure manager who then sells it at regulated prices to the operating companies. These companies pay both the electricity charge (which varies according to the time of day and region) and a charge for the use of the electrification assets.
- Diesel fuel for locomotives: Individual operators procure their own fuel and refuel their locomotives in the light maintenance depots that they operate or have third party access to.
- Locomotive pushing services: In the rare occasions that this is needed, the operators, this is either done by the operator itself, or by third party, specialised rolling stock owners. There are no published prices for these services.
- Back-up services: This is usually done by the operators themselves or by specialised third party rolling stock owners. There are no published price lists for these services.
- Services in marshalling and shunting yards; train formation services; services in freight terminals; access to maintenance facilities; access to storage sidings: Provided by the facility owner, operator and in some cases third parties through a negotiated contract, there are no published price lists but if an agreement is not reached the parties can appeal to the ORR.
- Services in freight terminals: Each operator undertakes these services independently in their own facility, or in the facilities of third parties (e.g. ports). If an agreement is not reached on access and on pricing, the parties can appeal to the ORR. Telematics services are done by each operator independently.
- Services in passenger stations: The services are provided by the station facility owner to all parties using the station; the user pays a charge to the facility operator which in some cases is the infrastructure manager.
- Computer reservation systems: This is a service offered by the industry association ATOC, but all operating companies are required to participate in the common system.
- Training facilities: The facilities for the training of drivers and other rail staff are made available both by operators and by third parties. Furthermore, during the route training, drivers often learn the routes while riding in the cab of competitors' rolling stock.
- Leasing of rolling stock: This is done either by the ROSCOS, by the manufacturers, by the operators or by specialist third parties. There is no leasing of staff.
- Rolling stock cleaning: This is done by each operator independently usually at their maintenance depot or in specialised sidings. In many cases this service is outsourced to third parties.
- Provision of on-board train protection equipment, etc: This is supplied by the

manufacturers subject to testing and compliance with Railway Group Standards.

- Services in border stations: There is only one border station on the GB network and it is currently on a route that is subject to a derogation from the First Railway Package. The service provider is the largest freight operator on the network EWS.
- Technical inspection services: These services are mainly provided by third parties, but also by the operating companies and the various facility owners. This service is covered by the provisions in the Regulations mentioned above.

Stakeholder Analysis

- 10.26 The Railimplement Country Report on Great Britain provides a detailed analysis of the structure of the British railway system, explaining the roles of key stakeholders, and describes the main industry processes involved in specifying, planning, procuring and operating rail services, and in managing the rail infrastructure network. As mentioned earlier, the institutional and structural attributes, industry procedures and regulatory arrangements of the British railway system were well aligned to the objectives of EU rail policy and the principal provisions of the First EU Railway Package, prior to the implementation of the legislation listed above. The formal transposition of the provisions of the First EU Railway Package thus comprised an administrative process with only limited impact on many rail stakeholders, and there has been little stakeholder comment about its implications and effect, either in terms of the generic rail infrastructure access regime, or access to services such as safety-critical training.

Problems and complaints

- 10.27 The Stakeholder consultation process held by the Department for Transport prior to legislation, and further consultation undertaken by ORR during the preparation of its appeals guidance, identified some concerns about the impact of the extension of open access arrangements on the efficient operation of certain rail facilities such as depots and freight terminals, and on the viability of major freight terminals developed for specific traffic flows, or by individual customers or operators. However, most stakeholders were neutral or supportive of the extension of open access arrangements.
- 10.28 Initial discussions with officials at ORR have indicated that no significant problems have arisen and very few formal complaints have been lodged since the implementation of legislation extending open access rights to a wider range of rail operational and rail freight facilities. The commercial interests of privately-owned rail freight operators, freight users and facility incentivise stakeholders to reach negotiated agreements. Nor have many issues been raised about access to other types of rail-related service such as technical inspection or safety-critical training facilities.

Stakeholder views

- 10.29 Domestic rail legislation in the UK prior to the transposition of the First EU Rail Infrastructure Package already provided rail undertakings and authorised users with effective, non-discriminatory access to main running lines in Britain (other than CTRL and the GB part of Eurotunnel), to light maintenance depots and fuelling facilities, to many networks of sidings, and to rail-related services such as the supply of traction current. The statutory rights are supplemented by the contractual provisions of the

infrastructure access regime contained in the Network Code, approved by ORR. The code defines responsibilities for addressing operational disruptions, including planned line blockages such as those for engineering purposes, and the management of unplanned operational disruptions - such as the removal of failed trains.

- 10.30 The effect of the secondary legislation to transpose the First Package, enacted in November 2005 was, therefore, limited to:
- Integrating the domestic rail infrastructure access regime in Great Britain into the framework of EU rail legislation;
 - Aligning the terms of the GB domestic rail access regime, to the provisions of relevant EU legislation (e.g. as regards prioritisation between users where capacity is limited);
 - Extending the presumption of the open access to a range of rail facilities previously exempt from the GB domestic rail access regime (principally a range of freight terminals, sidings and marshalling yards), but in a way that minimised administrative costs and encouraged voluntary commercial agreements;
 - Clarifying and extending the rights of third parties to use rail-related services provided at these facilities (e.g. loading and unloading facilities)
- 10.31 ORR and DfT undertook extensive consultation prior to the legislation transposing the 1st Package; they identified few substantive concerns and little likelihood of major competitive effects. Our stakeholder consultation focused on the impact of extending the presumption of open access to facilities previously used exclusively by railway undertakings, or those owned and operated by private sector third parties. One issue investigated was whether the risk of enforceable open access rights would limit the willingness of private sector entities to invest in rail facilities – particularly where the facility is designed to handle the entity’s own traffic.
- 10.32 We found no evidence of any such disincentive and new terminal capacity is still being constructed in Britain. Several respondents commented that as privately-owned service providers, they actively welcomed third party use of their facilities, and had built third party income streams into their business plans, to offset the construction and operating costs incurred.
- 10.33 ORR’s decision to publish details of the appeals procedure it would adopt when reviewing a failure to agree access arrangements to a rail-related facility, was seen by one respondent as a helpful incentive for commercial entities to reach commercial agreement. A common theme amongst respondents was that the competitive nature of the rail freight market in Britain, operated and used almost exclusively by privately owned entities, provides strong incentives to reach commercial agreement reached through bilateral commercial negotiation, rather than facing the uncertainties and administrative costs of regulatory intervention.
- 10.34 However, no respondent was prepared to publish information about capacity availability or charges at rail-related facilities; with stakeholders commenting individually that, in practice, clients had very different commercial requirements that were best addressed through confidential commercial negotiations. Some terminal operators did however publish technical information about their facilities (e.g. number of tracks, load limit for cranes); respondents said that there was no evidence that this

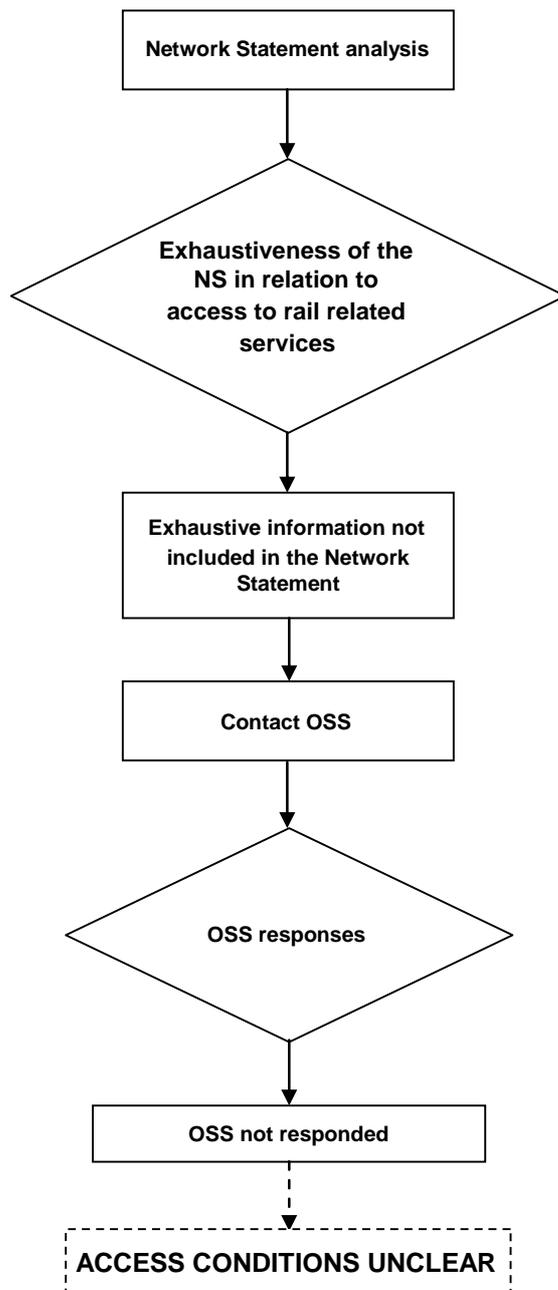
focus on confidential commercial negotiations has dissuaded freight users from investigating options to use rail.

- 10.35 Initial discussions have also been held with several owners and operators of major, privately owned freight terminals, including two who have undertaken significant expansion programmes. An operator of a port-based rail freight terminal commented that the open access regime now applicable to the rail terminal did not represent a problem: it was similar in effect to the duties placed by legislation on the port company to accept maritime traffic. An owner of a major inland freight facility under construction commented that the viability of the project was not affected by the extension of open access rights, as the business case depended from the outset on attracting a mix of traffic, including own-account flows and third party traffic.
- 10.36 Finally, one respondent, EWS, said that the transposition of the 1st Package and the application of EU rail legislation –which provided clear guidance on the duties of infrastructure managers and access priorities- had helped in its negotiations with the sponsors of a major rail project (Crossrail) who had sought to obtain long-term control over access to rail infrastructure that would significantly curtail EWS’s exiting and planned access rights.

Case study

- 10.37 For the case study we contacted the One Stop Shop in Great Britain to obtain further information on the access conditions, the figure below sets out the process that we followed for this network as well as the progress in terms of obtaining further data.

FIGURE 10.3 CASE STUDY PROCESS



- 10.38 As can be seen from the figure above, the Network Statement does not include detailed information with respect to access to rail-related services. The contacted OSS has not responded to our survey. Even though we are aware that the Office of Rail Regulation is currently seeking to review the Network Statement we must conclude that access conditions are unclear.

Northern Ireland

- 10.39 The rail network in Northern Ireland benefits from a derogation to the application of Directives 2001/12 and 2001/14, nonetheless, with the implementation of the

Directives in the UK, the Directives have also been implemented in Northern Ireland.

- 10.40 There have currently not been any requests for operating licences in Northern Ireland, but there is speculation that there will soon be a cross border freight service with Ireland.
- 10.41 Northern Ireland Railways, the current infrastructure manager and incumbent railway undertaking has not as yet published its Network Statement and as a result it is difficult to identify the conditions for access to the network.
- 10.42 The table below sets out the parties providing rail-related services in Northern Ireland.

TABLE 10.3 RAIL-RELATED SERVICES BY PROVIDER

Service	Provider
Electricity for traction	Northern Ireland Railways (infrastructure manager and incumbent railway undertaking)
Diesel fuel for locomotives	Northern Ireland Railways
Locomotive pushing services	Northern Ireland Railways
Back-up services	Northern Ireland Railways
Services in marshalling and shunting yards	Northern Ireland Railways
Train formation services	Northern Ireland Railways
Services in freight terminals	Northern Ireland Railways
Telematics services for freight operations	N/A
Services in passenger stations	Northern Ireland Railways
Computer reservation services for passenger transport	Northern Ireland Railways
Training facilities	Northern Ireland Railways
Leasing of rolling stock and staff	N/A
Maintenance	Northern Ireland Railways
Rolling stock cleaning	Northern Ireland Railways
Services in storage sidings	Northern Ireland Railways
Provision of on-board train protection systems; telecom and communications services	Manufacturers and Northern Ireland Railways
Services in border stations	Northern Ireland Railways
Technical inspection services	Northern Ireland Railways

- 10.43 It is difficult to see how in the short or medium term, there will be a market for rail-related services in Northern Ireland, and more widely, how the market as a whole will develop.

Stakeholder analysis

- 10.44 The stakeholders we spoke to said that the likelihood of third party entry into the

domestic passenger and rail freight markets in Northern Ireland is limited by the topography and economic structure of Northern Ireland, and by the configuration and functionality of the Northern Ireland rail network. They did not make any specific comments in relation to rail-related services.

Case study

- 10.45 The case study could not be taken forward in Northern Ireland because this network has not produced a Network Statement as yet. As a consequence access conditions are unclear.

11. GREECE

Introduction

- 11.1 Greece benefits from a derogation from the First Railway Package of Directive as its network is not connected by rail to another network within the EU.¹³ As a result, the liberalisation process is delayed with respect to other Member States. However, the process is now being taken forward with the infrastructure manager and operating companies being separated into two subsidiaries of OSE: EDISY S.A. (infrastructure manager) and TRENOSE S.A. (passenger and freight operating company).
- 11.2 The rail-related services in Greece are still undertaken by the incumbent operator and infrastructure manager as the industry has not fully separated into its new structure. The table below sets out which companies are look after each of the rail-related services.

TABLE 11.1 RAIL-RELATED SERVICES BY PROVIDER

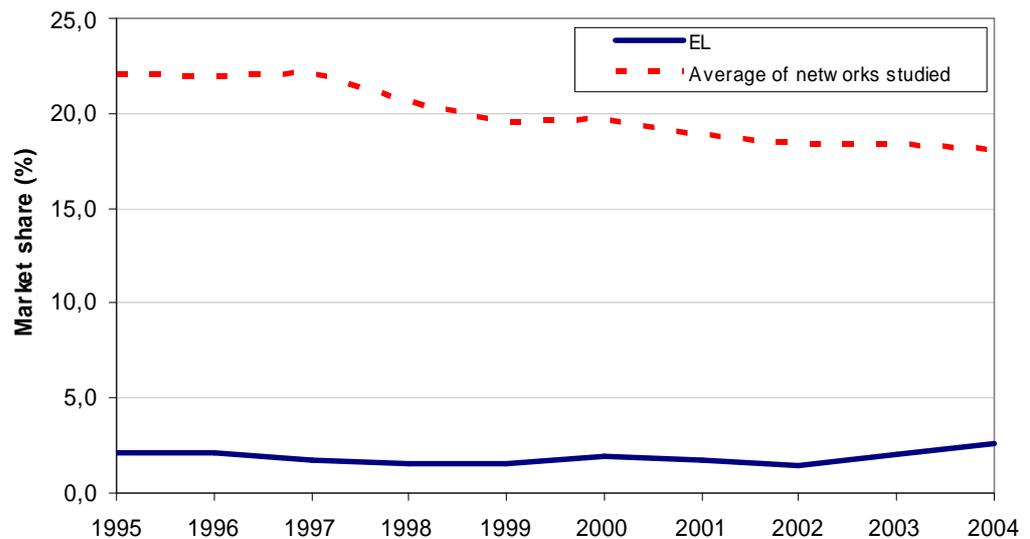
Service	Provider
Electricity for traction	DEI
Diesel fuel for locomotives	ELPE
Locomotive pushing services	OSE
Back-up services	OSE
Services in marshalling and shunting yards	OSE
Train formation services	OSE
Services in freight terminals	OSE
Telematics services for freight operations	N/A
Services in passenger stations	OSE
Computer reservation services for passenger transport	OSE
Training facilities	OSE
Leasing of rolling stock and staff	N/A
Maintenance	OSE
Rolling stock cleaning	OSE/ outsourced
Services in storage sidings	OSE
Provision of on-board train protection systems; telecom and communications services	N/A
Services in border stations	OSE
Technical inspection services	OSE

¹³ As of the 1st January 2007, with the entry of Romania and Bulgaria into the EU, Greece will be connected to the rest of the EU network.

Market information

- 11.3 The market in Greece is still dominated by the sole operator, now known as TRENOS that is only operator on the national network. In recent years the market share of rail in Greece when compared to other land based modes of transport has fluctuated but has remained around the same low levels especially in terms of rail freight. The same can be said about the market share for passenger transport; already one of the lowest across the networks, has fallen further in recent years and is now below 2%. The market share of rail freight transport is shown in the figure below.

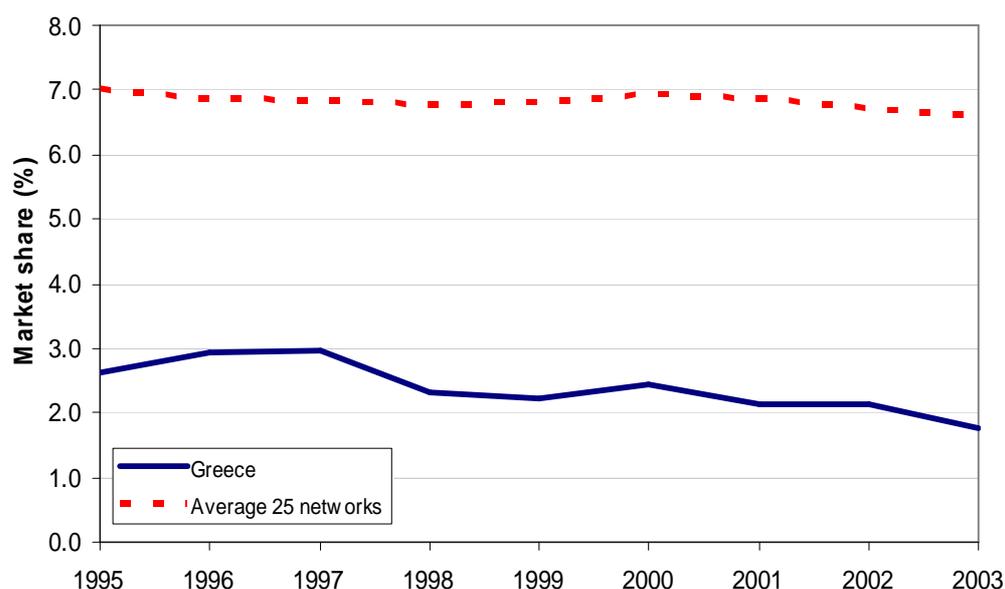
FIGURE 11.1 RAIL FREIGHT INTERMODAL MARKET SHARE



Source: European Commission and Steer Davies Gleave analysis

- 11.4 The figure below shows the change in the land based market share of rail passenger transport.

FIGURE 11.2 RAIL PASSENGER TRANSPORT MARKET SHARE



Source European Commission and Steer Davies Gleave analysis

Implementation into national law of the provisions relating to access to railway services

- 11.5 The table below sets out the national legislation that implemented Directive 2001/14/EC.

TABLE 11.2 EU LEGISLATION TRANSPOSED INTO NATIONAL LAW

EU Legislation	Title	Implemented (and when, in which piece of legislation)
Directive 2001/14	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Presidential Decree 41/2005

- 11.6 In the presidential decree mentioned above, Article 12 and Annex IV of Article 49 deal specifically with rail-related services. This takes the wording of the EU Directive and copies it into national law; this practice ensures that the relevant law is compliant with the Directive, but does not provide any details that help define the requirements for the national market. Furthermore, some secondary legislation still needs to be implemented into national law.

Access conditions

- 11.7 The access conditions are unclear for the Greek market, the national law seems to reflect the requirements of the Directive, but the specific access conditions are not yet activated, tested and defined in enough detail to be of use to a potential operator.

The minimum access package and other services

- 11.8 While the Network Statement has not been published, the access conditions to the services can be found in the Presidential Decree.
- 11.9 The minimum access package comprises:
- handling of requests for infrastructure capacity;
 - the right to utilise the granted capacity;
 - use of running track points and junctions;
 - train control including signalling, regulation, dispatching, and communication, and provision of information on train movement;
 - all other information required to implement or operate the service for which capacity has been granted.
- 11.10 Track access to services facilities and supply of services including:
- use of electrical supply equipment for traction current, where available;
 - refuelling facilities;
 - passenger stations, their buildings and other facilities;
 - freight terminals;
 - marshalling yards;
 - train formation facilities;
 - storage sidings;
 - maintenance and other technical facilities.
- 11.11 Additional services may comprise:
- traction current;
 - pre-heating of passenger trains;
 - supply of fuel, shunting, and all other services provided at the access services facilities mentioned above;
 - tailor-made contracts for:
 - the control of transport of hazardous goods,
 - assistance in running abnormal trains.
- 11.12 Ancillary services may comprise:
- access to telecommunication network;
 - provision of supplementary information;
 - technical inspection of rolling stock.
- 11.13 The key point to make about the list of services above is that they are taken directly from the national law and thus do not have a more detailed explanation concerning the requirements behind these services. This is partly due to the state of liberalisation and the lack of a Network Statement for Greece which needs to be fully defined to ensure that the access conditions are clear for potential new entrants.

Charging for services

- 11.14 There is currently no information in relation to charging for access to rail-related facilities and services as the charges have not as yet been defined.

Stakeholder analysis**Problems/complaints**

- 11.15 There are currently no other participants in the Greek rail industry apart from OSE and its subsidiaries and, also as a result of this, there have not been any problems or complaints raised in this market to date.

Stakeholder views

- 11.16 Our discussions with stakeholders were limited as there are not many stakeholders in the Greek market. The discussion that we had explained to us the current state of play with the liberalisation process and that the definition of services, as well as how they are to be charged for were, still issues that needed to be addressed.

Case study

- 11.17 It was not possible to undertake the case study for Greece because this network has not produced a Network Statement as yet. Despite this we have contacted the OSS who has not responded to our survey. As a consequence we must conclude that the access conditions are unclear.

12. HUNGARY

Introduction

- 12.1 Hungary has fully implemented into national law the EU Directives, therefore allowing full market opening and integration of its railway network. Despite that, the incumbent MAV, although split into different business units, is still dominant in the national market.
- 12.2 In particular, other railway undertakings declared that they have faced some major problems in gaining access to some rail-related services, which are mainly provided by MAV. The table below sets out who provides the rail-related services in Hungary.

TABLE 12.1 RAIL-RELATED SERVICES BY PROVIDER

Service	Provider
Electricity for traction	MAV (Infrastructure manager)
Diesel fuel for locomotives	Each operator independently
Locomotive pushing services	Each operator independently
Back-up services	Each operator independently
Services in marshalling and shunting yards	Infrastructure manager
Train formation services	Infrastructure manager
Services in freight terminals	Terminal operators
Telematics services for freight operations	N/A
Services in passenger stations	MAV
Computer reservation services for passenger transport	Each operator independently
Training facilities	Each operator independently
Leasing of rolling stock and staff	Leasing companies
Maintenance	Each operator independently
Rolling stock cleaning	Each operator independently (outsourced)
Services in storage sidings	MAV
Provision of on-board train protection systems; telecom and communications services	Manufacturers of the equipment
Services in border stations	MAV
Technical inspection services	Infrastructure manager

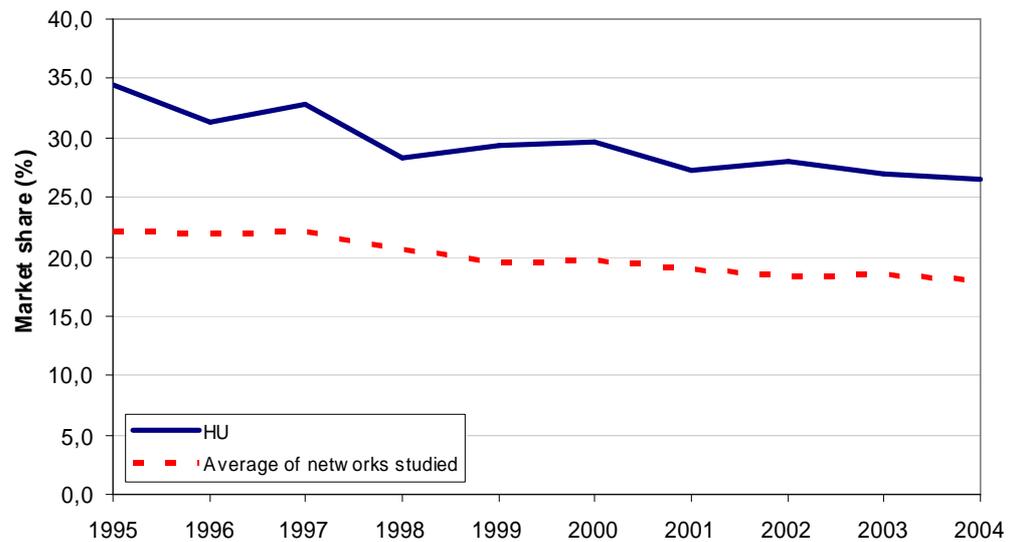
Market information

Market Shares

- 12.3 In Hungary the intermodal market share of rail freight has steadily decreased in the last 10 years much as it has done in other European states. The main difference is that while the majority of the EU states have started this decline from market shares barely over 20% and most now have shares below 10%, the Hungarian market still has

market shares approaching 30% and the fall in these 10 years has been just over 6%.

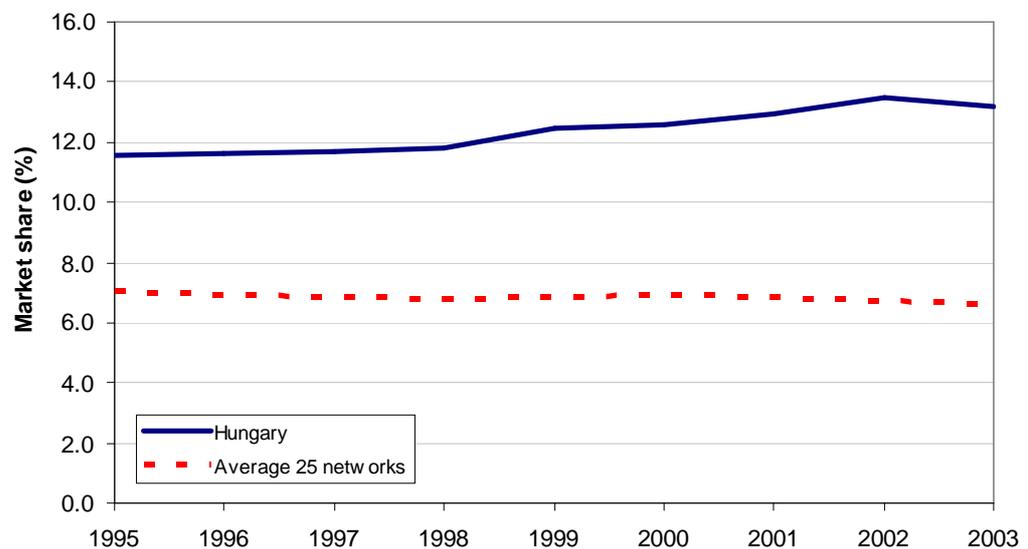
FIGURE 12.1 RAIL FREIGHT INTERMODAL MARKET SHARE



Source: European Commission and Steer Davies Gleave analysis

- 12.4 The market share for rail passenger services in Hungary is also higher than the European average as shown in the figure below. Furthermore, in contrast to the trend shown in other networks, this share is slowly increasing.

FIGURE 12.2 RAIL PASSENGER INTERMODAL MARKET SHARE



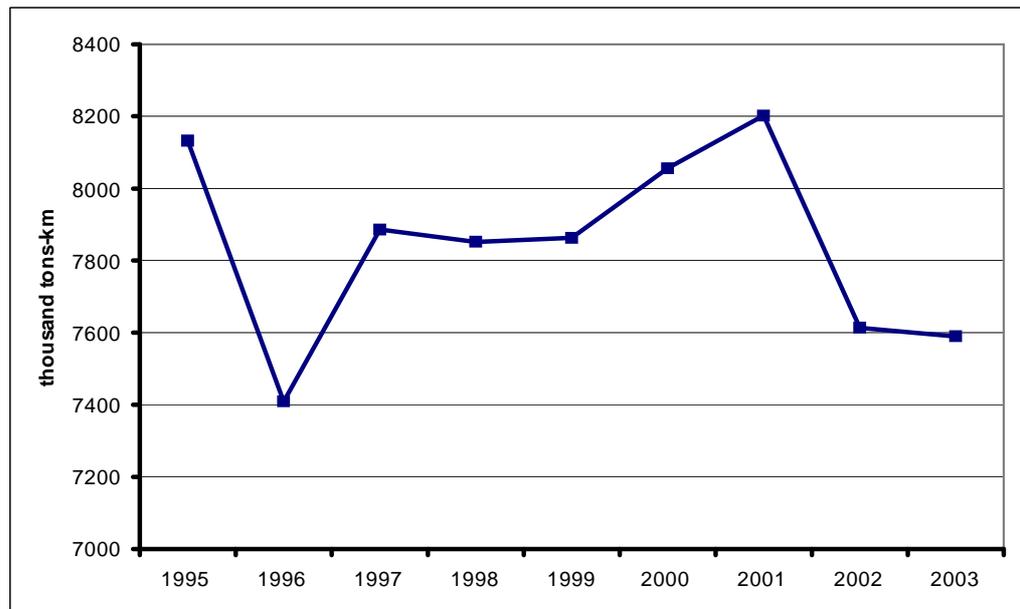
Source: European Commission and Steer Davies Gleave analysis

Market participants

- 12.5 MAV remains the main passenger railway undertaking in Hungary with a market share of 98%. Gysev has a market share of 2% of total passenger kilometres carried.

- 12.6 MAV and Gysev are the main freight railway undertakings in Hungary. In addition, four new entrants provide freight operations: MMV, Floyd, CER and MÁV Hajdú Vasútépitő Ltd.
- 12.7 Gysev's market share is 10% of total freight tonne kilometres. It mainly transports cross-border traffic to Austria and is owned 31% by the Austrian State and 69% by the Hungarian State.

FIGURE 12.3 TREND OF FREIGHT TRANSPORTED BY MAV



Source: MAV

New entrants

- 12.8 CER, which is owned by MAV and private investors, currently carries 600,000 tons of coal per annum. These services were previously provided by MAV.
- 12.9 Floyd carries freight operations between Austria and Romania. It transports goods for Gysev, Wiener Lokalbahnen (Austria) and several private companies. It has filed several complaints, stating that there may be discrimination for access to the industrial track network and to the BILK and Zahony terminals, which are controlled by MAV Cargo. As a result of the lack of clarity in access rights, Floyd has stated that it lost most of its freight transportation contracts. MMV has been recently sold to Petrolschped.

Implementation into national law of the provisions relating to access to railway services

- 12.10 The table below shows the relevant Article that refers specifically to rail-related services in Hungarian Legislation.

TABLE 12.2 EU LEGISLATION TRANSPOSED INTO NATIONAL LAW

EU Legislation	Title	Implemented (and when, in which piece of legislation)
Directive 2001/14	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Article 10 of Joint Decree 66/2003

Access conditions

The minimum access package and other services

- 12.11 The minimum access package includes the following tasks:
- The use of requested and allocated train routes for the purpose of transporting passengers, freight and traction;
 - The use of lines, points and junctions as well as signalling and safety facilities;
 - Traffic management;
 - The making available of any information necessary to the railway undertaking to provide its services.
- 12.12 The infrastructure manager is also obliged to make the following facilities available to all railway undertakings:
- Electrical supply equipment for traction current;
 - Refuelling facilities;
 - Passenger railway stations, their buildings and other facilities;
 - Freight terminals;
 - Marshalling yards;
 - Train formation services;
 - Public storage sidings;
 - Axle transformation facilities;
 - Maintenance and other technical facilities.
- 12.13 The infrastructure manager must also provide the following services, if available, at the instance of any railway undertaking:
- Supply of traction current;
 - Pre-heating of passenger trains;
 - Supply of fuel, shunting and all the services undertaken in the rail facilities;
 - Control of the transportation of dangerous goods;
 - Assistance in the running of abnormal trains.
- 12.14 Additionally, the following services may be supplied to railway undertakings:
- Access to the telecommunications network;
 - Provision of supplementary information;
 - Technical inspection of rolling stock.

Charging for services

- 12.15 From our stakeholder consultation we have been able to obtain some information in relation to charging for some services, in particular for train formation and services in passenger stations. These charges are shown in the table below. No further information from the stakeholders in relation to other charges has been provided.

TABLE 12.3 CHARGES FOR SERVICES

Category	Station category		
	I	II	III
Train formation: price per train moved (€)	27.8	11.6	4.6
Access to passenger stations: price per station stop (€)	13.0	5.4	2.2

Source: MAV Passenger

Stakeholder analysis**Problems/complaints**

- 12.16 There have been a number of complaints raised in Hungary directly in relation to rail-related services. They have focused both on access to industrial lines and freight terminals and on services in border stations. The new entrants have had problems in arranging access to the freight facilities and obtaining the necessary prioritisation within the facilities.

Stakeholder views

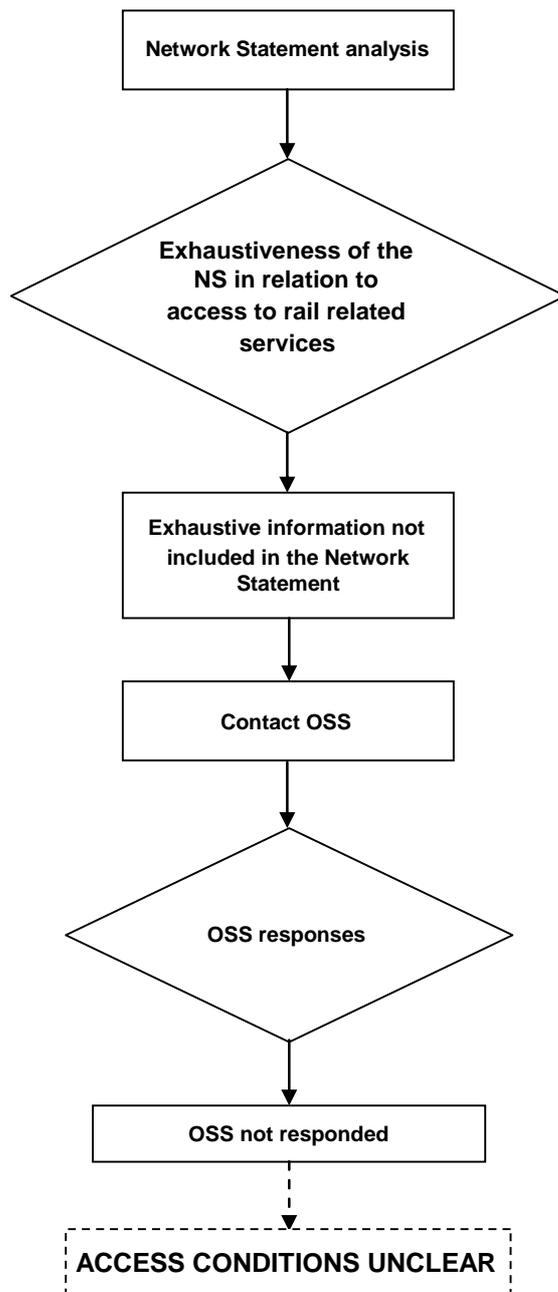
- 12.17 We have had a number of discussions with stakeholders in Hungary. The largest operator in the passenger market explained that the market development is still in its early years and that some problems persist; this is also as a result of the transition to a fully open market that is continuing and that may take some time to stabilise.
- 12.18 Given the current rigid structure of the market and the lack of regulation and monitoring of the interactions between the various business units within MAV, there are problems getting access to some rail-related services and thus in optimising demand and revenues. Currently, the largest passenger operator is the only user of certain depots and maintenance facilities and does not have access problems, nor does it see that there will be any in the future. Furthermore, this stakeholder explained that the prices charged for access to some facilities, especially station facilities, are related to the cost of providing the station services (including maintenance costs) rather than their real market price, which would be difficult to obtain in a market with such a small number of passenger operators.
- 12.19 A large number of complaints come from the new entrants' experiences with facility owners and other government institutions. The main problems identified related to access to freight terminals; more specifically there is no clear distinction between the terminal operator and the incumbent freight operator in a number of cases, which has resulted in discriminatory practices in the past. New entrants also pointed to problems

experienced at border crossings where the customs services on at least one occasion made the operator produce documents (for example proving the property of their rolling stock) that would not have been asked to the incumbent freight company,. The new entrants agreed that many of these are problems that should disappear in future, but for the moment, according to one new entrant, the situation and the relationship between the new entrants and MAV has not improved yet.

Case study

- 12.20 For the case study we contacted the One Stop Shop in Hungary to obtain further information on the access conditions, the figure below sets out the process that we followed for this network as well as the progress in terms of obtaining further data.

FIGURE 12.4 CASE STUDY PROCESS



- 12.21 As can be seen from the figure above, the Network Statement does not include detailed information with respect to access to rail-related services. We proceeded to contact the local OSS, but they have not responded to our survey. Therefore we conclude that the access conditions are unclear.

13. IRELAND**Introduction**

- 13.1 Ireland is required to implement the Directives but, as a result of being on an island with rail links only to one other network, it benefits from derogations from the application of certain requirements of Directives 2001/12/EC and 2001/14/EC until 15 March 2008. This derogation ends if a new entrant wishes to enter the market.
- 13.2 There has been one initial enquiry by an applicant other than Iarnród Éireann (Irish Rail-IR), the incumbent national rail operator, for an operating license for rail freight services, including the possibility of cross-border operations into Northern Ireland. This enquiry is likely to have been triggered in response to IR's continuing programme of withdrawing loss-making rail freight services. However, this initial interest has not so far been progressed, as the new entrant chose voluntarily not to take the application forward for commercial reasons.
- 13.3 The table below sets out the providers of rail-related services in Ireland.

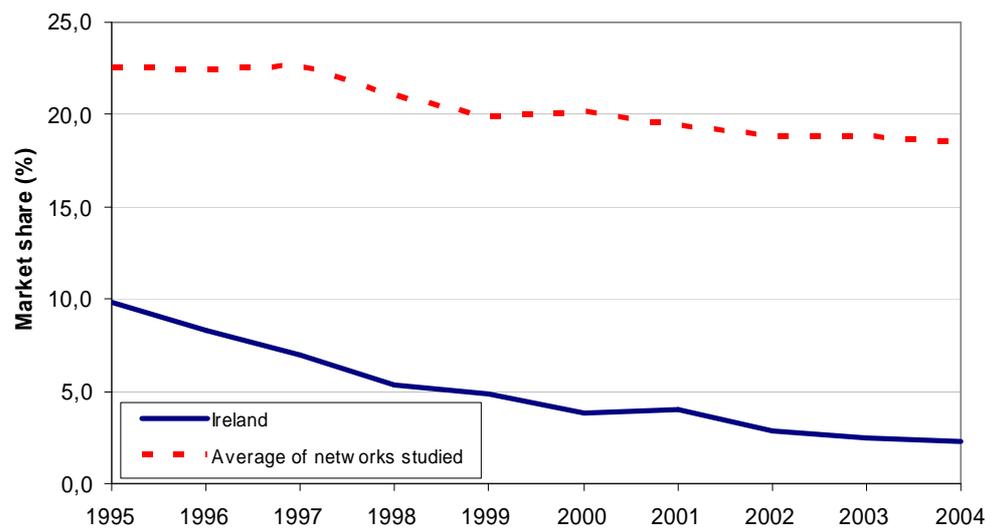
TABLE 13.1 RAIL-RELATED SERVICES BY PROVIDER

Service	Provider
Electricity for traction	Iarnród Éireann (infrastructure manager and incumbent railway undertaking)
Diesel fuel for locomotives	Iarnród Éireann
Locomotive pushing services	Iarnród Éireann
Back-up services	Iarnród Éireann
Services in marshalling and shunting yards	Iarnród Éireann
Train formation services	Iarnród Éireann
Services in freight terminals	Iarnród Éireann
Telematics services for freight operations	N/A
Services in passenger stations	Iarnród Éireann
Computer reservation services for passenger transport	Iarnród Éireann
Training facilities	Iarnród Éireann
Leasing of rolling stock and staff	N/A
Maintenance	Iarnród Éireann
Rolling stock cleaning	Iarnród Éireann
Services in storage sidings	Iarnród Éireann
Provision of on-board train protection systems; telecom and communications services	Manufacturers and Iarnród Éireann
Services in border stations	Iarnród Éireann
Technical inspection services	Iarnród Éireann

Market information

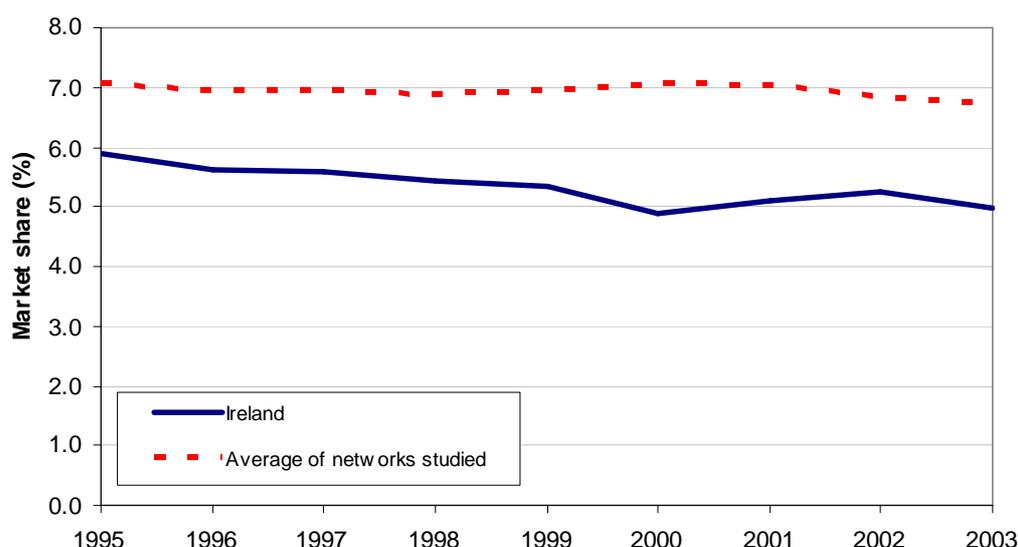
- 13.4 There has been a steady decline in the amount of tonne-kms transported on the Irish railways in recent years, accompanied by a substantial fall in the intermodal market share of freight when compared to other forms of land transport, as shown in the figure below. Furthermore, it can be seen that the market share is well below the average of the networks being looked at in this study.

FIGURE 13.1 RAIL FREIGHT INTERMODAL MARKET SHARE



Source: European Commission and Steer Davies Gleave analysis

- 13.5 The opposite is true for passenger transport which has seen an absolute, gradual, increase in passenger-kms since 1990, but now seems to have levelled off. However, this has not been accompanied by a similar trend in intermodal market share which has steadily fallen since 1995 as shown in the figure below which also shows the rail market share remaining below the average of the networks being looked at in this study.

FIGURE 13.2 RAIL PASSENGER INTERMODAL MARKET SHARE

Source: European Commission and Steer Davies Gleave analysis

Implementation into national law of the provisions relating to access to railway services

- 13.6 The law that transposed into national law the *First Railway Package* is Act 155 of 12 March 2003.

TABLE 13.2 EU LEGISLATION TRANSPOSED INTO NATIONAL LAW

EU Legislation	Title	Implemented (and when, in which piece of legislation)
Directive 2001/14	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Yes, Statutory Instrument No 643, 28/07/2004

- 13.7 Since the adoption of this Directive into national law, very little has changed in the Irish market as the incumbent operator and the infrastructure manager still remain tied, although with separate accounting for the two business units.

Access conditions

- 13.8 As there is only one operator in the market at the moment, and because of the derogations to the European Directives, Iarnród Éireann still has not published a Network Statement. As a result, it is not possible to ascertain the conditions for access to the network.

Charging for services

- 13.9 As mentioned above, given the current derogations and the state of progress in relation to the actual implementation of the First Package of Directives, it has not been possible to identify any charges related to the provision of rail-related services.

Stakeholder analysis

Problems/complaints

- 13.10 We have not as yet been made aware of any problems relating to the provision of rail-related services. This does not mean that in future there will not be any problems as the market currently is not developed enough.

Stakeholder views

- 13.11 The stakeholders we have spoken to have told us that the legislative and market situation in Ireland has not changed since the publication of the Railimplement report. There is still uncertainty over the procedure for issuing operating licences to applicants, although the Irish Ministry of Transport is designated as the body responsible for granting licences.

Case study

- 13.12 The case study has not been undertaken for Ireland because this network has not produced a Network Statement as yet. As a consequence access conditions are unclear.

14. ITALY

Introduction

- 14.1 The Italian railway market is currently going through a process of liberalisation, as a result of the splitting in 2000 of the integrated operator Ferrovie dello Stato (FS), which resulted in the creation of the FS Group, headed by the holding company FS Holding, whose main subsidiaries are the infrastructure manager RFI and the main transport operator Trenitalia. Following the implementation of national legislation, a number of new entrant freight operators have sought access to the Italian rail freight market to undertake international freight services. These new entrants are either new companies or are local subsidiaries of other national freight companies. The rail-related services in Italy are undertaken by a number of operators. The table below sets out which companies provide each of the rail-related services.

TABLE 14.1 RAIL-RELATED SERVICES BY PROVIDER

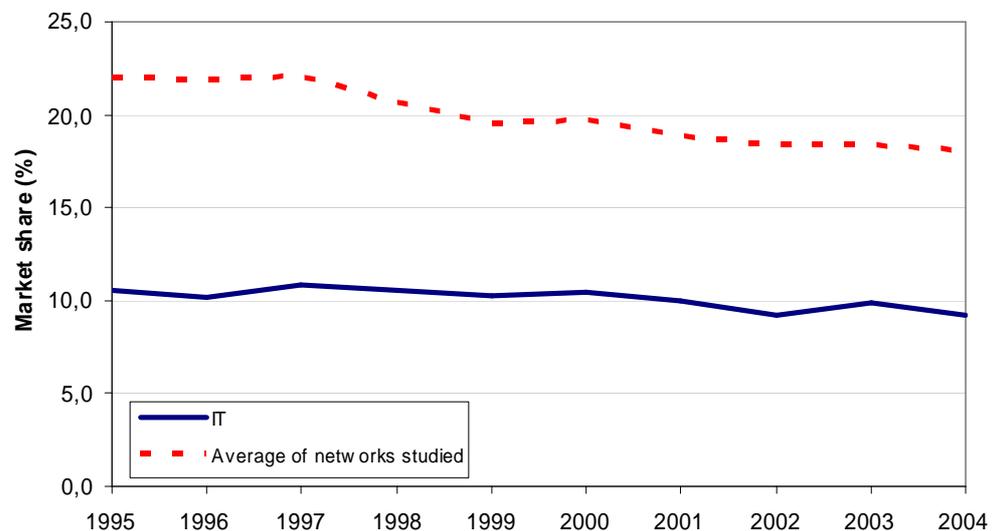
Service	Provider
Electricity for traction	RFI (The infrastructure manager)
Diesel fuel for locomotives	Each operator independently
Locomotive pushing services	Each operator independently
Back-up services	Each operator independently (RFI requirement)
Services in marshalling and shunting yards	Each operator (But should be guaranteed by RFI)
Train formation services	Each operator
Services in freight terminals	Each operator
Telematics services for freight operations	Each operator
Services in passenger stations	Each operator
Computer reservation services for passenger transport	Each operator
Training facilities	Each operator
Leasing of rolling stock and staff	ROSCOS and manufacturers for stock, the leasing of staff is not currently allowed by Italian law
Maintenance	Operator/Manufacturer/ROSCO
Rolling stock cleaning	Operator
Services in storage sidings	Operator
Provision of on-board train protection systems; telecom and communications services	Manufacturers of the equipment
Services in border stations	RFI and other operators
Technical inspection services	RFI

Market information

Market shares

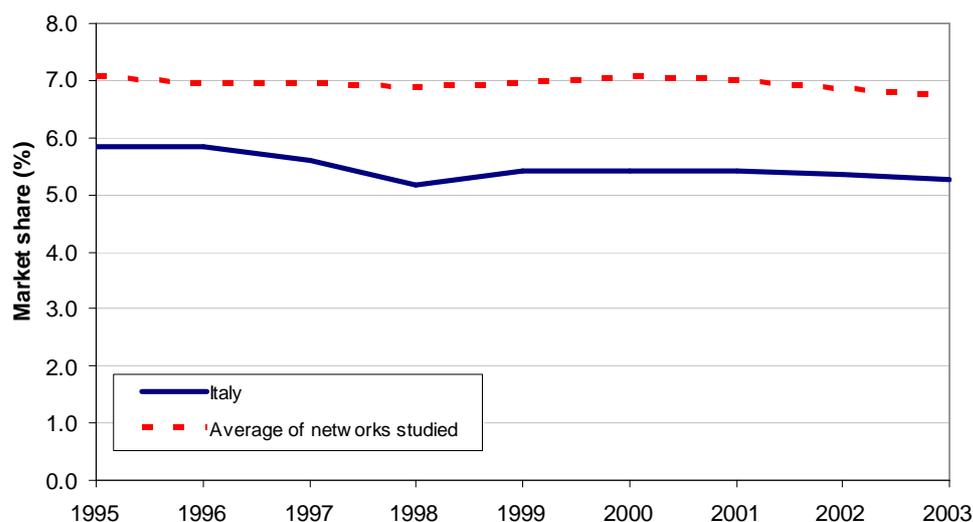
- 14.2 The Railimplement report showed that the market is still dominated by the incumbent operator both in the passenger and freight market, where Trenitalia retains a market share of over 95%. The liberalisation efforts are having an effect as the new entrants are gaining market shares from Trenitalia and have already brought the latter's share down from a value approaching 100% a few years ago.
- 14.3 The fact remains that both in freight and passenger market, the share of transported goods and passengers is falling. The figure below sets out the change in the market share of rail freight transport since 1991; furthermore, recent figures for 2005 show that there has been a contraction in the tonne-km figure of about 4% on 2004 for the Trenitalia rail freight business in Italy, as well as a fall in its international figure of about 14%.

FIGURE 14.1 RAIL FREIGHT INTERMODAL MARKET SHARE



Source: Railimplement

- 14.4 The figure below shows the change in market share for passenger transport when compared to other forms of land based transport.

FIGURE 14.2 RAIL PASSENGER INTERMODAL MARKET SHARE

Source: European Commission and Steer Davies Gleave analysis

Train operating companies

- 14.5 In addition to Trenitalia, rail-related services are being increasingly utilised by the new entrants operating on the Italian network. The key new entrants are those that have set up activity on the freight Alpine corridors; they are: FNM Cargo, Railion, SBB Cargo and Rail Traction Company, as well as Del Fungo Giera. These companies use the main terminal and marshalling infrastructure also used by (and in some cases operated by) Trenitalia Cargo (the incumbent operator). There are also third party operated terminals such as those controlled by Hupac which has contracts with each of the major freight operators. Some of the operators have set up their own training facilities certified by the infrastructure manager to meet the growing demand for locomotive drivers.
- 14.6 With the aim of showing the effects that the new entrants have had on the Italian freight market, it's worth pointing out that in the period 2002-2005 the amount of train-kms for RTC has increased more than threefold. On the passenger side, in addition to the joint Trenitalia-SBB operator Cisalpino, there is only one new entrant currently in the market, SeaTrain. This operator only runs services connecting maritime ports to Rome and Naples, but does not provide regular services where passengers can board at any station.
- 14.7 The numerous other passenger operators in Italy are those railways that are local railways formally under concession, which cannot be considered as new entrants; these railways, besides operating on their networks, have important interfaces with the infrastructure manager RFI. The largest is Ferrovie Nord Milano (FNM), which currently operates services around Milan (as well as being the owner of FNM Cargo mentioned above). This operator uses RFI infrastructure as well as the infrastructure owned by FNM's parent company.

Implementation into national law of the provisions relating to access to railway services

- 14.8 The law that implemented the First Infrastructure package of Directives in Italy was the Decreto Legislativo (Legislative Decree) N.188 of 8th July 2003, which amongst other things states the general requirements for rail-related services as set out in Directive 2001/14/EC.
- 14.9 While the overarching legislation has been implemented, the Legislative Decree itself points to future Ministerial Decrees to be published to explain in more detail some areas, which are:
- the framework for access to the infrastructure (with focus given to the prioritisation of services during the capacity allocation process);
 - the principles and procedures for the allocation of capacity;
 - the principles and procedures for charging the access to infrastructure and the provision of services as well as the rules relating to these services.
- 14.10 These decrees are currently going through the consultation phase with the Regions and the current timescales point to a publication in the near future. In the meantime the infrastructure manager has proceeded to change a small number of its practices to conform to the new legislation. However, the bulk of the above areas remain open and require further attention and as a result represent a large gap in the information available to potential operators and a potential barrier to access to rail related services.

TABLE 14.2 EU LEGISLATION TRANSPOSED INTO NATIONAL LAW

EU Legislation	Title	Implemented (and when, in which piece of legislation)
Directive 2001/14	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Yes, D.Lgs. 2003/188

Access conditions

- 14.11 The missing information listed above concerns the majority of the access conditions, which are not fully regulated by the Legislative Decree. This shortfall is shown in the RFI Network Statement, which with regard to these issues refers directly to the future Ministerial Decrees. Nevertheless, one of the appendices to the Network Statement contains the necessary procedures to be followed in freight terminals and marshalling yards. This section sets out the key services that are included and defined in the Network Statement as well as the charges for accessing these services.

The minimum access package and other services

- 14.12 The RFI Network Statement states that the minimum access package covers the following services:
- Allocation of capacity;
 - Use of the allocated capacity;

- Use of intersections and link routes;
 - Traffic control, signalling as well as traffic information;
 - Use of the electricity for traction infrastructure where available;
 - Any other information necessary for taking forward the service which capacity has been allocated for.
- 14.13 In addition, there are a number of services the infrastructure manager must compulsorily provide, which are:
- Access and use of fuelling points;
 - Access and use of passenger stations and connected buildings;
 - *Access and use of freight terminals and sidings;
 - *Access and use of marshalling and shunting yards;
 - Access and use of storage sidings and depots;
 - *Access and use of maintenance facilities;
 - *Shunting services;
 - Monitoring of the transportation of dangerous materials;
 - Assistance in the movement of special trains;
 - Sea based rail connection with Sicily and Sardinia; and
 - Access to the GSM-R network.
- 14.14 The infrastructure manager will also provide (where available) complementary services following a timely request made by the railway undertaking:
- Traction current;
 - Preparation of passenger trains (heating or air conditioning);
 - *Diesel and water replenishment;
- 14.15 Finally, the infrastructure may provide the following ancillary services to those operators that request them:
- Information not related to the programming of trains;
 - Feasibility studies for specific paths;
 - The (re-)opening of facilities and or lines that have been closed or are in disuse, any extra costs arising from this (re-)opening falling on the operator.
- 14.16 Amongst the categories mentioned above, the services marked with a “ * ” are to be defined in detail by the future Ministerial Decrees.
- 14.17 Our analysis found that there are some areas that could lead new entrants (both freight and passenger) to substantial risks and costs. For example, although RFI is required to undertake shunting and marshalling on behalf of any operators, it requires the latter to carry out these activities on their own. Furthermore, the operator completely bears all risks even if it sub-contracts to third parties.
- 14.18 Secondly, the Network Statement points out that in the event of a break-down, RFI has the right to take the rolling stock of the nearest operator to the incident to remove the

rolling stock that is blocking the tracks.

Charging for services

14.19 For the majority of services (excluding those included within the minimum access package) there are currently no tariffs set out in the Network Statement, as they will be published following the publication of the Ministerial Decrees mentioned above. The list below shows the tariffs for those services that do have a defined charge:

- Maritime connections with Sicily for trains carrying non-hazardous materials: € 1,704.49 per trip (covering the crossing and the shunting at either end, for timetabled crossings). € 1,866.82 per trip (for non timetabled, ad hoc crossings);
- Maritime connections with Sicily for trains carrying dangerous materials: € 1,581.53 per trip (covering the crossing and the shunting at either end, for timetabled crossings). € 1,724.22 per trip (for non timetabled, ad hoc crossings);
- Maritime connections with Sardinia for trains carrying non-hazardous materials: € 16,071.85 per trip (covering the crossing and the shunting at either end, using the ship Garibaldi with 830m capacity);
- Preparation of passenger trains (heating or air conditioning): € 22 per train for medium and long distance services and € 4 per train for local services, there are volume discounts applied to those operators that run more than a certain number of trains per day.
- Water replenishment: € 1 per transport for medium and long distance services and € 0.3 per transport for regional transport, there are volume discounts applied to those operators that run more than a certain number of train-kms per annum.

14.20 The Network Statement also states the fees for the provision of complementary information as well as the cost of undertaking a feasibility study for new paths.

14.21 Back-up services are charged for according to the amount of traction used and the distance the rescuing traction needs to travel. The fees are shown in the table below.

TABLE 14.3 RESCUE FEES

Number of locomotives used for traction	Fees (€ per rescue)		
	Locomotive returned to the original location	Locomotive returned to a different location <50kms from pick-up point	Locomotive returned to a different location >50kms from pick-up point
1	1,495	1,856	Case by case basis
2	2,372	3,094	
3	3,351	4,486	

Source: Italian Network Statement (RFI)

14.22 The information provided above shows that there is still substantial amount of work that needs to be done in terms of defining and implementing the access conditions for a number of the rail-related services. This work can only be done once the national legislation is complete and the Ministry has approved the requirements for the access conditions. At the present time, we must conclude that the system lacks the necessary

transparency and investment certainty.

Stakeholder analysis

Problems/complaints

- 14.23 There have been in Italy a number of complaints raised by the new entrants regarding competition in the railways; however, most of them do not focus on rail-related services. The only two relevant for this study relate to the leasing of terminals and the provision of rolling stock.
- 14.24 The first decisions taken by the Autorita' Garante della Concorrenza e del Mercato (Italian Competition Authority) with regard to the railway market originated from an appeal by the Regione Lombardia on the potential anticompetitive effects of the lease by RFI of 61 among the most important freight terminals in Italy to Trenitalia.
- 14.25 The Authority, in its Decision AS265¹⁴, argued that the FS Group may still be regarded as a single economic entity, as the holding company can, and actually does influence its subsidiaries' decisions. The Authority further stated that the efforts made to date to encourage the liberalisation process should not be lost and that action should be taken to effectively separate the infrastructure management and service provision.
- 14.26 This point was reiterated in a communication made to the Government in February 2006 in which the Authority accused CEMAT (a subsidiary of FS Group, responsible for combined transport activities) of providing Trenitalia with unfair advantages in terminal operations at the expense of other operators.
- 14.27 The Authority was also asked by Trenitalia to provide an opinion in relation to the provision of rolling stock for regional franchises. Many Regions had stated that the rolling stock controlled by Trenitalia (in some cases co-funded by the Regions themselves) should be assigned to them so as to permit a real competition in the tendering process, as Trenitalia holds almost all the available rolling stock.
- 14.28 The Authority in this case deliberated in favour of Trenitalia, recognising its property rights on the rolling stock utilised for regional services; in addition, arguing that rolling stock cannot be considered an "essential facility", it stated that it could not be leased without Trenitalia's consent.
- 14.29 Recently the URSF¹⁵ published a decision relating to discounts on the access charge in relation to the provision of on-board safety equipment. The Italian network requires that on sections of track where SCMT equipment is not installed, all locomotives must have two drivers in the cab for safety reasons. This is currently the case for many sections in the Italian network. In order to compensate the increased personnel cost,

¹⁴ "Separazione tra gestione delle infrastrutture e servizi di trasporto ferroviario"; decision dated on 7th August 2003 and published on 13th August 2003. Ref: AS265. Translated into English from the original text by Steer Davies Gleave.

¹⁵ Ufficio per la Regolazione dei Servizi Ferroviari (Office for the regulation of rail services), instituted within the Transport Ministry as the regulatory body required by art. 30 of Directive 2001/14/EC.

RFI offers a 50% reduction on the access charges. Now that the network is being fitted with SCMT, RFI has removed this discount; however, not all the rolling stock of the operating companies has been fitted with on-board SCMT equipment as there is a shortage in supply. As a result, these undertakings would have faced both higher access charges and high personnel costs.

- 14.30 Five of the new entrants mentioned above jointly called in the URSF, which decided that the discount should be reinstated until the necessary equipment has been installed on the rolling stock and the operators can run trains with only one driver. RFI has appealed the decision to the courts (TAR del Lazio) requesting the suspension of the of the decision in lieu of a decision but the suspension was not granted, a date has not been set for the full hearing.

Stakeholder views

- 14.31 We have undertaken a number of meetings with stakeholders in the Italian industry and have been able to gather wide ranging opinions on the market. All the stakeholders we spoke to made clear that while in the past there have been some problems with rail-related services, the majority of problems have now disappeared, mainly thanks to the implementation of the European Directives into national legislation., In addition, the new entrants affirmed that in general they have a good relationship with the other industry participants (including the infrastructure manager and the incumbent railway company) and that the existing problems should disappear with the publication and then the application of the Ministerial Decrees mentioned above.
- 14.32 The new entrant stakeholders have however mentioned to us a number of problems they have experienced. The first one relates to the provision of shunting services: they state that there are no clear rules on the processes to follow, nor is there any clear indication of the relevant charge. Some operators complained that the price of shunting applied by Trenitalia, is up to three times the cost of doing the shunting in-house, but they have neither the facilities nor the financial capabilities to carry out this service autonomously in all the stations and terminals they use.
- 14.33 The problem of the “last mile”, that is the shunting of rolling stock from the last station on the network to a terminal or other facility off the main network, is also an important problem for the operators, who expressed concern about the lack of rules and guidelines for the provision of this service and for the prioritisation process in entering and exiting the facilities. In particular, some operators have complained about this last issue, as they sometimes miss their paths on the network as a result of a train being held back in the facility.
- 14.34 The majority of new entrants also complained about the impossibility of setting up and running their own training facilities, because of the large financial drain on their businesses this choice would imply. As a matter of fact, since there is no independent structure for driver training, they have no other alternatives than to undertaken the

training in-house¹⁶.

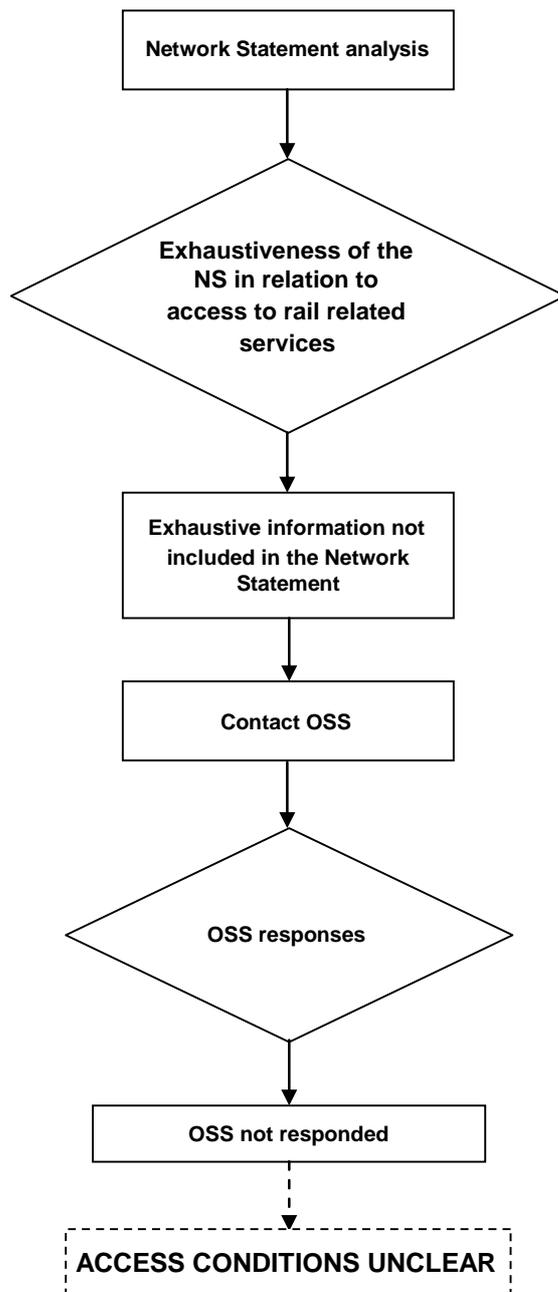
- 14.35 Furthermore, many stakeholders have pointed out the limitations within national law that does not allow the leasing of staff; they have also explained that their personnel costs on the Italian sections of their routes is substantially higher than on the rest of the routes, where staff leasing is generally allowed. This is tied with the fact that the national legislation is not complete and therefore the information that they can extract from the Network Statement is also incomplete.
- 14.36 A number of stakeholders have declared that they are being treated unfairly with respect to the provision of diesel fuel; they explained that they are aware that Trenitalia benefits from a discount on diesel fuel that the other operators do not benefit from. The Ministry confirmed that they were looking into the matter and that they are working to find a solution. This differential results mainly from a previous Ferrovie dello Stato agreement with the Italian State, through which FS paid fewer taxes on the fuel they acquired. It should be noted that the difference in costs stems from the fact that the new entrant operators do not always access the RFI fuelling facilities where the fuel is cheaper, but they use fuel brought in from external sources which is subject to the full tax level.
- 14.37 Some stakeholders mentioned that in the past there were problems with accessing maintenance facilities, where the incumbent was not allowing them access. After the introduction of the new national legislation this problem seems to have disappeared.
- 14.38 One stakeholder mentioned that in the past they had problems with customs officials at a border crossing in Italy, as the trains were delayed by the continued inspections that the incumbent operator was not subject to. We have been informed that this problem has recently subsided as the agreements that Trenitalia (at that time Ferrovie dello Stato) had with the Customs Ministry have been extended to all freight operating companies and cargo should not now suffer repeated delays.

Case study

- 14.39 For the case study we contacted the One Stop Shop in Italia to obtain further information on the access conditions; the figure below sets out the process we followed for this network as well as the progress in terms of obtaining further data.

¹⁶ In Italy the driving licence is tied only to the driver, and not also to the operator.

FIGURE 14.3 CASE STUDY PROCESS



- 14.40 As can be seen from the figure above, the Network Statement does not include detailed information with respect to access conditions to the majority of rail-related services. We also contacted the OSS to obtain further information, but, they have not responded to our survey. Therefore we must conclude that the access conditions for the majority of services are unclear.

15. LATVIA

Introduction

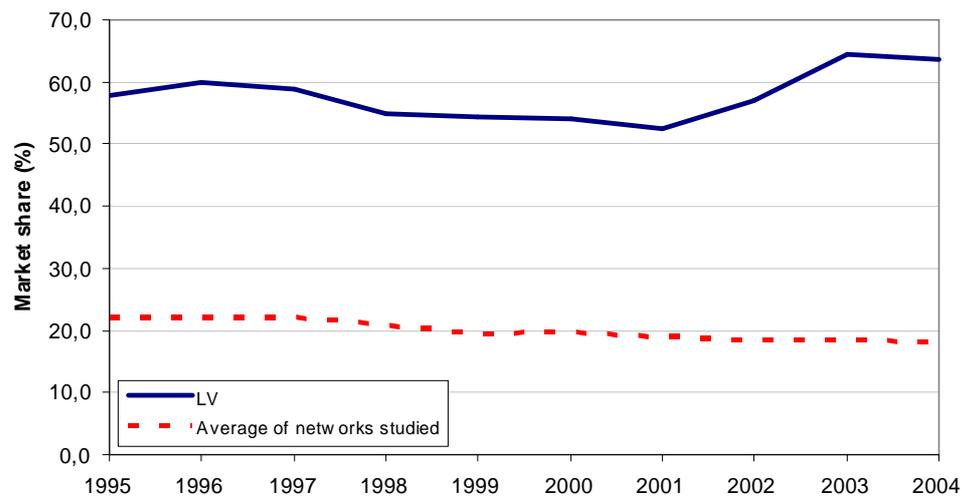
- 15.1 Latvia possesses a dense railroad network with a total length of 2,583 kilometres, the extended length of the main railway is 3,724 kilometres. Currently Latvian Railways mostly serves as a transit trunk-line with as much as 75% of the total freight volume being transit connected to Latvian ports and 60% of the freight rolling-stock being tanker-wagons. Movement in the opposite direction to Moscow and other parts of Russia/CIS is dominated by container cargo.
- 15.2 Although several licenses have been issued and new carriers have entered the railway sector, competition on the Latvian railway market can still be described as poor. This also applies to the market for rail-related services, where supplementary services like technical maintenance of wagons, processing of train documents, shunting and other services like operations with cargo, provision of electricity, provision of fuel and cleaning of the rolling stock are still provided by the infrastructure manager. The table below sets out the providers of the various rail-related services in Latvia.

TABLE 15.1 RAIL-RELATED SERVICES BY PROVIDER

Service	Provider
Electricity for traction	LDz (The infrastructure manager)
Diesel fuel for locomotives	LDz (The infrastructure manager)
Locomotive pushing services	LDz Latvian Railways
Back-up services	LDz Latvian Railways
Services in marshalling and shunting yards	LDz Latvian Railways
Train formation services	LDz Latvian Railways
Services in freight terminals	LDz and private operators
Telematics services for freight operations	LDz Latvian Railways
Services in passenger stations	LDz Latvian Railways
Computer reservation services for passenger transport	LDz Latvian Railways
Training facilities	LDz owned Latvian Railway Training Centre Other public providers
Leasing of rolling stock and staff	LDz Latvian Railways
Maintenance	LDz and private providers
Rolling stock cleaning	LDz Latvian Railways
Services in storage sidings	LDz Latvian Railways
Provision of on-board train protection systems; telecom and communications services	LDz Latvian Railways Manufacturers of the equipment
Services in border stations	LDz Latvian Railways
Technical inspection services	LDz Latvian Railways

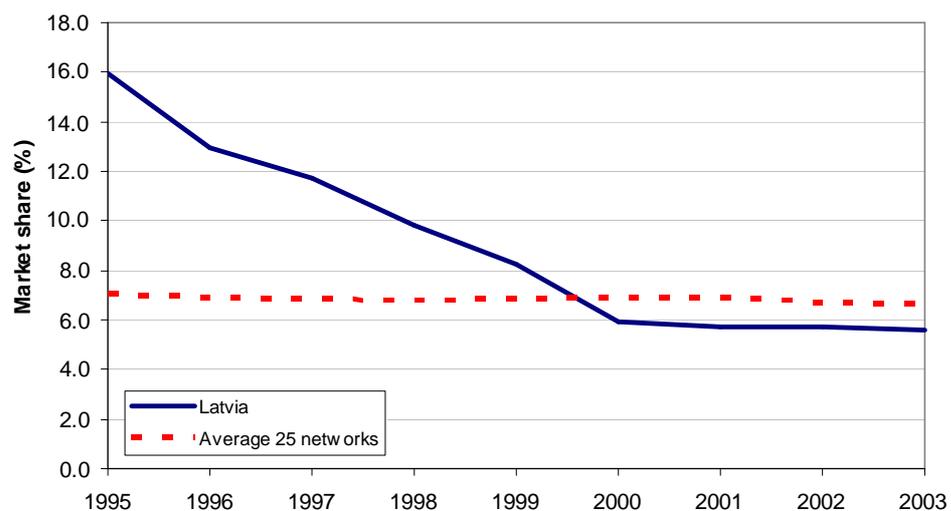
Market information

- 15.3 The development of the rail transport sector in Latvia depends on several internal and external environmental factors directly influenced by the political attitude of the State and activity in the development of inter-state and domestic economic relations. The following aspects can be considered as the most important factors for the development of freight volumes:
- Volume of trade between Russia and western countries and the related market prices,
 - the business and flow of transit freight shipments largely depending on the national policy of Russia and the interests of the big Russian companies,
 - competition with regard to alternative transit routes between Russia and western countries and different modes of transport.
- 15.4 In 2005, "Latvian Railways" (LDz) carried a record 54.86 millions tonnes of freight. This amount is 45% greater than 2001, and 7% more than in 2004, the highest growth in the Baltic States. The bulk of the carried freight was oil and oil by-products, accounting for 39% of the total. The rapid increase in total freight carried in the past five years has been achieved due to the transit of coal via Latvia's ports of Ventspils and Riga.
- 15.5 Most of the freight carried by "Latvian Railways" has been freight in transit through Latvia's seaports. This accounts for 74%, or 40.6 millions tonnes of all freight carried by rail, and has grown by 10% or 2 millions tonnes since 2004. Since February 2003, freight transportation has been performed also by the private operators "Baltijas ekspresis" and "Baltijas tranzita serviss", which have attained more than 10.5% of total freight turnover (based on tonnes-kilometres) by the end of 2005. Russia's status as the biggest exporting country to Latvia has not changed; its exports comprise 47% of total freight carried by "Latvian Railways". The figure below shows the market share of rail freight when compared to other land based transport modes, measured in tonne-kms.

FIGURE 15.1 RAIL FREIGHT INTERMODAL MARKET SHARE

Source: European Commission and Steer Davies Gleave analysis

- 15.6 Since 2002, a small number of passenger services have been performed by the private company “Gulbenes-Aluksnes banitis”. All major domestic services are however still performed by a 100% subsidiary company of LDz.
- 15.7 The number of passengers transported by rail has decreased since the mid 1990s; 2002 and 2003 were the first years when growth was observed. In 2003 all Latvian railway undertakings counted 26,202 million rail passengers, JSC Pasazieru vilciens, a subsidiary company of Latvian Railways (LDZ) has a market share of 89%. The figure below shows the market share of passenger rail services when compared to other land based transport modes.

FIGURE 15.2 RAIL PASSENGER INTERMODAL MARKET SHARE

Source: European Commission and Steer Davies Gleave analysis

- 15.8 As can be seen from the figure above, the market share for rail passenger services has

declined substantially since 1995 and is currently at a level below the average of the networks being looked at in the study. This is mainly a result of the growing incomes in Latvia and the subsequent increase in the use of private automobile transport.

Implementation of the provisions relating to access to railway services into national law

- 15.9 The national legislation of Latvia in relation to railways conforms to the requirements of European acquis. The Law on Railways and its subordinated Regulations of the Cabinet of Ministers and Regulations of Ministry of Transport form a legal base for the liberalisation of the railway transport system. The Railway Administration and the Railway Technical Inspectorate were established and became operational independently on the 1st July 1999, supervised by the Ministry of Transport.
- 15.10 The Law on Railways covers the main aspects of the three European Directives and specifically the requirements set out in Directive 2001/14/EC relating to charging, rail-related services and performance aspects.

TABLE 15.2 EU LEGISLATION TRANSPOSED INTO NATIONAL LAW

EU Legislation	Title	Implemented (and when, in which piece of legislation)
Directive 2001/14	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Yes Ministry of Transport Regulations: "The Procedure of Public Usage of Railway Infrastructure and Capacity Allocation" , Latvian Law on Railways: Paragraph 11,12, Latvian Cabinet of Ministers: "Regulations of Railway Technical Operations (Reg. 148)"

- 15.11 With the "Procedure of Public Usage of Railway Infrastructure and Capacity Allocation" and the "Network Statement 2005", two important milestones for the full activation of the requirements of the First Infrastructure package were set in 2004/2005. We have been informed that now all the necessary secondary legislation has been implemented.

Access conditions

The minimum access package and other services

- 15.12 Latvian Railways published its first Network Statement in August 2004, with the objective of providing detailed information to applicants for access to the railway network, managed by the LDz. An English version was also published so that foreign applicants could understand domestic access issues.
- 15.13 The Network Statement identifies the services not charged by the infrastructure manager, but that must be provided by the latter to any operators:
- Shunting;
 - Rolling stock maintenance and repair;
 - The verification and processing of train documents when trains arrive and leave;
 - the provision of rolling stock;
 - back-up services.

- 15.14 The Network Statement also describes the additional services that LDz can offer for an additional charge:
- Services in freight terminals
 - The preparation of freight wagons for loading;
 - Registering and processing of operating documents;
 - Weighing of wagons;
 - The commercial inspections of trains and wagons and the repair of the damages detected;
 - Cleaning and washing of rolling stock;
 - Management of the transportation of dangerous goods;
 - Assistance in the movement of non-standard trains;
 - Telematics services;
 - Staff facilities;
 - Access to other buildings;
 - Leasing of rolling stock and containers;
 - Provision of electricity;
 - Provision of fuel;
 - Telecommunication services;
 - Rolling stock technical inspection;
 - Pre-heating of rolling stock;
 - Provision of additional information.
- 15.15 With regard to the access conditions to the market for rail-related services, there are some restrictions to access to specific parts of the infrastructure. According to the information obtained from the Latvian Ministry of Transport, the regulations set for the access to the public railway infrastructure are also valid for marshalling yards, terminals, etc. The access to marshalling and shunting yards is currently controlled by the cargo division of LDz, but there are future plans to place this responsibility on the infrastructure manager.
- 15.16 Traction energy is exclusively provided by LDz as the infrastructure manager. Generally the access to traction energy provided by LDz as infrastructure manager is possible without any discrimination. With respect to the provision of diesel fuel, there are several competitors to LDz offering diesel fuel at sometimes lower prices than the incumbent, but prices in general are not considered as being too high..
- 15.17 The access to passenger stations is generally open to third-party operators without any specific authorization. As both the main seaports terminals are operated by private terminal operators, their access is open to third-party railway undertakings. Charges for access to terminals are set by these private operators. Due to the declining volume of Russian transit traffic there is no evidence of a lack of capacity of the shunting yards and there are no problems in relation to the access to these facilities.
- 15.18 Latvian state-owned railway company LDz is more and more withdrawing from operating technical maintenance and repair centres. Four out of five centres have already been partially transferred to private companies, with the major shareholder

still being LDz. One of the repair centres is a 50:50 joint-venture between LDz and a private investor. The market for maintenance and inspection services can already be described as open, and no discriminatory conducts are signalled. Third-party railway undertakings operate their own depots for small technical repairs and checks.

- 15.19 The biggest obstacle for third-party operators in cross border traffic is the lack of acceptance by Russian or Bielorussian authorities of their services, where authorities in these countries are still orientated towards state-driven entities and private undertakings are not accepted. As a result, official documents of third-party operators are still transferred to Latvian state railways.
- 15.20 As there is a certain shortage of experienced railway staff and the period for training new employees is quite long, the lack of experienced personnel can be seen as a problem for the competition on the Latvian railway network. If third party operators are willing to pay higher salaries for drivers currently employed by LDz, it will be possible for them to reduce their vacancies with experienced personnel from the state-owned railway company.
- 15.21 In Latvia, a large amount of rail freight wagons are owned by private investors without any relation to the railway market. More than 40% of these wagons belong to private investors or banks. The access for third-party operators to the leasing market for rolling stock can therefore be described as open.
- 15.22 In passenger traffic the company SIA "Gulbene - Aluksne banitis" has a contract with LDz for the utilisation of the railway infrastructure as well as for the leasing of rolling stock and facilities for narrow gauge routes.
- 15.23 As far as the leasing of locomotives are concerned, private railway companies cannot lease locomotives from Latvian Railways or other entities (except for shunting locomotives), while LDz leases locomotives from adjacent railway undertakings in Russia, Belarus and Estonia.

Charging for services

- 15.24 Details regarding charges for the access to shunting yards or freight terminals are not included in the Network Statement. However, since all charges are calculated on the basis of full costs, charges for the usage marshalling and shunting yards are very high due to the lack of financial support through the State.

Stakeholder analysis

Problems/complaints

- 15.25 Rail freight forwarders deem port equipment for handling rail cargo as old and in a bad state of repair in Riga. They also mention a lack of personnel at the Riga port, which causes unnecessary delay to the rail wagons, whose cost has to be paid by the rail forwarders.
- 15.26 Another problem is the current location of the rail terminals in the centre of the city, which poses a bottleneck for rail transport to the port. The tracks to and from the port of Riga are controlled by private companies; as there is no space to build extra tracks,

users are forced to pay the fees for the existing ones which are reported to be very high. According to respondents, the rail tracks in the port area should be owned by the Latvian railways or by the port itself as, for example, in Ventspils port.

- 15.27 In 2001, following a complaint made by a private railway undertaking relating to the access conditions to the railway infrastructure, LDz, at that time responsible for the issuing of safety certifications, recognised it was responsible for discriminatory conducts. With the transfer of these activities to the State-Rail Inspectorate these conflicts are solved.
- 15.28 Further complaints have been raised in relation to the high infrastructure access charges, but to date have not lead to any changes in the charging framework.

Stakeholder views

- 15.29 The competition between the state owned railway company and the two private operators on the freight market can be described as collaborative. Due to the problems mentioned above in relation to cross-border traffic with Russia or Belarus there is currently no real competition between the market participants. On the other hand LDz does not take advantage of this situation by discriminating against third party operators at the moment.
- 15.30 At the moment third party railway operators feel they are in a good situation as long as they represent a limited threat to LDz. In the event of an increase in their market share and/or in their competitive pressure on LDz, the state railway company may discriminate against them in daily operational matters.
- 15.31 Further aspects mentioned by the stakeholders focus on the high infrastructure fees. LDz as infrastructure manager still uses its monopolistic position to set or change infrastructure fees in accordance to their goals. Stakeholders have criticised the fact that revenues from railway infrastructure fees are still used to cross subsidise the road sector.
- 15.32 Private stakeholders also criticise the fact that market for most rail-related services provided by LDz are controlled by its cargo division, and not by the infrastructure manager. Currently there are indications that this situation will improve as LDz will pas the responsibility of managing rail-related service to the infrastructure manager .
- 15.33 Summarising, despite the above mentioned criticisms, the access to rail-related services and the charging system are described as fair, although some private railway undertakings have set up own depots for small technical maintenance and checking. The provision of diesel fuel is predominantly done by LDz, but prices are not high.
- 15.34 The access to training facilities for train drivers is described as non-discriminatory, but the 3-4 years training period for a train-driver is too long leading to a shortage of train drivers for the new entrants.
- 15.35 According to the stakeholders' opinions, competition between Latvian Railways and the private railway undertakings can increase in case of decreasing cargo volumes. This may lead however to an increase in the discrimination of third parties with

respect to the access to the railway infrastructure as well as to rail-related services. By transferring the control of rail-related services from LDz's cargo division to an independent infrastructure manager the above mentioned problems can probably be avoided.

Case study

- 15.36 The case study has not been undertaken for Latvia because this country has not yet identified the OSS contact. As a consequence access conditions to this network have not been assessed through the case study analysis, but have been looked at in the other sections of this chapter.

16. LITHUANIA

Introduction

- 16.1 At the present time, there is no real competition in the Lithuanian railway market as the Lithuanian state railway still has a *de facto* monopoly both in the freight and passenger transport market. As the Network Statement only exists in Lithuanian language, this can be regarded as another obstacle for foreign investment in the establishment of third-party railway undertakings as well as for providers for rail-related services. The table below sets out the providers of rail-related services in Lithuania.

TABLE 16.1 RAIL-RELATED SERVICES BY PROVIDER

Service	Provider
Electricity for traction	Litrail (The infrastructure manager)
Diesel fuel for locomotives	Litrail (The infrastructure manager)
Locomotive pushing services	Litrail
Back-up services	Litrail
Services in marshalling and shunting yards	Litrail
Train formation services	Litrail
Services in freight terminals	Litrail, Terminal Operators
Telematics services for freight operations	Litrail
Services in passenger stations	Litrail
Computer reservation services for passenger transport	Litrail
Training facilities	Litrail
Leasing of rolling stock and staff	Litrail
Maintenance	Litrail
Rolling stock cleaning	Litrail
Services in storage sidings	Litrail
Provision of on-board train protection systems; telecom and communications services	Litrail , Manufacturers of the equipment
Services in border stations	Litrail
Technical inspection services	Litrail

Market information

- 16.2 The Lithuanian rail network has good connections with the Baltic States and CIS countries. The main route between Russia and the Kaliningrad district passes through Lithuania. Currently the operational length of the Lithuanian railways is 2001.8 kms, from which 1,811 kms are 1520 mm gauge, 21.8 kms 1435 mm gauge, and 168.8 kms 750 mm gauge lines. A 1435 mm gauge track of 22 kms connects Lithuania with Poland (the direct connection with Poland was re-established on 1st of July 1992) and via Poland with other Western and Central European countries. Lithuania has 334 kms

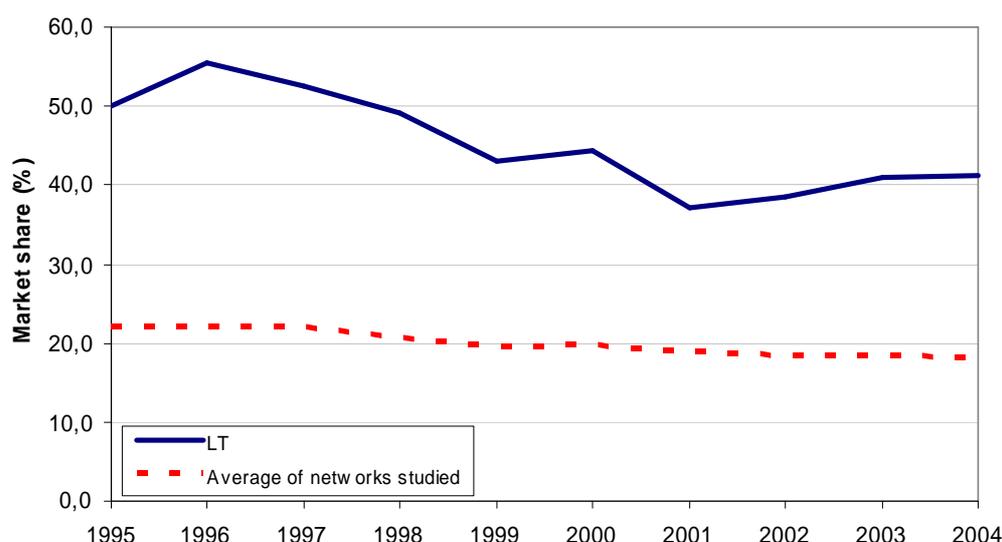
of railways of the Crete Corridor I (Warsaw - Mockava - Šeštokai - Kaunas - Riga - Tallinn - Helsinki).

- 16.3 Transit freight transport in the east-west direction from the ports of Klaipeda and Kaliningrad constitute the main share of railway transport in Lithuania. During 2004, the company Lithuanian Railways AB transported 45.5 million tonnes of freight, with an increase of 5% compared to the 2003 figure. The reasons for such a growth in the volume of transported freight can be seen in the increase of transit volume to Kaliningrad, as well as in the general growth of Lithuanian economy that influenced the rise in the volume of import, export and local carriages. Over the next ten years rail freight traffic is expected to increase by more than 30%. The liberalisation process is considered as only partly responsible for this development.

TABLE 16.2 RAILWAY PERFORMANCE OF THE FREIGHT SECTOR

	2003	2004	2005
Freight volume (1,000 tonnes)	43447	45555	49287
Domestic	5435	11806	14364
International	38012	33749	34923
Import	7176	11590	10249
Export	7053	5002	5480
Transit	23783	17157	19194
Million tonne-km	11457	11637	12457
Average Transport Distance	264	255	253

- 16.4 The market share for rail freight when compared to other land based modes of freight transport (road and pipeline) has been slowly decreasing in recent years but remains at a very high level when compared to most other EU countries, as is shown in the figure below.

FIGURE 16.1 RAIL FREIGHT INTERMODAL MARKET SHARE

Source: European Commission and Steer Davies Gleave analysis

- 16.5 In the passenger transport market there have been no major changes in the number of journeys undertaken. In fact, volumes in 2004 remained the same as in 2003, when 6 million passengers travelled on local transport routes. In 2005, the passenger transportation market was instead characterised by a fall in 2005 equivalent to 4.2 %.

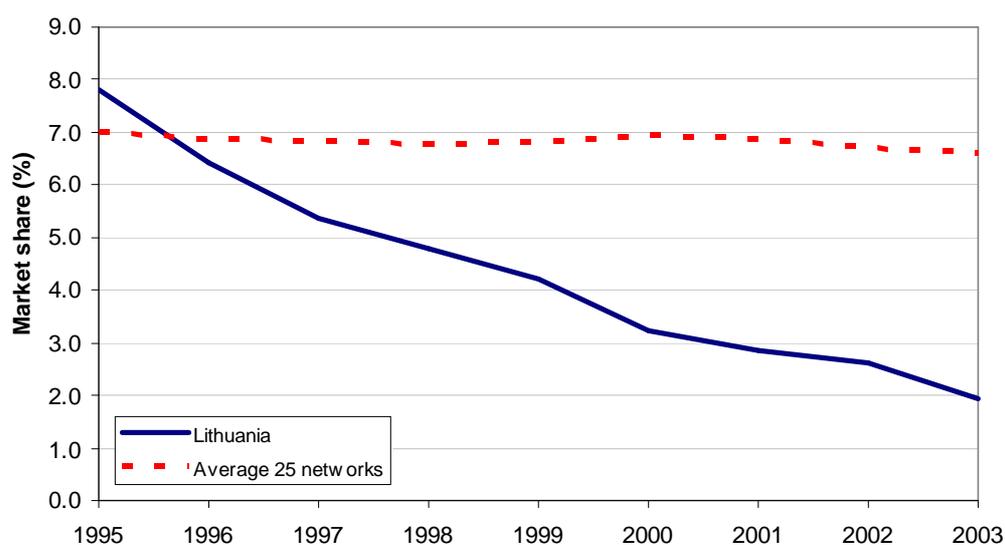
TABLE 16.3 RAILWAY PERFORMANCE OF THE PASSENGER SECTOR

	2003	2004	2005
Million Passengers	7.0	7.0	6.7
Domestic	6.0	6.0	5.7
International	1.0	1.0	1.0
Million Passenger Kilometres	432.1	443.5	427.9
Average Transport Distance	61.7	63.5	63.7

Source: LitRail

- 16.6 The Lithuanian railway network is also used by Latvian, Estonian, Russian, Belarusian and Ukrainian passenger transit trains, or separate carriages belonging to these states. In addition to the normal passenger transport, the JSC Narrow Gauge Railway of Upper Lithuania offers transportation services on a narrow-gauge line (750 mm gauge) focusing on the regional tourism development. The market share for passenger rail transport when compared to other forms of land based transport has decreased dramatically, from being slightly above the average of the networks in this study to being substantially below. The details of this change are shown in the figure below.

FIGURE 16.2 RAIL PASSENGER MARKET SHARE



Source: European Commission and Steer Davies Gleave analysis

Implementation into national law of the provisions relating to access to railway services

- 16.7 With the Law on rail transport safety, the Rules for investigations in railway transport accidents, the Statute of State Railway Inspectorate, the Law on Principles of Transport Activities, the Lithuanian Railway Transport Code and the Rules on the allocation of public railway infrastructure there exists a large amount of legislative instruments involving the issues of financing infrastructure maintenance and development and self-regulation of railway activities, which has been set up in order to transpose the EU directives 2001/12, 2001/13 and 2001/14 into Lithuanian national law.
- 16.8 The amendments to the Railway Transport Code approved in April 2004 play an important role in the harmonization of the Lithuanian legislative framework by implementing principles to liberalise the railway market and to secure a sustainable financial base. Initial work to set up a state-owned company for infrastructure management has to be completed, along with some other secondary legislation, by the end of 2006.

TABLE 16.4 EU LEGISLATION TRANSPOSED INTO NATIONAL LAW

EU Legislation	Title	Implemented (and when, in which piece of legislation)
Directive 2001/14	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Yes Law on Railway Transport Sector Reform, Lithuanian Railway Transport Code (Art. 5 and 34) and amendments, Rules on Allocation of public railway infrastructure, Law on Principles of Transport Activities (Art. 6)

Access conditions

The minimum access package and other services

- 16.9 The Network Statement mainly focuses on the access to the national railway infrastructure and capacity allocation; details regarding access to intermodal terminals and marshalling yards were not available. Regarding the access to freight terminals there are no detailed regulations. Marshalling and shunting yards are still controlled by Lithuanian Railways, the framework regarding the access conditions is therefore set by Lithuanian Railways infrastructure division.
- 16.10 Modernisation of the rolling stock is a big problem for the Lithuanian railways. The average age of the freight locomotives is 25 years. Their capabilities are insufficient for current requirements and they do not comply with the environmental requirements of the EU. Specialists of the incumbent operator have instituted a programme for the replacement and renovation of the locomotive stock to last until 2008. It provides for the modernisation of 29 locomotives and purchase of 34 new ones. The programme is estimated to cost about 145 million US Dollar.
- 16.11 The largest maintenance services provider is “Vilniaus lokomotyvu remonto depas”, a Litrail subsidiary. In 2005 the company started a staff training programme supported by the EU to improve the service quality and to adapt the service level to the changing market environment. So far there seem to be no private companies providing services for maintenance or overhaul of rolling stock. This may lead to an obstacle for new market entrants.
- 16.12 Lithuania has an agreement with Polish railways regarding the distribution of common functions on Sestokai-Trakiskes border crossing. Following this agreement, the Polish side is expanding the Trakiskes passenger terminal, and Lithuania the cargo terminal in Sestokai (Motskava). Kena and Kybartai stations are the main border transfer stations for East-West traffic in Lithuania. The freight delivery time mostly depends on the work of the border station, therefore, it is of vital importance to modernise the infrastructure of the stations and speed up customs procedure.
- 16.13 There is no evidence of any third party operators beside Lithuanian Railways offering significant services regarding the training of train drivers. The average number of graduates at Vilnius rail transport and business school is about 30 per annum. Access to rolling stock can still be considered as an important obstacle for third party operators to enter the market. As Lithuanian railways won't sell its old locomotives or wagons to potential competitors, it is difficult for new entrants to purchase second hand rolling stock which is less cost intensive when compared to new stock.

Charging for services

- 16.14 The charging framework is set in the Network Statement. Chapter 5 of the Network Statement covers the specification of the charging system. Regarding the charging for the usage of marshalling/shunting yards, freight terminals or passenger stations the Network Statement clarifies that these specific infrastructure sections are charged separately. The tariffs for the usage of the general railway infrastructure are published on the webpage of Lithuanian Railways in Lithuanian and Russian language which

demonstrates the high relevance of Russian transports for Lithuania. Tariffs for the usage of marshalling/shunting yards, freight terminals or passenger stations are not specified.

Stakeholder analysis

Problems/complaints

- 16.15 We were not informed of any specific problems or complaints in the Lithuanian rail market. There is also no evidence that third party operators have suffered access restrictions on the Lithuanian railway market. This does not mean that the market situation in Lithuania is ideal as the incumbent operator and the infrastructure manager are still closely linked.

Stakeholder views

- 16.16 Some of the stakeholders we approached explained that the market has a long way to go before it can be described as being open, while others explained that it was following the requirements of the EU Directives and thus working fine. Most of the rail-related services are still supplied by the monopolist because. We were told that in theory, some of them could be provided by other suppliers. The stakeholders we spoke to explained that the current situation is not likely to change in the near future, furthermore they mentioned that the main obstacle to this was not the behaviour of the current industry participants, but the technical difficulties inherent in the market mainly in relation to interoperability.
- 16.17 Prices for the usage of rail-related services have not as yet been defined. The national law just goes as far as saying that prices must be in accordance with European laws, thus fair and non discriminatory. Regarding the access to rail training facilities there are public state higher educational institutions, which are responsible for the training of railway related people. Nevertheless on-track can still only be undertaken with the incumbent company.
- 16.18 One of the main obstacles for the development of competition in the Lithuanian railway transport sector is the insufficient independence of the incumbent railway carrier and infrastructure manager from the state politics and regulations; inadequate financing and the technical constraints of the infrastructure. The main opportunities lie in the expected growth of intermodal freight volumes in standard gauge traffic to Western European countries. An extension of the western gauge network will also lead to growing influence of Western European operators, providing rolling stock leasing, maintenance and repair. Currently, due to the different gauge standard, there still exists an orientation towards Russia and Belarus.

Case study

- 16.19 While there is a Network Statement, we were not able to identify the areas that cover rail-related services. Furthermore there is no OSS contact that we could forward our requests to, as such the case study has not been undertaken for Lithuania. From the analysis that we have undertaken above we must conclude that the access conditions are unclear.

17. LUXEMBOURG

Introduction

17.1 Liberalisation of the rail industry in Luxembourg is currently underway, however CFL (Chemins de Fer Luxembourgeois) remains the sole provider of both passenger and freight transportation. In March 2005, following the October 2004 sentence by the Court of Justice, the Commission launched further legal action against Luxembourg, for failure to comply with the judgment of the Court and to communicate national measures for implementing the First Railway Package of EU Directives. Luxembourg, as of mid 2006, has transposed all the requirements of the Directives into national law.

17.2 The table below sets out the providers of rail-related services in Luxembourg.

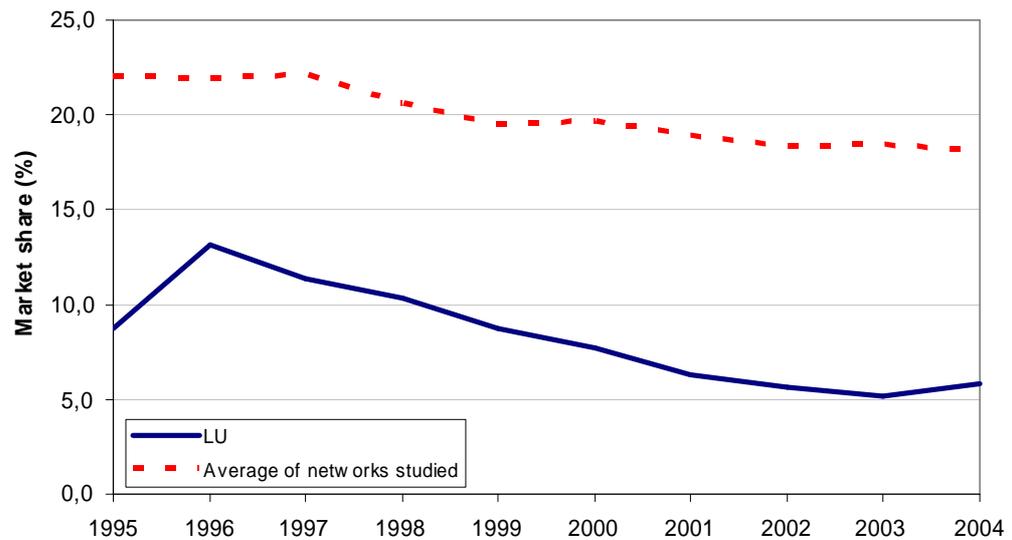
TABLE 17.1 RAIL-RELATED SERVICES BY PROVIDER

Service	Provider
Electricity for traction	CFL
Diesel fuel for locomotives	Each operator independently
Locomotive pushing services	Each operator independently
Back-up services	Each operator independently
Services in marshalling and shunting yards	CFL
Train formation services	CFL
Services in freight terminals	CFL
Telematics services for freight operations	N/A
Services in passenger stations	CFL
Computer reservation services for passenger transport	CFL
Training facilities	CFL
Leasing of rolling stock and staff	Rolling stock companies
Maintenance	CFL
Rolling stock cleaning	Each operator independently
Services in storage sidings	CFL
Provision of on-board train protection systems; telecom and communications services	Manufacturers
Services in border stations	CFL
Technical inspection services	CFL

Market information

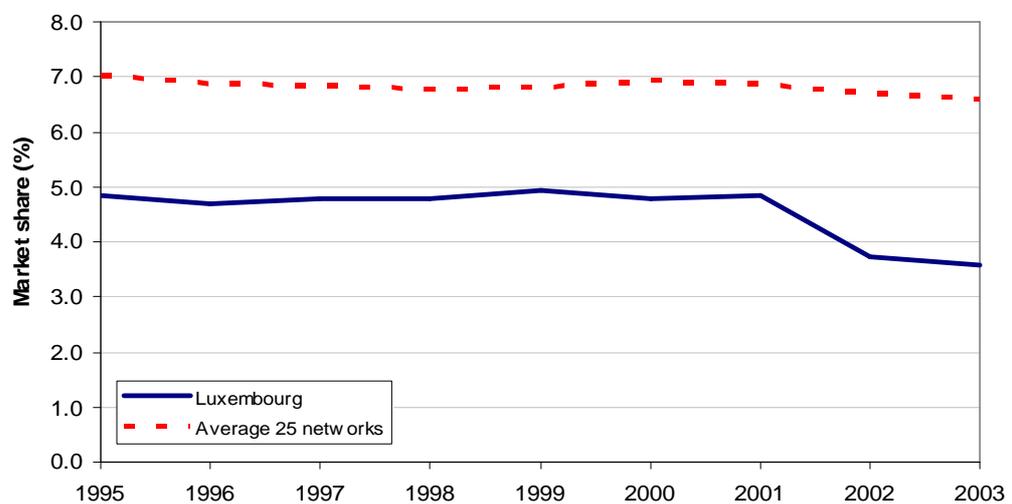
Market Shares

17.3 Railway freight transportation suffered a drastic decrease in Luxembourg, decreasing from more than 13% in 1992 to less than 5% in 2003 as shown in the figure below.

FIGURE 17.1 RAIL FREIGHT INTERMODAL MARKET SHARE

Source: European Commission and Steer Davies Gleave analysis

- 17.4 The rail passenger transport market share has remained fairly steady until the last few years where there has been a noticeable fall. Furthermore, the market share is well below the average of the networks included in this study. This change can be seen in figure below.

FIGURE 17.2 RAIL PASSENGER INTERMODAL MARKET SHARE

Source: European Commission and Steer Davies Gleave analysis

- 17.5 CFL, the incumbent operator grew in 2004 by more than 5% in both passenger and freight transportation. In fact, it transported more than 600 million tonne/km and more than 13 million passengers. Both passenger and freight transport registered a decline in the trend of traffic growth. Passenger traffic increased by only 2% in 2005 and by 1.5% in the first 9 months of 2006, the freight traffic decreased by 34% during 2005, a negative trend counterbalanced by 13% traffic increase in the first 9 months of 2006.

Implementation into national law of the provisions relating to access to railway services

TABLE 17.2 EU LEGISLATION TRANSPOSED INTO NATIONAL LAW

EU Legislation	Title	Implemented (and when, in which piece of legislation)
Directive 2001/14	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Yes, through law Mémorial A-141 of 16 th August 2006

17.6 The law implementing the First Package of Directives in Luxembourg is the Mémorial A-141 of 16th August 2006. The law modifies and extends the Règlement Grand-Ducal dated 31 March 2003, which introduced into national law part of Directive 2001/14 and is now fully compliant with the EU Directive.

Access conditions

17.7 CFL's Network Statement includes information regarding rail-related services. Both the minimal services description and their related prices are explained. In the event that the infrastructure manager is not the relevant owner or operator of the facility, the contact details of the facility manager are provided. There are no details however in relation to the specific conditions for access (such as opening times etc.) for the various facilities that are managed by the infrastructure manager. Any railway undertaking that has been granted access to the rail network, can be granted access to rail-related services. The procedure is the same as for the capacity allocation of the rail network.

The minimum access package and other services

17.8 The minimal services offered by CFL are the following:

- Processing of requests for infrastructure capacity;
- The right to use the capacities granted;
- Use of the junctions and switches of the network;
- The services necessary for the running of trains, including signalling, traffic control, traffic management, communication, and the provision of information concerning the running of the trains;
- Any other information necessary for the implementation or operation of the service for which the capacities are requested.

17.9 The following are described as the minimal access to equipment offered by CFL:

- Electrical installations and lines: Any railway undertaking which has been granted access to the network, is automatically granted the use of electrical installations and line;
- Access to passenger stations: it is included in the capacity allocation. Passengers are allowed to access all the facilities of the station. Prolonged stabling is only allowed in the stabling sidings;
- Access to freight terminals: it is included in the capacity allocation. Access to the

Bettembourg terminal and the Merttert port requires separate agreement and contract;

- Access to the marshalling and shunting yards of Bettembourg: request must be made with the capacity allocation request to the network;
- Train formation: such service is allowed to all the railway undertakings which have been granted access to the rail network;
- Storage sidings: access to these sidings is allowed to any railway undertaking which has been granted access to the network, but it is limited if any other demand with a higher traffic requests the same service;
- Access to maintenance facilities: there are no maintenance facilities on the network, but CFL provides such services at the Dépôt de Luxembourg, the Ateliers de Luxembourg and the Ateliers do Pétange. Access conditions and charges are negotiate between the railway operator and CFL;
- Fuelling stations: there are no such installations on the rail network, and CFL provides itself such service at the Dépôt de Luxembourg facility. Any other operator interested in using such service, has to agree with CFL on access conditions and charges.

17.10 The following is a list of the additional services which can be provided by CFL:

- Supply of traction current;
- Supply of fuel: it is not provided;
- Pre-heating of rolling stock;
- Marshalling and shunting services are not provided outside the Bettembourg terminal;
- Exceptional consignments and dangerous goods: CFL can perform a routing study that takes into account both the physical possibilities by the network and the impact on all other movements. The particular technical, operational, and financial arrangements applicable to each of the transports concerned are communicated to the railway undertaking by CFL and, before the actual movement of the exceptional consignment or of the dangerous goods, are transcribed in the particular conditions of the contract stipulated.

Charging for services

17.11 The charges received by the infrastructure manager for the minimal services are equal to the direct costs related to infrastructure use and include a minimal charge for the scarcities of the capacities. The charge includes the following elements:

- an element related to the administrative costs for the path demand;
- an element related to the use of the path;
- an element related to the scarcity of capacities defined as congested.

17.12 In relation to charges relating to other services, the infrastructure manager charges €2.60 per day for access to terminals, formation and marshalling yards. This seems a very low charge, as well as the fact that the charge is the same for these three services seem to imply that this is not related to the cost directly incurred by allowing access to these terminals.

17.13 As for charges relating to electric traction as mentioned above, this charge reflects the

cost directly incurred for running different services for example charges for freight trains are calculate according to the weight of the train. Given that the charges are substantially higher for locomotive hauled passenger trains, than they are for electric multiple units, the operators are incentivised to use the latter rather than the former.

17.14 There are also the following charges for the following complementary services:

- Traction current: it is the product of the unitary tariff, of a factor related to the weight of the train, of the average speed of the train, of a factor related to the forecasted number of stops and of a factor related to the coefficient of rush hour.
- Passenger and freight stations: it is the product of a daily unitary tariff and the time needed at the station. For any train longer than 27 meters, this formula will be applied for each extra 20 meters.
- Access to Bettembourg terminal: it is the product of a unitary tariff per wagon and the total number of wagons.
- Heating (or pre-heating) of the trains: it is the product of a unitary tariff and the number of wagons or locomotives.
- Special contracts for the assistance during the transportation of dangerous materials and special convoys: it is the product of a hourly rate and the time needed for the analysis.

Stakeholder analysis

Problems/complaints

17.15 We have not been made aware of any complaints in relation to the Luxembourg market. This is as a result both of the fact that there is only one operator currently in the market, but also as a result of the size of the market.

Stakeholder views

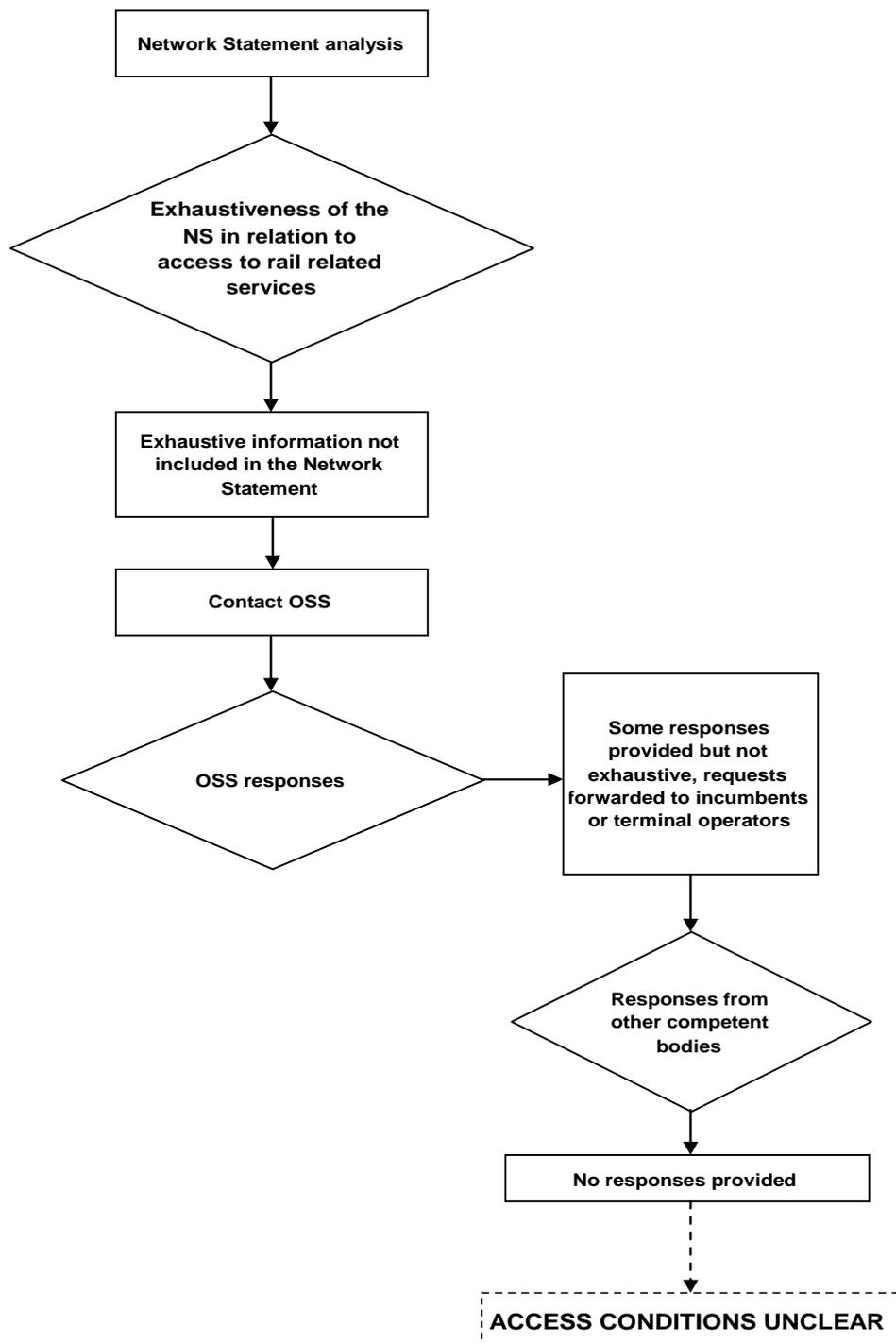
17.16 We have contacted the various industry players within the railway industry in Luxembourg on a number of occasions to try and obtain an interview with them in relation to this project, on each occasion they have declined to be interviewed.

17.17 In an effort to get a view of the industry in Luxembourg we spoke to a number of foreign stakeholders that use Luxembourg network, who told us that the current structure of the industry is such that it is difficult for a market to develop locally. However, they also mentioned that given the size of the market it was not going to have a substantial impact on their business. The stakeholders did not make any specific references to rail-related services.

Case study

17.18 For the case study we contacted the One Stop Shop in Luxembourg to obtain further, more detailed information on the access conditions, the figure below sets out the process that we followed for this network as well as the progress in terms of obtaining further data.

FIGURE 17.3 CASE STUDY PROCESS



17.19 As can be seen from the figure above, access conditions to rail-related services are unclear. Having looked at the Network Statement and seen that it contained some information we contacted the OSS to obtain further information but it was not able to provide more specific information other than those contained in the Network Statement and referred us to other organizations also quoted in the Network Statement as contacts. These organisations did not respond to our survey.

18. NETHERLANDS

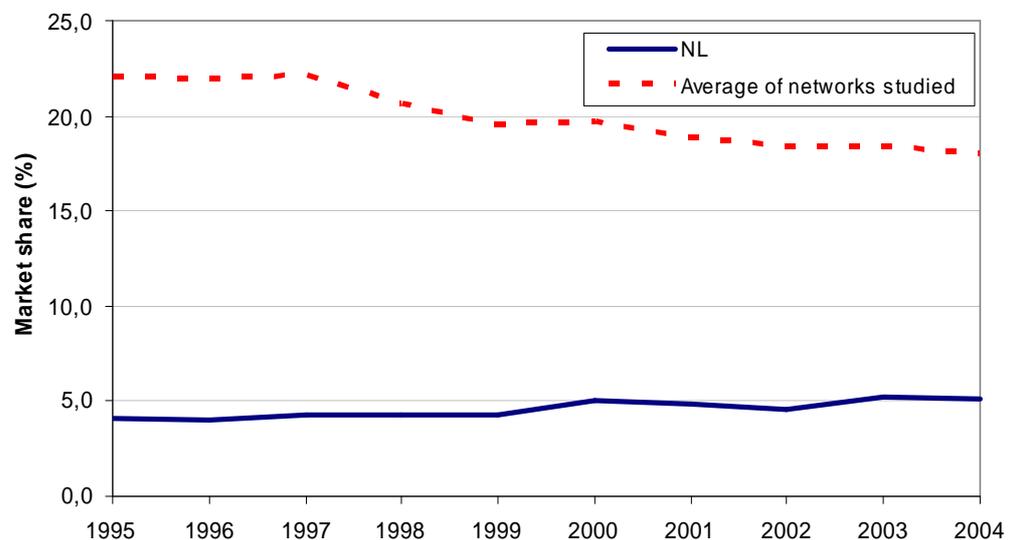
Introduction

18.1 The implementation of the First Package Directives into the Dutch law through *Spoorwegwet 2003* has significantly facilitated the opening of the railway transport market in the Netherlands. There are 15 railway undertakings operating in the Netherlands.

Market information

18.2 For the past 10 years the rail freight market has been steadily growing, while the passenger market has fallen slightly. The intermodal market share of rail freight, when compared to other land based forms of transport, (as seen in the figure below) has increased slightly and is now above 5%.

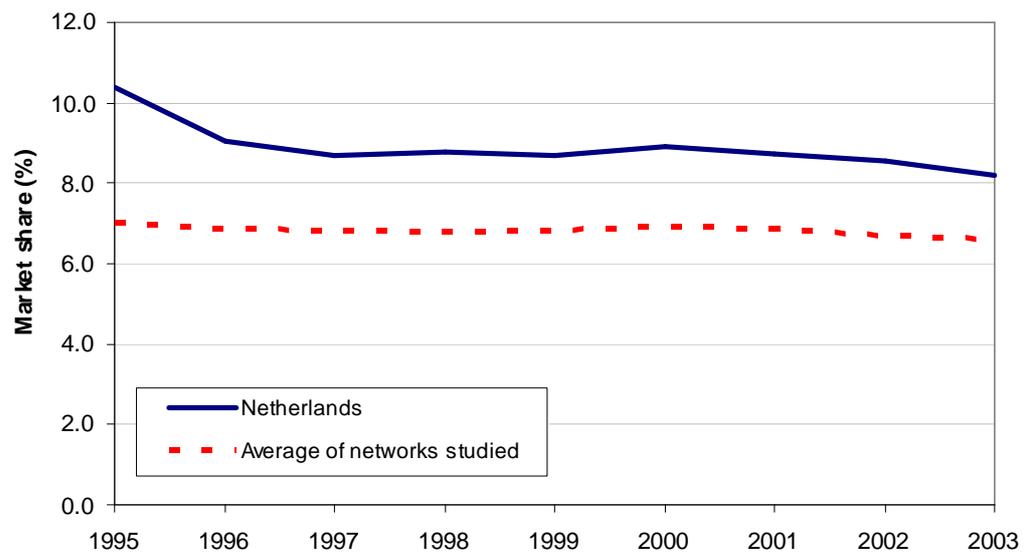
FIGURE 18.1 RAIL FREIGHT INTERMODAL MARKET SHARE



Source: European Commission and Steer Davies Gleave analysis

18.3 Following on from the experiences of the absolute figures, the market share of passenger transport when compared to other forms of land based transport has also decreased. As the figure below shows however, the market share remains above the average of the countries analysed in the study.

FIGURE 18.2 RAIL PASSENGER INTERMODAL MARKET SHARE



Source: European Commission and Steer Davies Gleave analysis

Market shares

- 18.4 Five railway undertakings are currently operating passenger transport in the Netherlands and 6 are operating freight transport. The Incumbent Nederlandse Spoorwegen NS, is still dominating the passenger market with nearly 15 million passengers transported in 2004. Railion Nederland N.V, the former NS Cargo, has a market share of more than 80%. It is the Netherlands' largest rail transport operator and a subsidiary of Deutsche Bahn AG.

TABLE 18.1 RAILWAY OPERATING COMPANIES

Railway Undertaking	Sector
ACTS Nederland	Freight
**Arriva Netherlands AN	Passenger
Connex Cargo	Freight
**DB Regionalbahn Westfalen GmbH	Passenger
*DLC (Dillen & Lejeune Cargo, Belgium)	Freight
ERS Railways B.V.	Freight
*HGK (Hafen und Güterverkehr, Köln, Germany)	Freight
Noordned Personenvervoer B.V.	Passenger
NS Reizigers B.V.	Passenger
Railion Nederland	Freight
*Rail4Chem (Germany)	Freight
Rotterdam Rail Feeding B.V.	Freight
Shortlines B.V.	Passenger
Syntus B.V.	Passenger
Thalys Nederland N.V.	Passenger

Source: Steer Davies Gleave analysis

Notes: * railway undertakings operating with other EU Member States Licences; ** railway undertakings operating without a licence

New entrants

- 18.5 Of the above listed 13 new entrants, 7 operated freight transport while 6 operates passenger transport. Among the freight operators Rotterdam Rail Feeding B.V. provides exclusively shunting services at freight terminals for other rail operators.

Implementation into national law of the provisions relating to access to railway services

- 18.6 The law that implemented the First Infrastructure Package of Directives in the Netherlands was the *Spoorwegwet* 2003. More in detail articles 62 and 63 of the law have transposed Directive 2001/14/EC.
- 18.7 The directives included within the Second Package have not as yet been transposed into national law.

TABLE 18.2 EU LEGISLATION TRANSPOSED INTO NATIONAL LAW

EU Legislation	Title	Implemented (and when, in which piece of legislation)
Directive 2001/14/EC	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Yes Art 62, 63 Spoorwegwet 2003

Access conditions

The minimum access package and other services

- 18.8 The 2007 Network Statement of ProRail, published in accordance with *Spoorwegwet* 2003 identifies the following service packages delivered to railway undertakings by the infrastructure manager:
- Basic Access Package;
 - Access to Facilities;
 - Additional services;
 - Ancillary services.
- 18.9 The minimum access package covers the following services:
- Handling applications for infrastructure capacity;
 - The acquisition of capacity rights and the right to use the capacity as laid down in the capacity allocation;
 - Using the tracks on route sections and in stations for train movements as well as the stationary use of tracks insofar as necessary for traffic management and the stopping of services at station platforms insofar as is necessary for passengers to board or alight and/or (un)load freight;
 - The train service and traffic control for both centrally and locally controlled areas, including use of the Railway Safety telecommunication services, and the provision of necessary information to the railway undertaking regarding the train service handling and the provision of traffic information to the railway undertaking and the public;
 - The provision of all information necessary to run services on the network according to this basic package;
 - Emergency services provided by ProRail's including the integral coordination of the operations of railway undertakings in these circumstances, as well as coordination with the competent authorities and the emergency services. The service is offered within the framework of the Generic Operational Regulations on the 'Rail Emergency Plan', with the corresponding settlement formula.
- 18.10 Track access to services facilities and supply of services that the infrastructure manager needs to provide, include:
- The use of the power systems for electric traction (the service also includes the use of ground connections for the pre-heating of passenger stock in storage sidings insofar as these ground connections are powered by the traction power system);
 - The use of refuelling points;
 - The use of passenger access and transfer facilities¹⁷ The service includes:
 - Access to and use of the footpath between the public road and the platform, and between platforms. Making of 'in-house' announcements by ProRail and

¹⁷ The use of the platform tracks is included in the Basic Access Package.

announcements of a safety nature;

- The lighting, heating as well as the hygienic and technical maintenance of the facilities;
 - The use of infrastructure facilities on platforms and concourses for the provision of travel information (i.e. public-address equipment, traffic & travel information displays and train indicator systems);
 - The announcement by means of an automated system of standardised travel information on platforms and in concourses, and the operation of train indicator systems in concourses and on platforms, in accordance with the generic operational regulations; and
 - The use, of closed-circuit TV systems on stations that are fitted with this equipment.
- The use of goods transshipment facilities;
 - The use of holding and marshalling sidings; the service concerns:
 - The use of tracks for the stabling of all types of rolling stock;
 - The use of tracks for stabling and cleaning of rail vehicles;
 - The use of tracks for the shunting of rail vehicles;
 - The use of the hump in Kijfhoek is only possible with locomotives fitted with equipment for communication with and control by the automated hump process control system installed there;
 - Use of the facilities for water supply points, pressurised air and electrical depot power supply present at holding and sorting sidings;
 - Access to and use of loading and unloading tracks at public sites and the use of the associated loading and unloading roads on sites managed by ProRail;
 - Traffic control of the tracks in question, including use of the Railway Safety telecommunication services, as well as the provision of information about the current local train service handling;
 - Train formation facilities;
 - Storage sidings; and
 - Maintenance and repair facilities.

18.11 There are also a number of additional services that the infrastructure manager must provide, they are:

- Traction power;
- Fuel supply;
- Stock maintenance services;
- Shunting services;

- Non-standard transportation;
- Connections and peripheral equipment traffic control information systems;
- Travel information.

18.12 Finally, the infrastructure manager may provide the following ancillary services to those operators that request these services:

- Use of telecom facilities for purposes other than for railway safety telecommunication services;
- Customized information products;
- Technical inspections;
- Timetable studies;
- Studies and other services.

18.13 The table below sets out which companies are look after each of the rail-related services.

TABLE 18.3 RAIL-RELATED SERVICES BY PROVIDER

Service	Provider
Electricity for traction	ProRail
Diesel fuel for locomotives	Each operator independently
Locomotive pushing services	Each operator independently
Back-up services	Each operator independently
Services in marshalling and shunting yards	ProRail
Train formation services	ProRail
Services in freight terminals	Facility operator
Telematics services for freight operations	Each operator independently
Services in passenger stations	ProRail
Computer reservation services for passenger transport	N/A
Training facilities	Each operator independently
Leasing of rolling stock and staff	ROSCOS and some operators
Maintenance	Each operator independently
Rolling stock cleaning	Each operator independently
Services in storage sidings	ProRail
Provision of on-board train protection systems; telecom and communications services	Manufacturers of the equipment
Services in border stations	N/A
Technical inspection services	N/A

Charging for services

Essential services

- 18.14 The Basic Access Package charge is based on a tariff per train kilometre, in combination with a tariff per tonne kilometre. The tariff per train kilometre is € 0.5059 (price level 2006). The tariff per tonne kilometre is € 0.001715 (price level 2006).

Access to facilities services

- 18.15 The tariffs for *Access to Facilities* services are as follows:

- Use of the overhead contact line: € 0.02996 per kWh (price level 2006);
- Use of refuelling systems: The tariff paid by the railway undertaking to the operator of a refuelling system for use of that system includes the user charge owed by the operator to ProRail. No user charge is due for the fuelling on a refuelling platform without making use of the refuelling system;
- Passenger access and transfer facilities at stations: € 5.0799 per stop at Class 1 station, € 2.4910 per stop at Class 2 station, and € 0.8637 per stop at Class 3 station (price level 2006);
- The use of holding sidings and sorting lines, loading and unloading roads is charged by means of a 14% surcharge on the train kilometre tariff for the Basic Access Package, applied to all trains of the railway undertaking concerned.¹⁸

Additional and ancillary services

- 18.16 For both additional and ancillary services the tariffs are calculated taking into account all costs derived from the supplied service, based upon the effective usage.

Stakeholder analysis

Problems/complaints

- 18.17 The Netherlands benefits from a number of new entrant parties in various sections of the rail industry, including in rail-related services where there are new entrants in the provision of maintenance services for example. In 2005, the Dutch competition authority (NMa), started an investigation into the contents of the Network Statement produced by ProRail. Within this analysis, the NMa has looked at rail-related services and has investigated the price of these services and the advantages that the incumbent operators may have due to their previous connections with the infrastructure manager. It found that the Network Statement did not contain enough details; ProRail has set itself the goal of improving the document.
- 18.18 At the end of August 2006, the NMa, following a complaint by Dillen & Le Jeune Cargo (DLC), published a decision stating that ProRail had failed to adequately meet the information transparency requirements set out in the national legislation relating to access to and the use of the railways, specifically to capacity on the Budel-Weert

¹⁸ In the Network Statement of 2008 this changes to a value of €0.071.

section. Following consultation with ProRail, this decision was reversed in September 2006 as the information requested by DLC was withheld as a result of that section of track being unsafe.

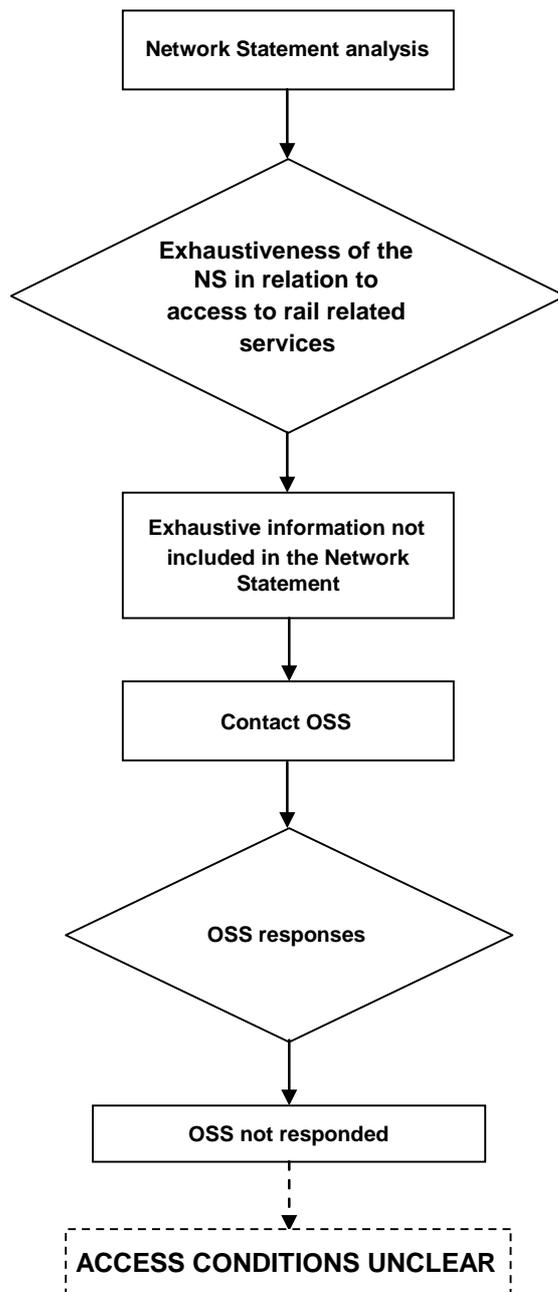
Stakeholder views

- 18.19 We have received complaints about the price of rail-related services from the freight sector that are being investigated by the NMa (Office of Transport Regulation) as set out above.
- 18.20 The stakeholders we spoke to explained that generally they thought that there was substantial progress in the liberalisation of rail-related services in the Netherlands and that the market was developing well. We were told that maintenance of rolling stock is sometimes undertaken by foreign companies and that foreign companies have bid to undertake maintenance for local transport companies. In addition to this, new entrants have also set up independent training facilities for locomotive drivers and a number of different operators now manage refuelling facilities.
- 18.21 The incumbent operators explained that they are aware that they are subject to substantial scrutiny and as such are always trying to ensure that their behaviour is beyond reproach.

Case study

- 18.22 For the case study we contacted the One Stop Shop in the Netherlands to obtain further information on the access conditions, the figure below sets out the process that we followed for this network as well as the progress in terms of obtaining further data.

FIGURE 18.3 CASE STUDY PROCESS



- 18.23 As can be seen from the figure above, the Network Statement does not include comprehensive information with respect to access to rail-related services. We then contacted the OSS in the Netherlands to obtain further information however they have not responded to our survey. As a result we must conclude that access conditions are unclear.

19. NORWAY

Introduction

19.1 The Norwegian market has had substantial experience with the liberalisation process and has proceeded to open up its rail freight market following the requirements of the EU Directives. The rail-related services in Norway are undertaken by a number of undertakings. The table below sets out which companies are look after each of the rail-related services.

TABLE 19.1 RAIL-RELATED SERVICES BY PROVIDER

Service	Provider
Electricity for traction	Jernbaneverket (The infrastructure manager)
Diesel fuel for locomotives	Each operator independently
Locomotive pushing services	Each operator independently
Back-up services	NSB AS has back-up services that can be used by other companies for a charge. CargoNet has their own
Services in marshalling and shunting yards	Each operator
Train formation services	Each operator
Services in freight terminals	Each operator
Telematics services for freight operations	Jernbaneverket/CargoNet
Services in passenger stations	Jernbaneverket, some services by the passenger train operators
Computer reservation services for passenger transport	Each operator
Training facilities	Norsk Jernbane Skole (by Jernbaneverket)
Leasing of rolling stock and staff	CargoNet and NSB lease some rolling stock
Maintenance	Mantena (a subsidiary of NSB) and the operators themselves.
Rolling stock cleaning	Operator
Services in storage sidings	Operator
Provision of on-board train protection systems; telecom and communications services	Manufacturers of the equipment (Jernbaneverket provide specification of the system)
Services in border stations	None
Technical inspection services	The operators use their own

Market information

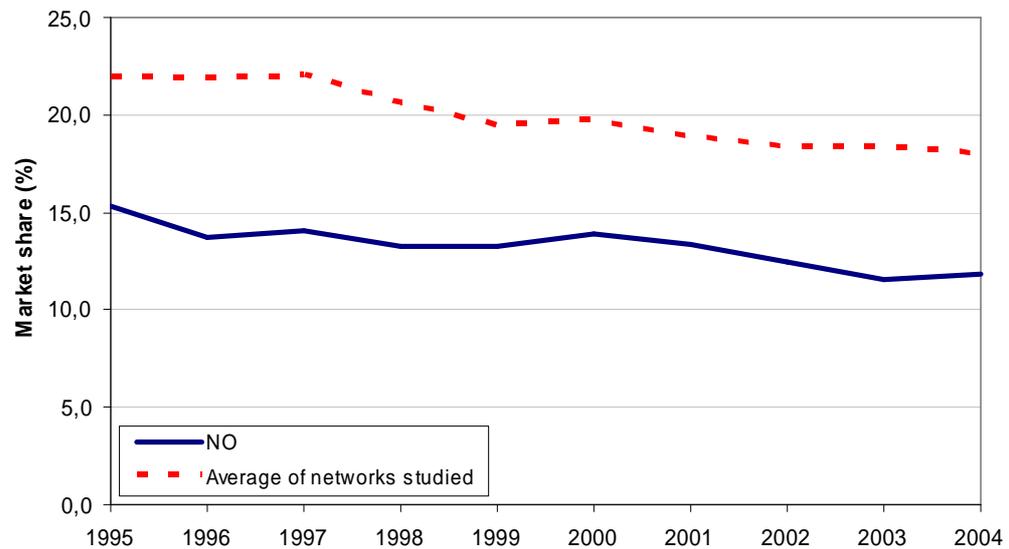
Market shares

19.2 The market in Norway is still dominated by the incumbent operators both in the passenger and freight markets. The market share for new entrants is increasing in the freight sector with the new entrants approaching 20% of the total market. On the

passenger side the market is still dominated by NSB with a small number of flows (mainly cross border and airport connections) being operated by third parties.

- 19.3 As in a number of other networks, the Norwegian rail freight market has experienced a gradual fall in the market share of rail freight when compared to other overland forms of transport. This can best be seen in the figure below.

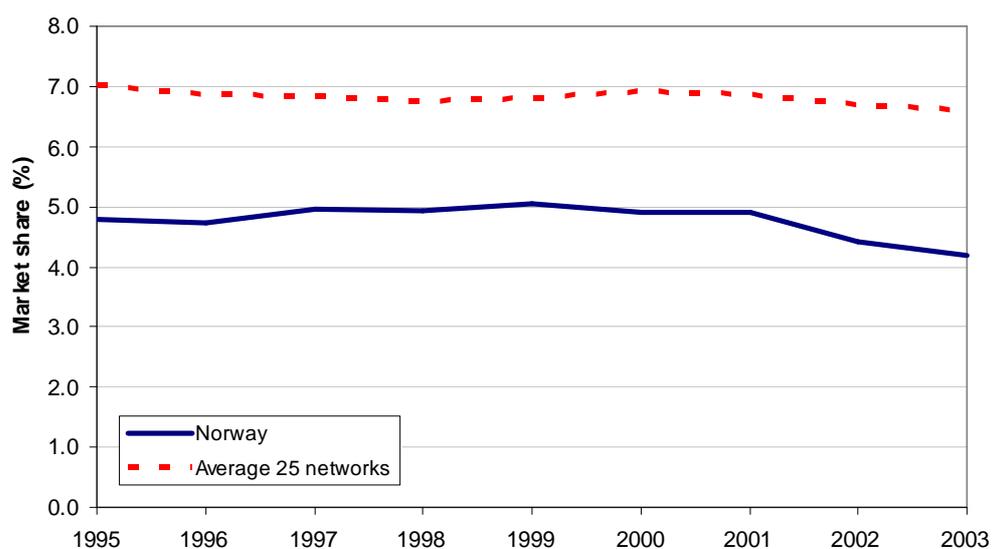
FIGURE 19.1 RAIL FREIGHT INTERMODAL MARKET SHARE



Source: European Commission and Steer Davies Gleave analysis

- 19.4 The figure below shows the change in market share for passenger transport when compared to other forms of transport.

FIGURE 19.2 RAIL PASSENGER INTERMODAL MARKET SHARE



Source: European Commission and Steer Davies Gleave analysis

Passenger and freight operating companies

- 19.5 In addition to the incumbent passenger operator, NSB, and the incumbent freight operator, CargoNet, the main operators in the Norwegian market are Connex Tog and Flytoget in the passenger market and Ofotbannen and Malmtrafikk in the freight sector. In recent years the new entrant companies have been growing slowly but have taken little market share from the incumbent operators.

Implementation into national law of the provisions relating to access to railway services

- 19.6 The law that replicates the requirements of the First Infrastructure Package of Directives with respect to rail-related services in Norway is Fordelingsforskriften of 2003. More specifically, the requirements are set out in Chapter 3 and Annex I of this law.

TABLE 19.2 EU LEGISLATION TRANSPOSED INTO NATIONAL LAW

EU Legislation	Title	Implemented (and when, in which piece of legislation)
Directive 2001/14	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Yes, Fordelingsforskriften 2003

Access conditions

- 19.7 The contents of the Network Statement that refers specifically to services refers directly to the Fordelingsforskriften law in addition to this the appendices to the Network Statement contain substantial amounts of information related to access conditions for the various facilities on the network, even those not owned or operated by the infrastructure manager. A potential operator is able to obtain detailed information about the equipment available within facilities as well as an understanding of opening times. The information available within this Network Statement is clearly an example of best practice in information transparency.
- 19.8 The sections below set out what is included in the Fordelingsforskriften law as referred to in the Network Statement.

The minimum access package and other services

- 19.9 The infrastructure manager must provide the minimum access package covering the following services:
- Allocation of capacity;
 - Use of the allocated capacity;
 - Use of intersections and link routes;
 - Rail traffic control, signalling as well as traffic information, regulation and communication; and
 - Any other information necessary for the taking forward of the service for which capacity has been allocated.

- 19.10 In addition to this there are a number of compulsory services that the infrastructure services must provide if it has the facilities available to do so, they are:
- Use of the electricity for traction infrastructure where it is available;
 - Access to refuelling facilities;
 - Access to passenger stations and connected buildings;
 - Access to freight terminals and sidings;
 - Access to marshalling yards;
 - Access to train formation services;
 - Access to storage sidings; and
 - Access to maintenance and other technical facilities.
- 19.11 Where the infrastructure manager can provide the following additional services it must do so to all those that request:
- Traction current
 - Pre-heating of passenger services
 - Supply of the services available in the facilities mentioned above;
 - Monitoring of the transportation of dangerous materials; and
 - Assistance in the movement of abnormal trains;
- 19.12 The infrastructure manager may also provide (where available) the following ancillary services:
- Access to the telecommunications network;
 - Provision of supplementary information; and
 - Technical inspection of rolling stock.
- 19.13 The train operating company can obtain the minimum package and access to the facilities mentioned above once an access contract has been signed. While access to additional services is granted once the operator enters into separate contracts with the infrastructure manager in relation to each individual service. The Network Statement does not however explain the specific conditions attached to access to any of these services, that is any potential restrictions or requirements for access to the various facilities or for that matter the procedures necessary for access. There are however some further details in relation to some other services available such as the supply of traction energy, pre-heating, the supply of water, access to storage sidings as well as the availability of back-up locomotives and the location, ownership and services of the various maintenance facilities in Norway.
- 19.14 Recently the training centre for the train drivers has been passed to an independent company, Norsk Jernbaneskole so as to ensure that there is equal access to the training facility for all operators and to ensure that there is an independent body whose focus is on rail training. There is currently a shortfall in drivers and it is planned that this separation will increase the number of drivers being trained and recruited. While the separation has only taken place recently and the new graduates will only be available from, this is a positive move aimed at facilitating access to rail-related services.

Charging for services

- 19.15 Apart from the minimum access package charges calculated per gross-tonne-km, and a description of the manner in which the electric traction charge is calculated, the Network Statement states that the charges for access to rail-related service facilities are included in the minimum access charge.

Stakeholder analysis**Problems/complaints**

- 19.16 There have not been any specific complaints referred to the competition authority or that have been brought to our attention in relation to rail-related services in Norway. This does not necessarily mean that there are no structural or actual problems in the provision of rail-related services, it is more an identification of the possibility that problems may be solved in other fora or through different procedures (for example, negotiation/agreements between undertakings).

Stakeholder views

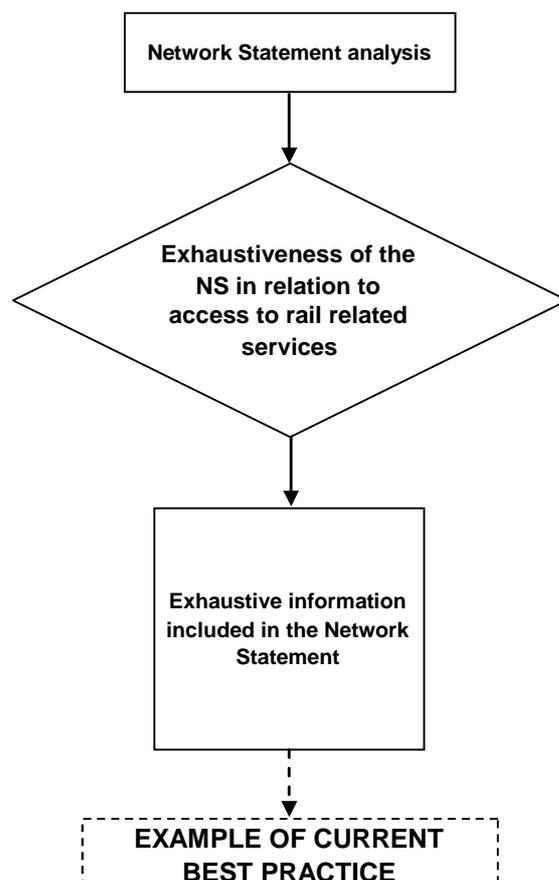
- 19.17 The stakeholder views on the market for rail-related services were mixed with some mentioning that the market was functioning well while others stating that there were problems with access to some services. The general view is that the Norwegian market is much more open than in other countries but there are still some areas that need to be addressed. The majority of stakeholders mentioned that a market for rail-related services is possible in some of the services but that some such as back-up services are best provided by a (regulated) monopoly supplier, furthermore any mentioned that it was too early to talk of a market as there was no demand as yet for a number of these services. The key problems that were cited revolved around staff availability, access to terminals and other facilities as well as rolling stock provision.
- 19.18 A number of stakeholders have expressed concern about the availability of staff, especially train drivers in Norway. Some companies have resolved this by hiring Swedish train drivers. The creation of the separate institution Norsk Jernbaneskole in charge of training has the aim of alleviating the problem of the shortfall in drivers by focusing on hiring the necessary staff for the industry as a whole rather than for one operator thus providing a central pool from which the operators can draw from.
- 19.19 Industry participants (from different stakeholder groups) have stated that the fact the majority of terminals are owned by the incumbent operator could, and in some cases have lead to problems with access to terminals and to some other facilities/services. Tied to this is the fact that there are no published tariffs for access to these facilities and services and as a result it is possible that some operators will be charged more than competing operators, furthermore the operators are not able to get a complete understanding of the amount that will be due for access to these services. The organisation of freight terminals in essence is a result of the manner in which privatisation was taken forward in the early 1990s, and is something that needs to be addressed to encourage freight market growth.
- 19.20 Some stakeholders are also having difficulties accessing rolling stock as a result of the lack of rolling stock available for hire or purchase, this has partly to do with the

scrapping policies of the incumbent operator but it mainly has to do with the difficulty in leasing rolling stock for the Norwegian market as the cost of leasing locomotives can in some cases be prohibitive and as a result a barrier to market entry. Many stakeholders have also commented that the market opening process has been stalled by the change in political will with reference to liberalisation and that the new government is less willing to push for market opening and as a result a number of the areas that are potentially inhibiting liberalisation have not been addressed.

Case study

- 19.21 For the case study we contacted the One Stop Shop in Norway to obtain further information on the access conditions, the figure below sets out the process that we followed for this network as well as the progress in terms of obtaining further data.

FIGURE 19.3 CASE STUDY PROCESS



- 19.22 The flow chart above confirms that the Norwegian Network Statement, and more specifically the technical appendices are very comprehensive in terms of access conditions to rail-related services. Information and data concerning opening times, locations of terminals and service facilities, service providers' details and contacts etc. is included within the document. Although the Norwegian OSS did not respond to our survey, the Norwegian Network Statement remains an example of best practice in terms of transparency of access conditions to rail-related services.

20. POLAND

Introduction

- 20.1 Poland's rail system is the third largest in Europe, but in terms of quality of equipment and service, the country's standards are far behind those of most western European countries. The length of the railway network in use totals 23,200 km, of which 23,100 km are normal gauge lines, 53% of which are electrified. In regard to railway network density, with 6.7 km per 100 square km Poland has one of the most dense railways. Poland's central location in Europe necessitates integration of the country's railway system with the European network, and initiatives to improve the network standard are crucial to the internationalization of Poland's overall transportation system.
- 20.2 Since the railway sector was opened up to domestic railway undertakings in 2003, market entry has occurred and a certain level of competition has developed. The number of licenses granted to railway operators is still growing. Despite the growing amount of third party railway operators Poland's state railway company PKP S.A. is still the dominant market operator.
- 20.3 Despite the rising level of competition especially in the rail freight market, the situation with respect to rail-related services is not well developed, rising competition can only be seen in a small number of sectors, while the rest are still dominated by PKP Cargo.
- 20.4 The table below shows which industry participants undertake the various rail-related tasks in Poland.

TABLE 20.1 RAIL-RELATED SERVICES BY PROVIDER

Services	
Electricity for traction	PKP PLK (The infrastructure manager)
Diesel fuel for locomotives	Each operator independently
Locomotive pushing services	Each operator independently
Back-up services	Each operator independently
Services in marshalling and shunting yards	PKP Cargo
Train formation services	Each operator
Services in freight terminals	Each operator
Telematics services for freight operations	Each operator
Services in passenger stations	Each operator
Computer reservation services for passenger transport	Each operator
Training facilities	PKP related organisations
Leasing of rolling stock and staff	Manufacturers, and leasing companies. leasing of staff is currently done by PKP
Maintenance	Operator/Manufacturer
Rolling stock cleaning	Operator
Services in storage sidings	Operator
Provision of on-board train protection systems; telecom and communications services	Manufacturers of the equipment
Services in border stations	PKP and other operators
Technical inspection services	PKP

General Market information

20.5 In terms of transported volumes Poland's state-owned railway company PKP is the second largest rail freight operator in the EU. Transported volumes have been relatively stable in the past four years; decreases in cross-border traffic have been compensated by increases in domestic transportation. PKP rail freight transport is still dominated by bulk transport (coal and coke, ores, mineral oil and products).

TABLE 20.2 PKP FREIGHT TRAFFIC

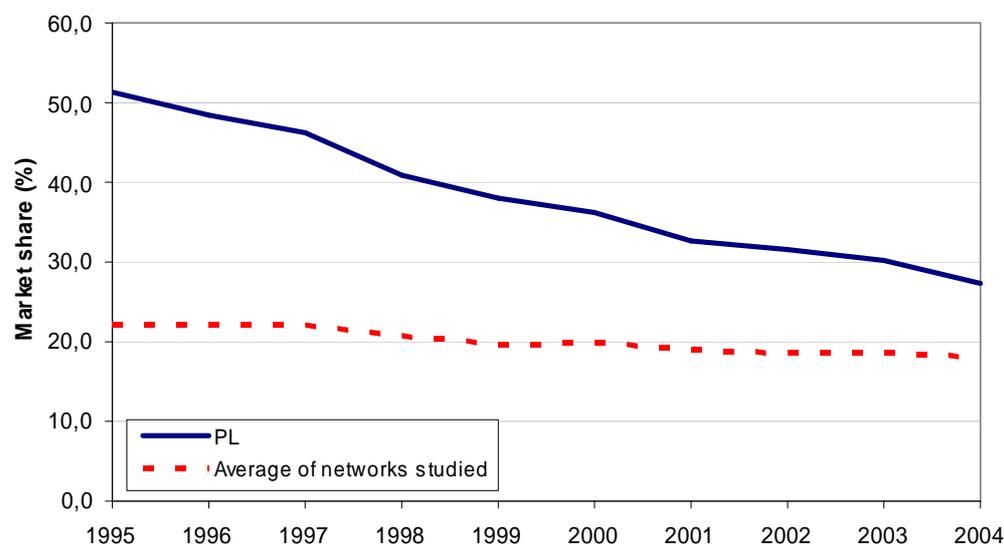
	2001	2002	2003	2004
Total traffic (in million t)	165.0	159.7	161.8	163.5
of which domestic (in million t)	45.8	46.1	55.2	55.9

Source: PKP S.A.

20.6 The figure below sets out the market share of freight moved by rail when compared to other land based transport. It can be seen from this graph that the market share for rail freight has decreased substantially in recent years from its position of dominance. This is partly due to the gradual fall in goods transported by rail, but mainly due to the

doubling of tonne-km transported by road since 1995. According to some Polish experts the modal share of railway transportation especially on the freight sector will increase under the common EU transport policy. Despite rising transit volumes other experts do not see any significant chances of an increase of rail transport volumes due to changes in the freight categories changing from bulk commodities like coal, coke and ore to consumer products.

FIGURE 20.1 RAIL FREIGHT INTERMODAL MARKET SHARE

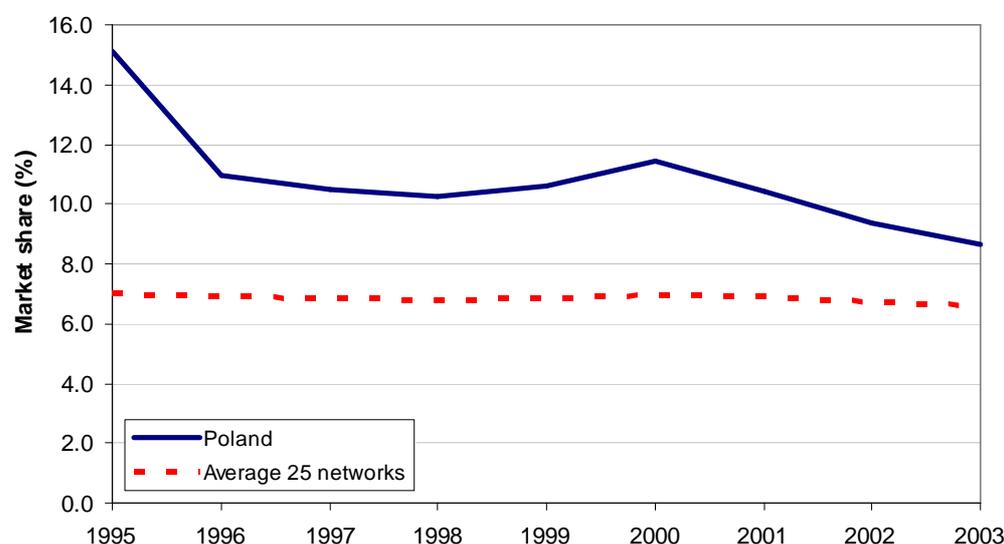


Source: European Commission and Steer Davies Gleave analysis

- 20.7 Even though the statistical base is small, experts estimate that PKP Group accounts for considerably more than 95% of the Polish railway market. Only in some segments of the rail freight market non-PKP competitors have gained a small market share, so that PKP Cargo probably accounts for “only” 94.3% of the market (based on train kilometres in 2004).
- 20.8 Competition is slowly increasing. New competitors target the intermodal freight transport market both in the port hinterland as well as cross-border transportation with block train. Moreover, the transportation of chemical products is a growing market, where new entrants have gained a significant market share in cross-border flows. New competitors tend to create their own handling facilities or use facilities operated by other private companies, as a result of the negative view they have of access to PKP operated facilities.
- 20.9 The market for passenger services is almost completely in the hands of PKP and its subsidiaries. The Polish Government has handed down the responsibility for regional and local transport services to regional and local entities applying the subsidiarity principle. However, public service contracts have only just been introduced and the available funds for the organisation of regional transport are deemed insufficient to attract significant numbers of foreign companies to bid for concessions in Poland.
- 20.10 Poland has seen a sharp decline in passenger traffic recently. In 1988 there were 984 million passengers, by 1993 only 540 million was transported and currently only 272

million passengers are transported. The same is true for the intermodal market share of rail passenger services as shown in the figure below.

FIGURE 20.2 RAIL PASSENGER INTERMODAL MARKET SHARE



Source: European Commission and Steer Davies Gleave analysis

Implementation into national law of the provisions relating to access to railway services

- 20.11 With the Act on Railway Transport of 28 March 2003, Poland met the deadline for the implementation of the First Infrastructure Package of Directives 2001/12-14 set at the 31 March 2003.

TABLE 20.3 EU DIRECTIVES TRANSPOSED INTO NATIONAL LAW

EU Legislation	Title	Implemented (and when, in which piece of legislation)
Directive 2001/14	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Yes, 28 March 2003 Act on Railway Transport. & 7 April 2004 Regulation on condition of access and use of railway infrastructure

- 20.12 Liberalisation of the freight market's was facilitated further by the implementation of EU directive 2004/51. According to the rules of Polish membership of the EU treaty it was decided that in compliance with directive 2004/51, the Polish railway market will have opened up for operations by 2007. The process is going ahead at the same time as the implementation of the directive on safety and interoperability, even though the Polish government has asked the European Commission for permission to extend the transition period to March 2008.

Access conditions

- 20.13 The Polish Network Statement has been published in Polish and English language on the PKP website. A short summary of the most important items is also available in German. The Network Statement's priority is to set the regulatory framework for the relationship between PKP PLK as infrastructure manager and the railway undertakings. The stated set of basic and additional services excludes the explicit existence of third party service operators.
- 20.14 The access conditions to rail-related services remain unclear as the conditions are contained in bilateral agreements between the facility owner and the operator and as such there is no published information.
- 20.15 In the Network Statement PKP sets out the provision of the following basic and additional services:
- Access to railway stations or other places where railway undertakings' train stops, enabling full technical and commercial service of this train including access, boarding and alighting of passengers;
 - Access to marshalling traction as well as shunting and the execution of works connected with start or end of a journey, as set out in the timetable;
 - Traffic control and management;
 - Operation of special trains.
 - Supply of water, compressed air, waste disposal points, as well as refuelling and fuel distribution from PLK's distribution stations,
 - Supply of electric traction energy for rolling stock and the pre-heating of passenger trains.
- 20.16 The following activities are, however, only discussed in the context of PKP-s activities:
- Supply power, water and compressed air consumption,
 - waste disposal
 - refuelling and fuel distribution,
- 20.17 The access to marshalling yards and freight terminals is regulated in the annex to The Law on Railway Transport of 28th March 2003 (ver. 2006-02-09):
- These services, as well as access to the facilities that provide these services must be provided to the railway undertakings.
- 20.18 Marshalling yards are also regulated in the Regulation of 10th September 1998 on technical conditions for railway buildings and its lay-out: "Art.41 par. 2 - infrastructure manager specifies the type and quantity of technical equipment at marshalling yards". The Network Statement ensures access to traction network on the route, including shunting performance and execution of works connected with the start or end of journey, in accordance to the timetable. As all marshalling or shunting yards are controlled by PKP Cargo the access is based on bilateral agreements between user and PKP opening up space for the discrimination of third party operators by denying access or setting high charges.

- 20.19 For third party operators the most important difference between access to main railway lines and marshalling and shunting yards can be derived from the organisational responsibility. While the access to main railway lines is under control of PKP PLK as infrastructure manager, rail terminals and marshalling yards are due to historical, reorganization reasons, still managed by PKP Cargo.
- 20.20 The access to the main infrastructure is described as fair and transparent, however the access to facilities controlled by PKP Cargo may be considered as discriminatory. PKP Cargo denies access to third party operators or sets high charges for the usage. As a result third party operators prepare their trains in their own sidings and only offer block trains as they cannot afford the cost of shunting.
- 20.21 The conditions of supplying and consumption of electrical energy are regulated by the contract that needs to be entered into between the railway undertaking and PKP Energetyka. The contract regulates in detail the requirements for the consumption of traction energy and the principles for calculating charges for the consumption of traction energy and providing transmission services. Regarding diesel fuel there are no detailed regulations, the market is open.
- 20.22 PKP Cargo is the dominant player in terminal operation in Poland. PKP Cargo operates 1,200 freight stations while CargoSped as a 100% subsidiary to PKP S.A. offers forwarding services as well as operating services on the container terminal in Warsaw. The CargoSped terminal is also used by private operator ERS for intermodal trains to the port of Rotterdam, operators like Polzug use the terminal occasionally. In comparison to marshalling and shunting yards, access to the main intermodal terminals is open for third party operators as they use these terminals sporadically. The access to the seaport rail terminals for third party railway operators is open. Spedcont, Polzug and other carriers operate at those terminals. The remaining container terminals in Poland are managed by Spedcont and Polzug. Polzug terminals are also used by other operators like Kombiverkehr, Spedcont, Intercontainer ICF and Cargosped.
- 20.23 The market for maintenance, inspection and cleaning of rolling stock is growing with many new providers on the scene, however, the market is still dominated by PKP or former PKP companies, but there is evidence for a beginning withdrawal of PKP from this market sector. Another important company in the field of rail-related services for rolling-stock is Rail Poland (Rail Polska). Rail Poland holds a license for train operations in Poland and offers a wide range of services. Third party railway undertakings like the CTL Group also have locomotive and wagon repair facilities. The CTL-owned workshops for railcars are able to carry out maintenance as well as overhaul services. For overhaul services of locomotives there are specialized workshops open for all operators. Some PKP workshops have been privatized over the last few years.
- 20.24 Generally speaking there are problems for private railway undertakings in cross-border services, but as private companies are excluded from bilateral agreements between state railway companies, problems can occur in everyday administration at the border stations. Private railway undertakings state that border agreements should be signed so as to encompass all railway undertakings.

- 20.25 Driver training is still undertaken predominantly by PKP. So far there seems to be no PKP independent training facilities for training train drivers in Poland. The lack of neutral training facilities can be considered as an obstacle for third party operators. Although the setting up of independent facilities is possible, the examination has to be undertaken by long experienced railway experts who are naturally closely related to PKP. Given this situation, the only recourse for a number of new entrants is to hire, retired PKP staff. New entrant stakeholders have stated that it is essential that a private or state-driven training facility offers independent training services.

Charging for services

- 20.26 The Network Statement does not set a proper framework for the charging of rail-related services as the defined charges only refer to the access to railway lines. PKP Polish Railway Lines JSC provides access to railway lines applying charges which are calculated taking into account maintenance, traffic and other operations costs.
- 20.27 Tariffs for the usage of PKP main infrastructure are specified by the infrastructure manager, with the charging framework specified by The Office for Railway Transport (UTK). Tariffs for the usage of marshalling/shunting yards are not clear, PKP Cargo still controls the access to some sections of infrastructure, and thus has the ability to discriminate between operators by denying access to the terminals or marshalling yards or setting high charges for the usage.
- 20.28 Prices and charges for the use of transmission infrastructure and the supply of energy are included in the document "Tariffs for electrical energy relevant to the plant of PKP Energetyka Sp. z o.o."

Stakeholder analysis

Problems/complaints

- 20.29 PKP Cargo is causing difficulties for other carriers with regard to access to rail terminals and places where trains are loaded and unloaded. This statement was prompted by the events of October 2005, when, at Gdynia Port station, PKP Cargo stopped a train owned by CTL Rail. PKP Cargo's employees refused to let the train, which was transporting 40 containers of liquid fertiliser, pass. The train was allowed to continue after CTL requested the intervention of the Railway Transport Office (UTK), and the media. This, however, took 21 hours. PKP Cargo insists that the train was stopped because there was no free track to allow it to pass, as well as for procedural reasons. A member of the board of PKP Cargo, stated that as soon as the problems were resolved, the train was allowed to go.

Stakeholder views

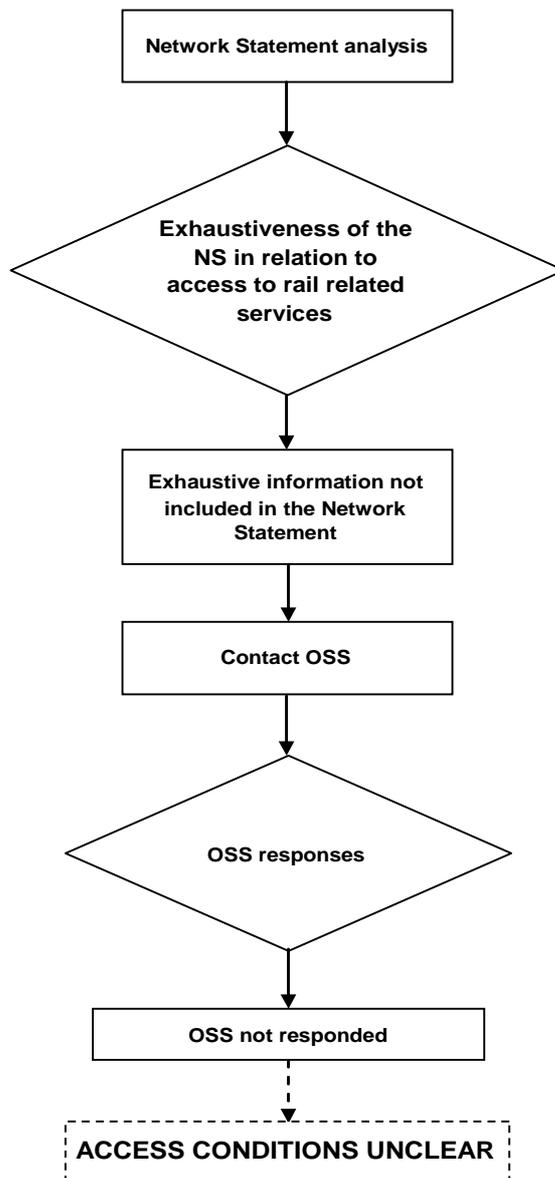
- 20.30 In 2006 and 2007 the market development (both freight and passenger) is expected to stabilize at the level of 220 billion train-km. From 2008, there should be a rate of growth of 5-6% (which should last for 7 to 8 years) due to an increase in the volume of passenger traffic. Also it will take probably the next 2 years to solve the financing problems of the passenger rail companies.
- 20.31 All laws regarding security are fully applied. According to stakeholders, regulations

- regarding third party access to certain elements of the infrastructure (for example loading points, access rail lines, sea ports) are sometimes violated by PKP Cargo that still manages certain elements of the infrastructure that should have been moved to PKP PLK (infrastructure manager).
- 20.32 Around 90% of the terminals owned or mainly used by third party railway undertakings are also used by competing third party operators. The access to freight related facilities of strategic importance to load and unload goods is widely considered as generally open, but there are cases of limited access to terminals when PKP Cargo manages the access lines to the terminals. Privately-owned terminals are open to third parties.
- 20.33 Loading work is mostly performed on self-owned sidings where third party operators do not experience any bottle-necks. Except the prices for access to terminals (if they exist they are usually too high) the prices for all other services are usually considered as market-based and therefore acceptable. There are significant differences between the size of the charges. Poland, the Czech Republic and Slovakia belong to the states where access to infrastructure is the most expensive in Europe. In case of freight carriers in Poland this cost alone makes up approx. 30% of the whole cost of the shipment.
- 20.34 The minimum package offered by PKP PLK for the all trains is described as sufficient, additional services (e.g. shunting services, access to ancillary equipment, access to electric power, etc.) usually cause problems because these additional services are usually offered by parties other than PKP PLK. Third party operators argue that all these services (“minimum” and “extra”) as well as access to loading points should be in the hands of PKP PLK which is unfortunately not the case at present. Some of these services/loading points are even in the hands of PKP Cargo – which may lead to discriminatory action against the direct competitors.
- 20.35 Shunting yards of PKP Cargo are used very rarely by third party operators. They perform shunting work using their own locomotives at their sidings. CTL as the largest third party operator undertakes the cleaning of the rolling stock in-house because approx. 40% of their shipments are chemicals. Trains of third party operators are also looked after in-house. The work at the terminal is done by the employees of the terminal operator.
- 20.36 Although it is possible to use PKP training centres CTL as major third party operator manages its own training, according to their own training program. There are 3 sources of the drivers: (i) ex-PKP, (ii) from the sidings operators, (iii) training from “scratch”. It takes one year to fully train a driver. Problems getting the drivers from PKP Cargo (although more than 2,000 of them have been made redundant) can still be considered as an important obstacle. Most ex-drivers from PKP are still not available on the market as they have been put in other jobs within PKP. Also there is a stigma against working for private operators due to the working conditions or the drivers require long-term extra training for special equipment or special routes.
- 20.37 Border station with Member States require only the change of locomotives and technical and documents checks (taking 2 hours maximum), borders with a different gauge and where customs clearance is required the crossing can take up to 6 hours.

Case study

20.38 For the case study we contacted the One Stop Shop in Poland to obtain further information on the access conditions, the figure below sets out the process that we followed for this network as well as the progress in terms of obtaining further data.

FIGURE 20.3 CASE STUDY PROCESS



20.39 As can be seen from the figure above, the Network Statement in Poland does not include enough detailed information on access conditions to rail-related services. The OSS contact is able to provide some additional but not substantial information. This is also due to the fact that the infrastructure manager in Poland does not provide any of these services, it just manages and controls the rolling stock access to terminals and facilities. As a result we must conclude that the access conditions to rail-related services are unclear.

21. PORTUGAL

Introduction

21.1 The Portuguese railway market is currently going through a slow process of liberalisation. Despite the splitting of the incumbent operator and the infrastructure manager in 1997 and the full implementation of the First Package of Directives into the national legislation in 2003, no new entrant freight operators have sought access to the Portuguese rail-freight market to undertake international freight services.

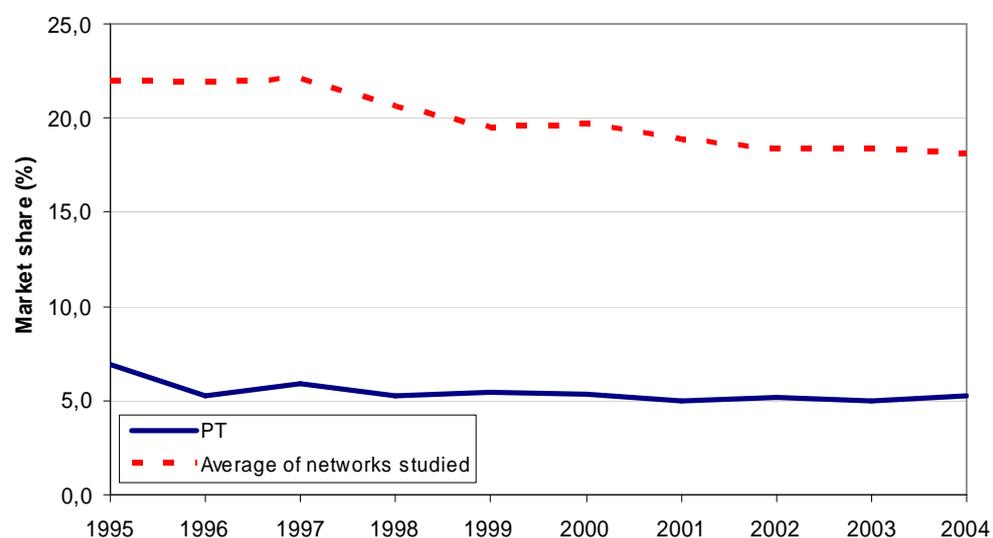
Market information

Market shares

21.2 The incumbent CP is the only railway undertaking operating freight as well as passenger services in Portugal. Fertagus S.A., which is the other railway undertaking operating in Portugal operates *de facto* as a concessionary company of the public transport suburban service focusing on the Tagus river crossing and connecting Lisbon to Setubal across the 25th April Bridge.

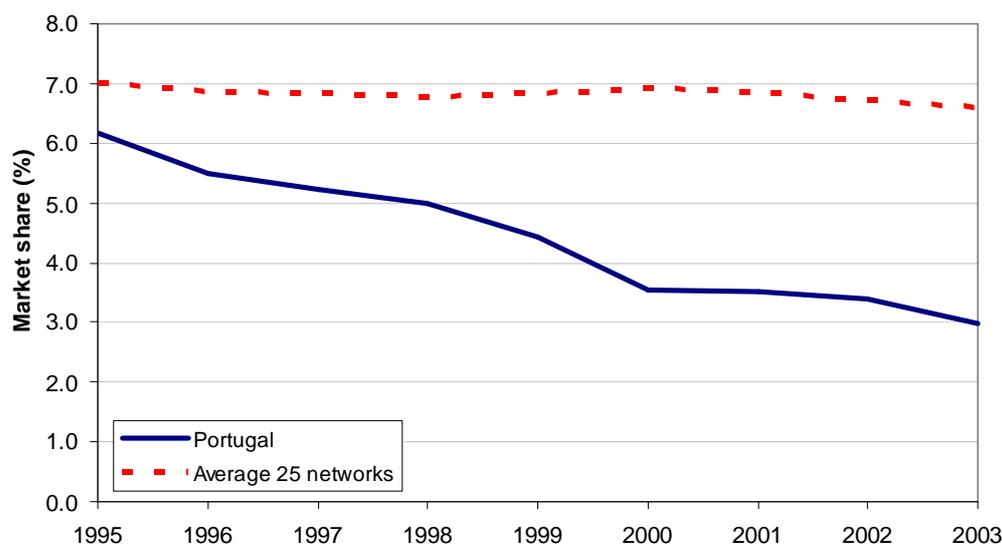
21.3 Less than 10% of land-based freight transportation is undertaken by the railways through CP. Total freight traffic has increased by 10.8%, from 9.7 million tonnes in 2003 to 10.8 million tonnes in 2004. The increase in tonne-kilometres has been similar, from 2.1 billion to 2.2 billion.

FIGURE 21.1 RAIL FREIGHT TRANSPORTATION MARKET SHARE



Source: European Commission and Steer Davies Gleave analysis

21.4 Passenger rail transport decreased by approximately 3.2%, from 137.9 million to 133.6 million in 2004. The decline in passenger-kilometres was equivalent to almost 4.7%, from 3,585 million to 3,416 million.

FIGURE 21.2 RAIL PASSENGER INTERMODAL MARKET SHARE

Source: European Commission and Steer Davies Gleave analysis

New entrants

- 21.5 The concessionary agreement between Fertagus S.A. and the Portuguese Government includes and substitutes the licence and the safety certificate to be delivered by the rail regulator, INTF as well as the contract agreement for the use of the infrastructure to be signed with the infrastructure manager REFER E.P. The incumbent railway undertaking CP has recently requested a licence and is undergoing negotiation with REFER E.P. in order to sign an access agreement for the utilization of the whole network. As a public body CP can independently undertake safety inspections and does not need any safety certification according to Portuguese law.

Implementation into national law of the provisions relating to access to railway services

- 21.6 The law that implemented the First Railway Package of Directives in Portugal was the Decreto Lei (Legislative Decree) N. 270 of October 2003 (henceforth DL 270). More specifically, this law states the general requirements for rail-related services as set out in Directive 2001/14/EC.
- 21.7 The Legislative Decree itself points to the Regulation 21/2005, issued by the Regulator (INTF) in March 2005, defining in more detail the principles and methodologies for the calculation of infrastructure charges¹⁹.
- 21.8 The publication of the two above-mentioned laws have enabled the infrastructure manager, REFER EP, to improve its efficiency in managing the network and have provided a very comprehensive and exhaustive legal framework for the provision of

¹⁹ The Network Statement 2006 has been published in accordance with the Regulation 21/2005

the services included within the *minimum access package and related services* (Essential services). The two laws are not exhaustive in disciplining the regulation and the charging calculation of the additional and ancillary services. These areas still remain open and require further attention.

TABLE 21.1 EU LEGISLATION TRANSPOSED INTO NATIONAL LAW

EU Legislation	Title	Implemented (and when, in which piece of legislation)
Directive 2001/14	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Yes, D.Lei. 2003/270 and INTF Regulation 21/2005

Access conditions

The minimum access package and other services

21.9 The 2006 Network Statement of REFER EP, published in accordance with the Decree-Law 270/2003 and the Regulation 21/2005 states that the essential services supplied by REFER are all those necessary for the effective task of providing right of access to infrastructure, including:

- The minimum access package;
- Rail access to facilities and services and the supply of services;
- The use of infrastructure equipment to supply, transform and distribute electric power for traction, where available;
- The supply of railway assistance in case of traffic disturbance resulting from technical failure of accident, in the terms envisaged by Article 51 of Decree-Law n° 270/2003.

21.10 The minimum access package covers the following services:

- The handling of requests for infrastructure capacity;
- The right to use allocated capacity;
- The use of tracks, points and junctions;
- The management and control of rail traffic, including regulation, signalling, dispatching and the communication of information on traffic or shunting, with the exception of non-core business information; and
- Information necessary for the operation of services for which the capacity was allocated.

21.11 Track access to services facilities and supply of services, include:

- Passenger stations, their buildings and other premises;
- Refuelling facilities;
- Freight terminals;
- Marshalling yards;
- Train formation facilities;
- Storage sidings; and

- Maintenance and other technical facilities.

21.12 In addition to this there are a number of additional services that the infrastructure manager must provide upon request, they are:

- Electrical energy for traction;
- Shunting;
- Parking of rolling stock;
- Use of lines not reserved for rail operations; and
- Use of stations.

21.13 Finally, the infrastructure may provide the following ancillary services to those operators that request these services:

- Access to the telecommunications network;
- Distribution of supplementary information;
- Analysis of railway vehicle compatibility;
- The undertaking of network capacity studies or supply-scenario feasibility studies;
- Cleaning of rolling stock;
- Water supply; and
- Supply of labour for operation activities on behalf of railway undertakings including the supply of diesel, loading and unloading car transporters, handling of freight and data input concerning the rolling stock.

21.14 The table below sets out which companies are look after each of the rail-related services.

TABLE 21.2 RAIL-RELATED SERVICES BY PROVIDER

Service	Provider
Electricity for traction	EDP Incumbent and unique electricity producer in Portugal and REFER E.P. (The infrastructure manager)
Diesel fuel for locomotives	CP (Incumbent) independently
Locomotive pushing services	CP (Incumbent) independently
Back-up services	REFER E.P. using CP or Fertagus rolling stock
Services in marshalling and shunting yards	Each operator and in few stations REFER E.P. (Should be guaranteed by REFER EP)
Train formation services	CP (Incumbent) independently [Fertagus N/A]
Services in freight terminals	CP (Incumbent) independently
Telematics services for freight operations	CP (Incumbent) independently
Services in passenger stations	REFER Fertagus and CP
Computer reservation services for passenger transport	Each operator independently
Training facilities	Each operator independently
Leasing of rolling stock and staff	REFER E.P. for residual services to CP [Fertagus N/A]
Maintenance	Each operator independently
Rolling stock cleaning	Each operator in outsourcing (In very few cases by REFER E.P.)
Services in storage sidings	CP (Incumbent) independently
Provision of on-board train protection systems; telecom and communications services	Manufacturers of the equipment
Services in border stations	CP (Incumbent) independently
Technical inspection services	INTF for Fertagus; CP (Incumbent)

Charging for services

- 21.15 As already stated the Regulation 21/2005 has facilitated the charging calculation of the essential services while that of the additional and ancillary services still requires legislative intervention.

Additional services

- 21.16 For both additional and ancillary services the tariffs are calculated taking into account all costs derived from the supplied service, based upon the effective usage.

Traction Power

- 21.17 The costs of electrical energy for traction are paid by users, with the costs being calculated according to the actual usage. Electricity in Portugal is produced and

provided by *Electricidade de Portugal* EDP. CP has a contract directly with EDP for the provision of electrical energy in the network in which it is the only operator. According to the Portuguese law, only EDP can produce and provide energy in Portugal and REFER E.P. can act only as intermediary in that part of the network in which both Fertagus S.A. and CP operates.

- 21.18 REFER E.P. receives € 3,000 per months from each railway undertakings for its intermediation in the provision of the traction current in the part of the network used by the two operators, in which the cost for the energy is € 0.67 per km. Fertagus S.A. expenditure for traction power in the year 2005 has been € 1,395,000.

Shunting

- 21.19 Shunting services can be provided subject to contracts or protocol with each individual railway undertaking. The services that require labour are charged in accordance to the staff required for the activity taking into consideration the professional categories shown in the table below.

TABLE 21.3 LABOUR COSTS

Professional category	Price / hour (€) 2005	Price / hour (€) 2006	Growth%
<i>Operational – Operations area</i>			
TRAFFIC INSPECTOR	26.74	27.90	4.16
TRAFFIC CONTROLLER	20.1	21.13	4.87
TRAFFIC OPERATOR	16.74	17.47	4.18
SHUNTING WORKER	15.78	16.89	6.57
LEVEL CROSSING GUARD	12.65	13.21	4.24
<i>Operational – Infrastructure area</i>			
INFRASTRUCTURE SUPERVISOR	25.41	25.92	1.97
MASTER OF WORKS	20.67	21.76	5.01
INFRASTRUCTURE WORKER	18.96	19.78	4.15
<i>Operational - Infrastructure area - Track</i>			
TRACK SUPERVISOR	23.6	24.95	5.41
MASTER OF WORKS - TRACK	18.37	19.17	4.17
TRACK WORKER	16.21	17.26	6.08
<i>Operational – Support area</i>			
ANCILLARY WORKER	13.83	14.45	4.29
<i>Operational support - Warehousing</i>			
WAREHOUSEMAN	20.64	21.05	1.95
WAREHOUSE WORKER	14.24	15.24	6.56
<i>Operational support - Driving</i>			
LIGHT VEHICLE DRIVER	16.13	18.11	10.93
<i>Operational support – Topography Area</i>			
TOPOGRAPHER	25	25.50	1.96
<i>Operational support – Design Area</i>			
DRAUGHTSMAN SUPERVISOR	25.11	25.61	1.95
DRAUGHTSMAN I	21.66	22.09	1.95
DRAUGHTSMAN II	17.74	18.09	1.93
<i>Administrative</i>			
BACK OFFICE WORKER	23.26	23.72	1.94
OFFICE CLERK	17.81	18.16	1.93
ADMINISTRATIVE WORKER	14.92	15.22	1.97
<i>Skilled workers</i>			
SKILLED WORKER I	32.55	35.66	8.72
SKILLED WORKER II	25.03	26.60	5.90
SKILLED WORKER III	19.37	19.82	2.27
<i>Graduates</i>			
GRADUATE I	65.76	73.74	10.82
GRADUATE II	53.23	55.82	4.64
GRADUATE III	35.75	37.73	5.25
CONSULTANT	N/A	86.67	N/A

Source: REFER E.P. Network Statement 2005 and 2006. Prices correspond to the average cost per category calculated over a 1-year period.

- 21.20 In relation to direct labour costs for the production of some services several complaints have been received during the past year. Both railway undertakings have expressed the intention of undertaking the services independently in the future if charges levied by REFER E.P. remain at current levels.

Stabling of Rolling Stock

- 21.21 Parking on lines in stations for periods of over 1 hour are charged according to the formula: $Pe = 11.00 \text{ €} \times C$, where Pe is the price of parking rolling stock and C – is a parameter that corresponds to the number of calendar days that the rolling stock is parked following each entrance to the parking track.

Use of tracks not reserved for rail operations

- 21.22 The table below includes the stations and the tariffs for the right to use the tracks not reserved for rail operations. Prices do not include VAT.

TABLE 21.4 TARIFFS FOR THE USE OF THE TRACKS NOT RESERVED FOR TRAIN OPERATIONS

Station	Annual Tariff (€ thousands)
Entroncamento	300
Alcântara Terra / Mar	150
Pampilhosa	80
Sta. Apolónia / Matinha	60
Bobadela	60
Santarém	60
Setúbal Mar	60
Nelas	60
Mangualde	60
Vilar Formoso	60
Valença	60
Gaia	40
Alfarelos	40
Guarda	40
Vendas Novas	40
Sintra	40
Barreiro	40

Source REFER E.P. Network Statement 2006

- 21.23 These tariffs are calculated in relation to an average usage of the tracks not reserved for rail operations in the above mentioned stations and correspond to their operating and maintenance costs.

Use of stations

- 21.24 For the right to use the areas of the stations for passenger services that are not included in the essential services, REFER E.P. charges the rates set out in the table below.

TABLE 21.5 TARIFFS FOR THE RIGHT TO USE STATIONS FOR PASSENGER SERVICES

Type of station	Description	Annual tariff per station (€ thousands)
A	Large terminal stations with many different types of services and proper passenger support facilities. These stations have very high passenger flows and therefore high maintenance costs.	245
B	Mainly large suburban stations that have been recently refurbished with adequate passenger support facilities. These stations have very high passenger flows and therefore high maintenance costs.	100
C	Medium size stations, most of which have been refurbished. These stations have significant passenger flows.	40
D	Stations and halts, most of which have a passenger building. Limited number of passengers.	10
E	Small stations and halts with few passengers.	1

Source REFER E.P. Network Statement 2006

- 21.25 The tariffs were calculated in accordance with the maintenance costs of the passenger facilities such as the waiting rooms, ticket booths, toilets and CCTV in the common areas. The maintenance costs that are not covered by the infrastructure usage tariff related to the essential services relate to cleaning, security, operation and maintenance including water and power consumption.
- 21.26 In the case of the stations in Roma-Areeiro, Entrecampos, Sete Rios, Campolide, Pinhal Novo, Venda Alcaide, Palmela and Setúbal, the annual tariff charged to each operator that currently uses these stations will be 50% of the price included in the table above according to the station category as the cost of the station management is split between the managing company and the operator using the station.

Ancillary services tariffs

- 21.27 The ancillary services rendered by REFER are contracted case by case with the railway undertakings. The services are charged in line with the labour that is required taking into consideration the professional rates set out in table 21.3 above.

Stakeholder analysis

Problems/complaints

- 21.28 Recently a number of complaints have been forwarded to the INTF by the two railway operators Fertagus S.A. and CP E.P., regarding the prices for the additional and ancillary services provided to them by REFER E.P (especially marshalling and shunting services).

- 21.29 According to our interviews, while the costs for the Minimum Access Package and related services are on average 18% lower in Portugal than in the other EU Member Countries, the process for the additional and ancillary services are on average 24% higher. The figures in table 21.3 confirm that during the last year there has been an increase in the tariffs in some cases higher than the 10%. REFER E.P. justifies this increase by pointing to the investments that have been made in recent years in the modernisation of the network.
- 21.30 Despite these complaints regarding the cost of the services provided by REFER E.P., no other complaints have been submitted to INTF, the regulatory body which has also competencies for issuing competition decisions together with the Portuguese competition authority, *Autoridade da Concorrência*.
- 21.31 The *Autoridade da Concorrência* stated that they could not divulge information relating to whether there had been any complaints as it was confidential in nature and they could not confirm whether competition issues have raised or not.

Stakeholder views

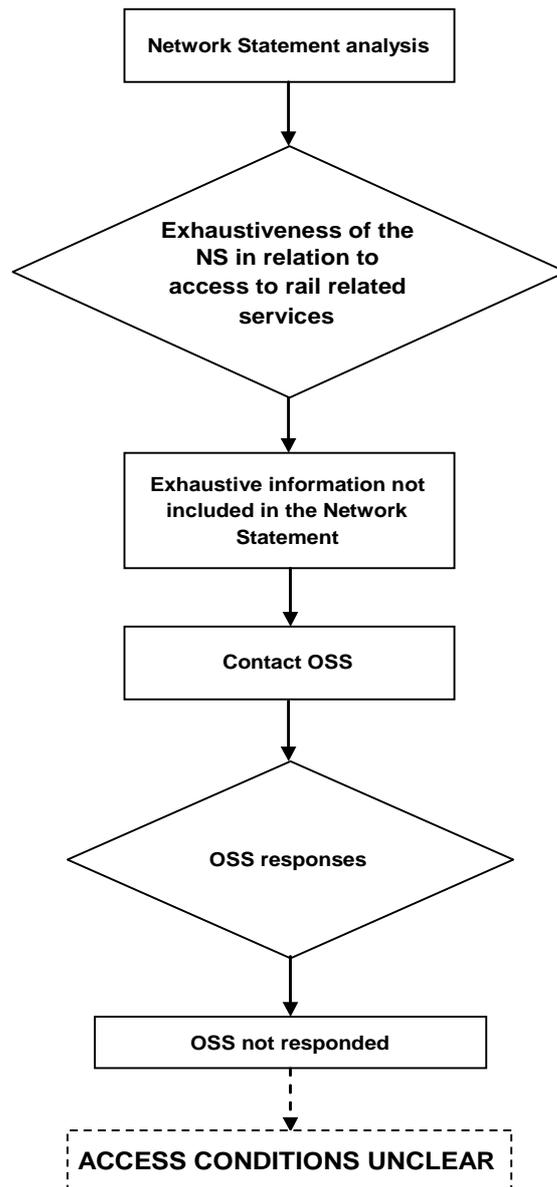
- 21.32 The general view of the stakeholders was that the market is still at an early stage and that only the effective opening of the market and the integration of the European railway network can further enhance the liberalisation of the Portuguese market. Despite progress under the legislative stand point, which makes it possible for other operators to have access to the network; the market seems to be unattractive.
- 21.33 This is in particular the opinion of the incumbent CP which *de facto* still benefits from some privileges as a public body, such as the possibility not to have an insurance contract and being entitled to undertake autonomously the technical inspection of its rolling stock. These benefits which are in part countered by the fact that the amount of funds provided to CP by the Government are deemed as not sufficient to cover PSO costs.
- 21.34 The fact remains that there is currently neither a signed access agreement between REFER E.P. and CP, nor a licence issued to CP by the INTF. A negotiation is currently ongoing between CP, REFER E.P., INTF and the Government to deal with all of the pending issues, included the public service contract with the Government.
- 21.35 In the opinion of the stakeholders, market development is possible for those services at the moment already outsourced such as cleaning of rolling stock and training. For the other additional and ancillary services the development of a related market does not seem possible in the short term. As already stated, the size of the Portuguese railway market represents a limit that only further integration of this network with the European one will probably overcome. In the current situation, the alternative can only be that of deciding whether to provide the services in house or to pass the service to the infrastructure manager. REFER E.P. and INTF agree that the legislation disciplining the additional and ancillary services requires further attention. As opposed to the essential services the additional and the ancillary ones lack clear regulation.
- 21.36 In relation to the training needs it is worth pointing out that the infrastructure manager and the two railway undertakings have the possibility to undertake training activities

autonomously as the INTF is the authority certifying all licences including those for train drivers and other technical personnel.

Case study

21.37 For the case study we contacted the One Stop Shop in Portugal to obtain further information on the access conditions, the figure below sets out the process that we followed for this network as well as the progress in terms of obtaining further data.

FIGURE 21.3 CASE STUDY PROCESS



21.38 As can be seen from the figure above, the Network Statement does not include detailed information with respect to access to rail-related services. We also contacted the OSS but they have not responded to our requests for further information. As a result we must conclude that access conditions are unclear.

22. ROMANIA

Introduction

22.1 The Romanian railway market is currently undergoing a gradual process of liberalisation supported by the ongoing reform in the railway sector started in 1998 with the restructuring of the National Railway Company SNCFR.

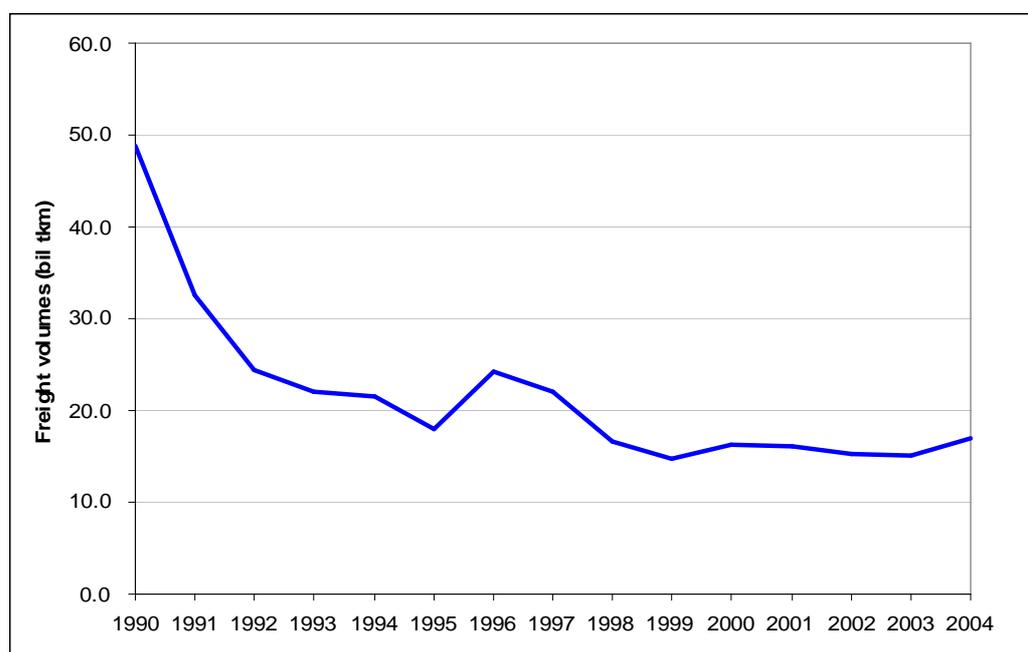
22.2 With *Government Ordinance* n. 12/1998, the National Railway Company (SNCFR) has been split into five main entities:

- *CFR S.A.*, the infrastructure manager;
- *CFR Calatori*, the passenger incumbent;
- *CFR Marfa*, the freight incumbent;
- The *Railway Assets Administration Company*; and
- The *Railway Financial Management Company*.

Market information

22.3 The figure below shows how since 1990, freight volumes measured in tonne-km have decreased substantially to a figure in 2004 of less than half of what it was in 1990.

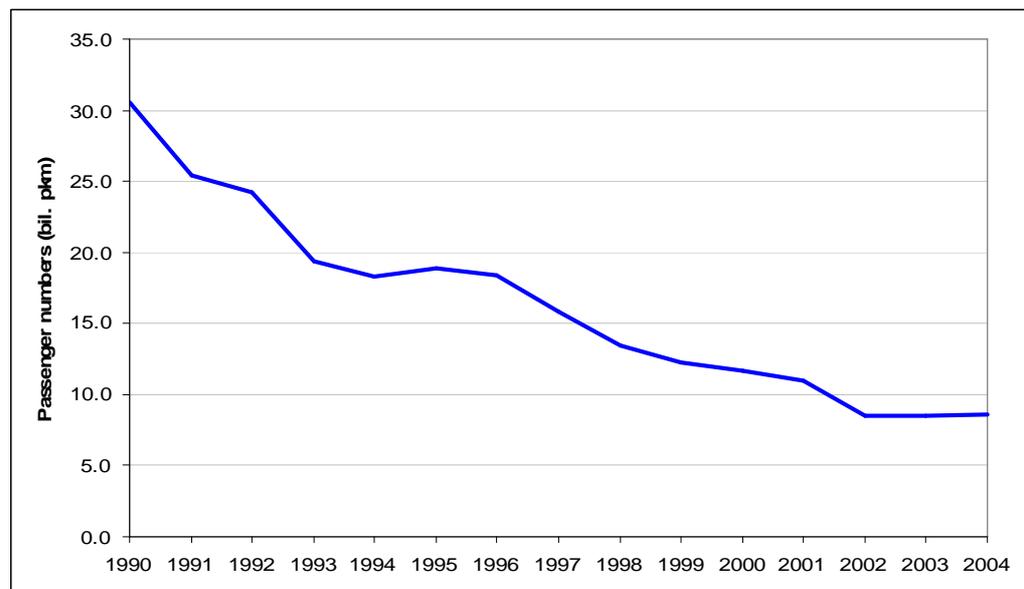
FIGURE 22.1 RAIL FREIGHT VOLUMES



Source: European Commission and Steer Davies Gleave analysis

22.4 The figure below shows the change in passenger volumes since 1990 in Romania. It can be seen that the number of passenger-kms has decreased substantially.

FIGURE 22.2 RAIL PASSENGER VOLUMES

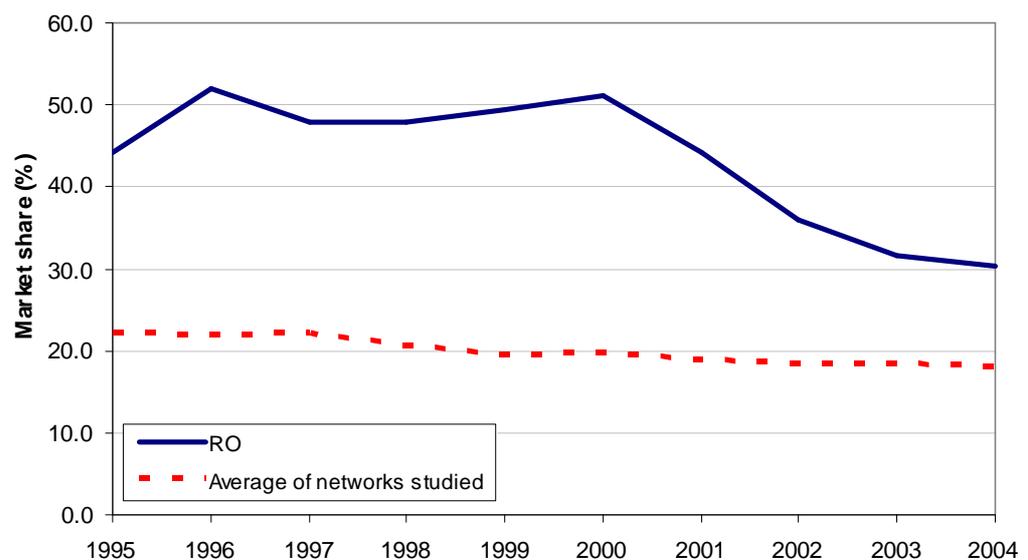


Source: European Commission and Steer Davies Gleave analysis

Market shares

- 22.5 Railway services are predominantly operated by the State companies CFR Calatori (Passengers) and CFR Marfa (Freight). The market for rail freight transport has been open in Romania since 1998 with the first private operators starting business in 2000. Rail freight traffic has decreased significantly in the past ten years; however the market share for rail freight transport still represents 30% of land-based freight transportation, much higher than the average of the networks considered in this study.

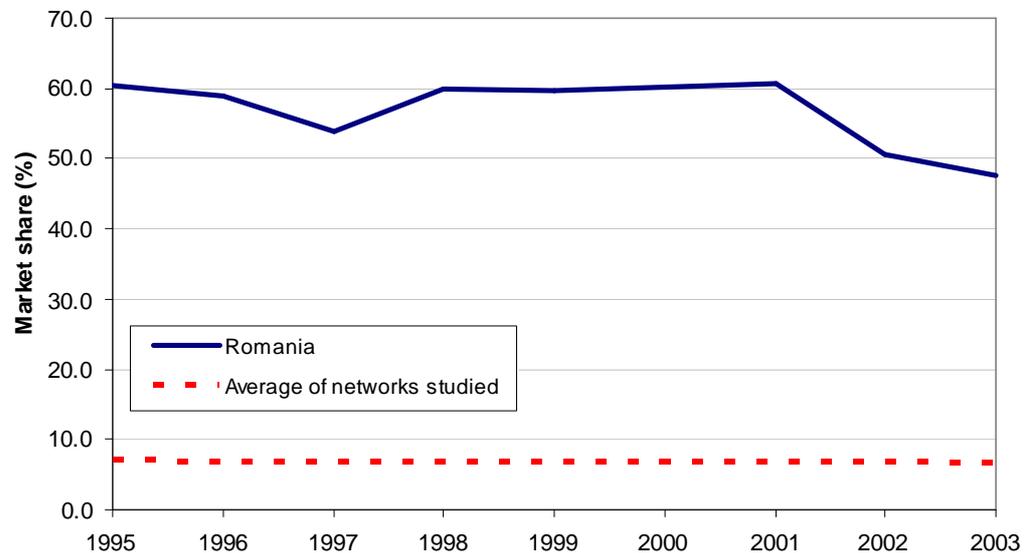
FIGURE 22.3 RAIL FREIGHT TRANSPORTATION MARKET SHARE



Source: European Commission and Steer Davies Gleave analysis

- 22.6 Passenger rail transport decreased by approximately 10% in the last 10 years, especially after 2001. This figure which is expected to decrease further in the forthcoming years is considerably above the average of the networks considered, nearly the 40% higher.

FIGURE 22.4 RAIL PASSENGER INTERMODAL MARKET SHARE



Source: European Commission and Steer Davies Gleave analysis

New entrants

- 22.7 According to the *Ministry of Transport, Construction and Tourism*²⁰ there are currently about 30 private railway undertakings licensed by the railway authority for rail transport operations. In 2003 the private freight operators carried 2 million tonne-km, representing approximately 6.7% of the total network; a figure that in 2004 increased to 3.2 million tonne-km, representing 10.5% of the total freight moved for the year.
- 22.8 Private passenger operations only started in 2004, mainly on the non-interoperable lines. Most private operators are part of an association known as ATFER that sees itself as an important partner to the Ministry of Transport on legislative matters.

Implementation into national law of the provisions relating to access to railway services

- 22.9 *Government Ordinance* n. 89/2003 transposed the *First Railway Package* of directives. This ordinance has been implemented into national legislation by the *Law n. 8/2004*, which transposes the provisions of Directive 2001/14/EC on the allocation of railway infrastructure capacity and the levying of charges for the use of railway

²⁰ Ministry of Transport, Construction and Tourism (2006), *Sectoral Operational Programme Transport (SOPT) 2007-2013*.

infrastructure and safety certification.

- 22.10 The *Ordinance of the Ministry of Transport, Construction and Tourism* n. 343/2003, subsequently approved the norms for granting the railway transport license and the safety certificate, for providing public/private railway transport services on Romanian railways as well as for granting the authorization and the certificate for shunting operations to undertakings wishing to provide this service.
- 22.11 This ordinance has been subsequently added to by *Ordinance of the Ministry of Transport, Construction and Tourism* n. 830/2003 transposing the provisions of Directive 2001/13/EC regarding the licenses of the railway company.
- 22.12 *Government Ordinance* n. 125/2003 integrated *Government Ordinance* n. 12/1998, subsequently approved by the Law n. 128/2004 also transposing the provisions of 2001/12/EC on the development of the Community's railways.

TABLE 22.1 EU LEGISLATION TRANSPOSED INTO NATIONAL LAW

EU Legislation	Title	Implemented (and when, in which piece of legislation)
Directive 2001/14	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Government Decision 89/2003 regarding the allocation of the railway infrastructure capacity, the tariffs for using the railways infrastructure and the certification regarding safety

- 22.13 *GD No 1533/18.12.2003* regarding the *high-speed rail transport system* transposed the provisions of Directive 96/48 referring to the high-speed trans-European rail system.
- 22.14 The Second package of Directives has been partially implemented and is expected to be fully implemented for the entry of Romania in the European Union in 2007.

Access conditions

The minimum access package and other services

- 22.15 According to the 2006 Network Statement of CFR S.A., the minimum access package covers the following services:
- Access rights to the components of the public infrastructure;
 - Use of the line and public infrastructure components as well as traffic and shunting operation in accordance with the technological processes;
 - Analysis of the applications for infrastructure capacity and train path allocation;
 - Scheduling, co-ordination and operation of the trains in accordance with the allocated train paths (regulations, traffic management, signalling and traffic safety systems, communication and supply of the information on train traffic);
 - Any other information necessary for enforcing or operating the service for which

the infrastructure capacity has been allocated.

- 22.16 Track access to service facilities and supply of services, includes access to:
- traction electric power supply systems, if available;
 - fuelling points owned by CFR;
 - freight terminals;
 - shunting and marshalling yards;
 - facilities for train formation;
 - storage sidings; and
 - maintenance centres and the other technical infrastructures;
- 22.17 In addition to this there are a number of additional services that the infrastructure services must provide:
- Electric traction power;
 - Authorisation and permission for shunting operations;
 - Use of the line and of the private infrastructure components necessary for train traffic and shunting operations]n accordance with the technological processes;
 - Diesel fuel;
 - Other services supplied to access the network; and
 - Assistance (scheduling, traffic approvals, agreements or endorsements, transport management, additional works on infrastructure, etc.) for special cargo.
- 22.18 Finally, the infrastructure manager may provide the following ancillary services to those operators that request these services:
- Access to the telecommunication network (telex, telegraph, phone, radio, etc.);
 - Use of the IT equipment and applications;
 - Rent or use of land, halls and rooms or systems owned by CFR;
 - Attribution of train delays (unless at the date of concluding of this Contract there will no be other lawful regulations).
 - Training, regular check and licensing of the personnel specialized in movement, lines, traffic safety installations, in accordance with the provisions in force;
 - Technical inspection of wagons at the arrival stations;
 - Other services agreed between the operator and the infrastructure manager.
- 22.19 The table below sets out which companies are look after each of the rail-related services.

TABLE 22.2 RAIL-RELATED SERVICES BY PROVIDER

Service	Provider
Electricity for traction	CFR S.A.
Diesel fuel for locomotives	Each operator independently
Locomotive pushing services	CFR Calatori; CFR Marfa
Back-up services	CFR Calatori; CFR Marfa
Services in marshalling and shunting yards	CFR Calatori; CFR Marfa and other RUs
Train formation services	CFR Calatori; CFR Marfa and other RUs
Services in freight terminals	CFR Calatori; CFR Marfa and other RUs
Telematics services for freight operations	N/A
Services in passenger stations	CFR Calatori and other RUs
Computer reservation services for passenger transport	CFR Calatori
Training facilities	CFR Calatori; CFR Marfa and CFR S.A.
Leasing of rolling stock and staff	CFR S.A.
Maintenance	CFR Calatori; CFR Marfa and other RUs
Rolling stock cleaning	Each operator often in outsourcing
Services in storage sidings	CFR S.A.
Provision of on-board train protection systems; telecom and communications services	Manufacturers of the equipment
Services in border stations	CFR Calatori; CFR Marfa and other RUs
Technical inspection services	CFR S.A. and AFER

Charging for services

- 22.20 The levying of railway infrastructure access charges is generally regulated by the Government Ordinance no. 12/1998 and especially by Chapter III of the Government Ordinance no. 89/2003.
- 22.21 According to *Government Ordinance* n. 412/2004 (art. 2.27), TUI²¹ is elaborated and submitted for Government approval by the *Ministry of Transport Construction and Tourism*, in his quality of central public administration body.
- 22.22 In accordance with the above mentioned Orders of the *Minister of Transport, Constructions and Tourism*, TUI shall amount to the following:
- for freight traffic: TUI = EUR 3.6 /train-km²²,

²¹ TUI (*Tarif de Utilizare al Infrastructurii*) is the Romanian acronym for *Infrastructure Access Charge*.

²² Train-km means the sum of distances in kilometres covered by each train.

- for passenger traffic: TUI = EUR 2.4 /train-km²³.

Additional, ancillary and other services

22.23 For private railway infrastructure access, as well as for the additional and auxiliary services set down in the Access Contract, CFR levies other charges. These charges are published in Annex 4 of the Network Statement, under the title *Charges for the auxiliary services supplied by CFR to third parties* and are included in the table below.

TABLE 22.3 ADDITIONAL AND ANCILLARY SERVICE CHARGES

Category	Charge (€)
Stabling in storage sidings (of CFR)	0.15 per hour
Stabling in storage sidings (not of CFR)	
(a)	1.65 per conventional wagon per day
(b)	4.60 per other type of rolling stock per day
Shunting/marshalling	1.00 per train per km
Training	3.00 per person per hour
Examination and authorization of operational personnel	6 per candidate
Examination of candidates in other locations:	
(a) for the committee first work day	58
(b) for each extra day	29

Source CFR S.A. Network Statement 2006

22.24 The following table reports the tariffs for the leasing of locomotives.

TABLE 22.4 TARIFFS FOR THE LEASING OF ROLLING STOCK

Locomotive	Tariff in Euro
Electrical locomotive 5100 KW	125 day/engine
Diesel-electrical locomotive 2100 CP	150 day/engine
Diesel-hydraulic locomotive 1250 CP	125 day/engine

Source CFR S.A. Network Statement 2006

Stakeholder analysis

Problems/complaints

22.25 We were not informed of any problems within the Romanian market, however, as mentioned in the main report the new entrant operators in the market were unwilling

²³ These tariffs apply only to interoperable railway infrastructure.

to speak to us for this project and so there may be some problems that have not been identified.

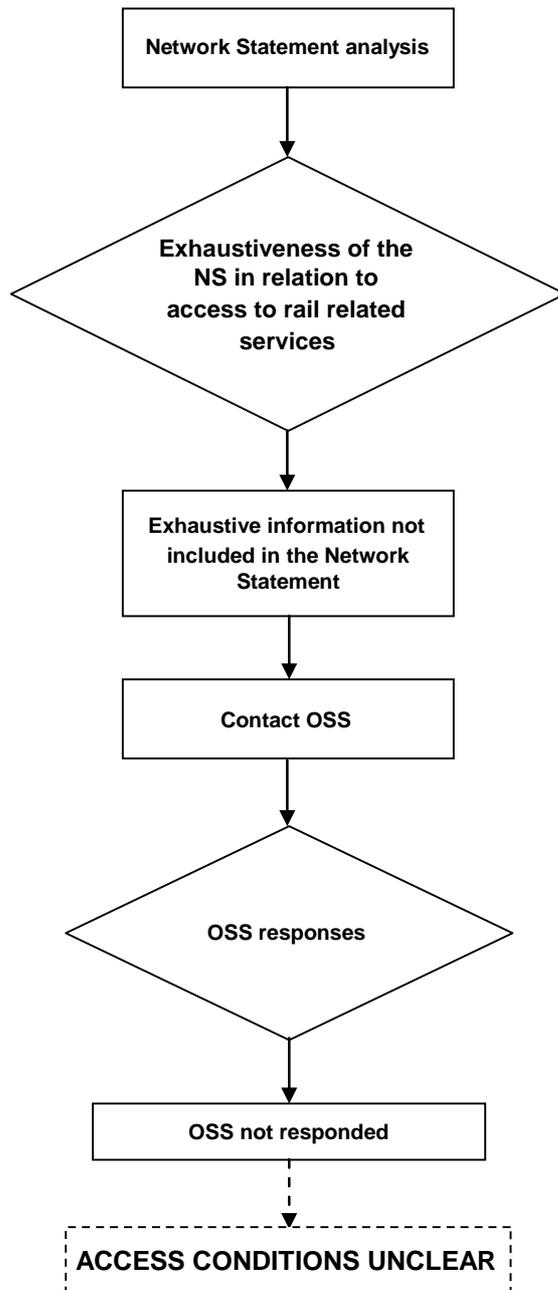
Stakeholder views

- 22.26 The stakeholders that we were able to speak to explained that the market for rail-related services is still in its infancy and that it requires further development. According to the stakeholders we spoke to, there are some services that can be provided in an open market regime (such as rolling stock cleaning services, supply of traction fuel and some services in passenger stations), and some that should be provided by the natural monopolist (such as technical inspection and services in border stations).
- 22.27 In those areas mentioned above where there is the potential for open competition, Romania has a number of external companies competing for work and as a result, according to the stakeholder, the market sets the prices are generally fair. In the other areas there is regulatory control of the prices.
- 22.28 Occasionally there are problems at border crossing with administrative checks that should take only about 20 minutes that in fact take much longer. This is mainly due to the fact that Romania, at the time the stakeholder interviews were undertaken, was not as yet within the EU.

Case study

- 22.29 For the case study we contacted the One Stop Shop in Romania to obtain further information on the access conditions, the figure below sets out the process that we followed for this network as well as the progress in terms of obtaining further data.

FIGURE 22.5 CASE STUDY PROCESS



22.30 As can be seen from the figure above, the Network Statement does not include detailed information with respect to access to rail-related services. Following this initial assessment we contacted the OSS but they have not responded to our survey. As a result we must conclude that access conditions are unclear.

23. SLOVAKIA**Introduction**

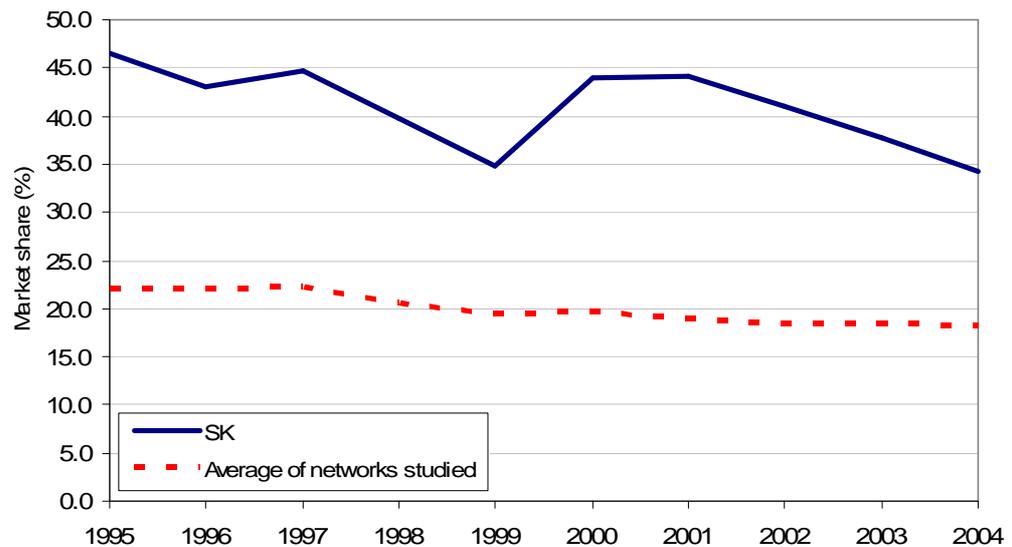
- 23.1 The company, Railways of the Slovak Republic (ZSR), was founded on the 1st January 1993. On the 1st January 2002, ZSR was further divided into two independent entities following the ZSR Transformation and Re-organisation Project, that is into ZSR Zeleznice Slovenskej Republiky and ZSSR Železničná spoločnosť. ŽSR is the infrastructure manager and provides transport services as well as other related activities.
- 23.2 ZSR's business goal is to provide railway transport services and related services, namely:
- Management and operation of the railway infrastructure;
 - Provision of operation related services;
 - Setting up and operation of railway, telecommunication and wireless network;
 - Construction, regulation and maintenance of railway and funicular services; and
 - Various other business activities as recorded in the goals and objectives of the company.
- 23.3 The table below sets out the providers of the various rail-related services in Slovakia.

TABLE 23.1 RAIL-RELATED SERVICES BY PROVIDERS

Service	Provider
Electricity for traction	ZSR (infrastructure manager); based on contract form
Diesel fuel for locomotives	Each operator
Locomotive pushing services	Each operator (according to requirements of ZSR)
Back-up services	Each operator independently (based on infrastructure manager requirements)
Services in marshalling and shunting yards	Each operator (Should be guaranteed by ZSR)
Train formation services	Each Operator (according to infrastructure manager)
Services in freight terminals	Not specified by infrastructure manager; available on demand
Telematics services for freight operations	Each operator
Services in passenger stations	Each operator
Computer reservation services for passenger transport	Each operator
Training facilities	infrastructure manager provides training/examination
Leasing of rolling stock and staff	Stock manufacturers; the leasing of staff is not currently allowed
Maintenance	Operator/Manufacturer
Rolling stock cleaning	Each Operator
Services in storage sidings	ZSR has not specified (individual agreement necessary)
Provision of on-board train protection systems; telecom and communications services	Equipment Manufacturer
Services in border stations	Not specified by infrastructure manager
Technical inspection services	Each operator

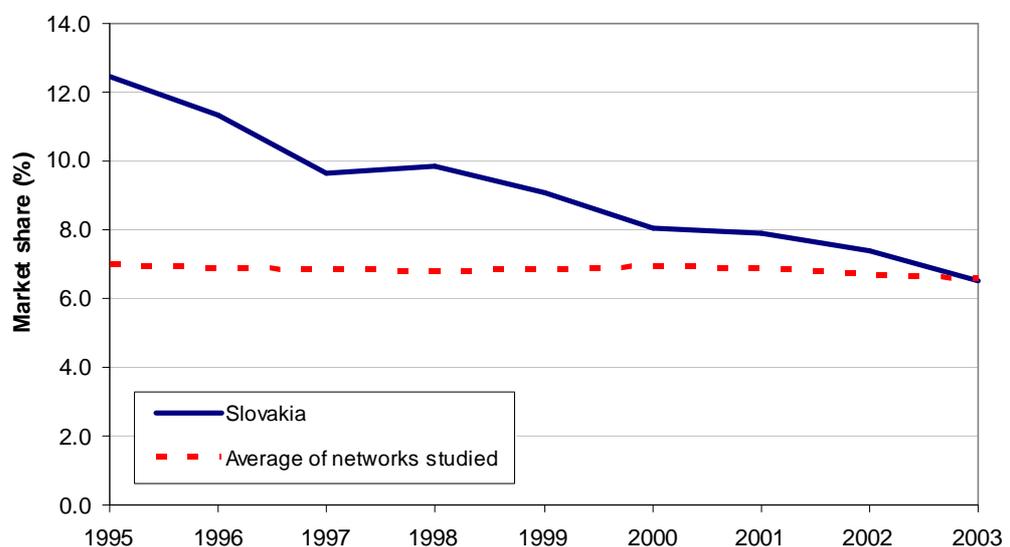
Market information

- 23.4 The transport volumes for freight have been steadily decreasing in Slovakia in the past 10 years from a high of 14.2 billion tonne-km in the first year of independence, to a current figure of less than 10 billion tonne-km. The same trend can be seen in the passenger market where the passenger-km have more than halved over the same period.
- 23.5 The situation when compared to the intermodal market share of the rail freight sector is different. The market share, as shown in the figure below, is substantially higher than in other parts of the European Union, it should be noted, in the period shown in the figure, the market share has fluctuated substantially.

FIGURE 23.1 RAIL FREIGHT INTERMODAL MARKET SHARE

Source: European Commission and Steer Davies Gleave analysis

- 23.6 The experience on the passenger side, with respect to intermodal market share, however, seems to follow the trend in the absolute figure. It can be seen from the figure below that the market share has fallen substantially from 1995 and is now around the average level of the networks included in this study.

FIGURE 23.2 RAIL PASSENGER INTERMODAL MARKET SHARE

Source: European Commission and Steer Davies Gleave analysis

Liberalisation

- 23.7 In 2005 an independent cargo railway company, ZSSK Cargo, was founded. It owns 16,000 wagons and 800 locomotives. The Slovakian privatisation committee has

recommended that the company be taken over by a consortium made of Rail Cargo Austria AG and the private equity firm J&T Finance Group as the winner of the public tender. The beginning of liberalisation in the Slovakian railway market goes back to a political decision of the Slovakian Government in 2000 to put in place the conditions and requirements in order to privatise state own railway company ZSR.

Implementation into national law of the provisions relating to access to railway services

- 23.8 The operation of infrastructure and transport on the network of ZSR is governed by European and national legislative provisions, as well as technological procedures of ZSR and provisions and technological procedures of the railway company within the scope specified above.

TABLE 23.2 EU LEGISLATION TRANSPOSED INTO NATIONAL LAW

EU Legislation	Title	Implemented
Directive 2001/14/EC	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Yes - Act of the National Council of the Slovak republic no. 164/1996 Coll. on rail infrastructure and on modifications of the Act no. 455/1991 Coll. On trade business as amended by later regulation - Decree of the Ministry of Transport, Posts and Telecommunications of the Slovak republic no. 113 /1999 Coll. On the outfit and identification of the employees of the infrastructure manager and of the railway undertaking of transport on the infrastructure - Price decision of the Ministry of Finance of the Slovak Republic 01/R/2003 valid as of 1 st January 2004 - Services to be provided to the railway undertakings are listed in the Annex no. 2 of the act of NC SR no. 164/1996 on rail infrastructure and on modifications of the act no. 455/1991 Coll. On trade business as amended by later regulations.

Access conditions

- 23.9 The Network Statement of the railways of the Slovak Republic was published on the 1st January 2006 and was approved by the Director General of the Railways of the Slovak Republic.
- 23.10 The general access conditions requires a railway undertaking intending to carry out railway transport services to undertake the following tasks:
- Obtain of a valid licence for transport operations;
 - Gain an allocation of capacity;
 - Have a valid safety certificate;

- Enter into a contract for access to the network with the infrastructure manager;
- Enter into a contract with the railway fire brigades; and
- Present an insurance contract.

The minimum access package and other services

- 23.11 The potential railway carrier is obliged to conclude a contract with ZSR-Railway fire department to participate in the following services:
- Fire assistance;
 - Fire protection; and
 - Disposal of leaking dangerous materials;
- 23.12 The maximum charges for the use of the infrastructure in domestic and passenger freight transport includes infrastructure costs, operational costs for the infrastructure according to special regulations set out in the Act of National Council of the Slovak Republic no. 164/1996 Coll. on rail infrastructure access and on modification of the Act no. 455/1991 Coll. on trade as amended by later regulations. These activities comprise:
- The organisation of train traffic, including access to the network, technical activities and shunting;
 - The operation, repair, maintenance and reconstruction of railway lines; including adjacent facilities, and the deterioration of these installations and facilities; prevention measures, and inspection and assessment services;
 - Operation, repair, control, review, maintenance and reconstruction of communication and safety installations, including dispatcher and information facilities;
 - Operation, repairs, maintenance, service, controlling and revisions of the electric installations, including operation of heavy current and special electro-technical installations, reserve electrical sources, traction line of direct and alternate current traction system, supply and switching, and feeding of safety installations.
- 23.13 ZSR must provide access to the following facilities:
- Use of electricity power installations for traction current, if at disposal;
 - Passenger stations, buildings and other facilities;
 - Freight terminals;
 - Train formation yards and facilities;
 - Facilities for coupling of trains;
 - Storage sidings;
 - Maintenance and other facilities; and
 - Marshalling yards.
- 23.14 The charges for the access and use of the above mentioned installations and facilities are included in the overall railway access charge.
- 23.15 The following services will not be offered by ZSR and must be obtained independently by the various railway undertakings:

- Supply of fuel;
- Discharging of rolling stock waste; and
- Inspection of rolling stock.

23.16 There are a number of additional services that may be provided by the infrastructure manager, but not exclusively. They are:

- Pre-heating for passenger coaches. This requires an extra contract with the railway company providing energy;
- Shunting in the formation and shunting yards. done by ZSR with the traction units and locomotive crew put forward by the railway undertaking. Shunting in other stations is operated by each railway undertaking independently;
- The provision of traction current requires a contract to be entered into with the infrastructure manager. A separate contract for traction energy consumption for shunting with the infrastructure manager must be concluded when the railway undertaking uses the traction of the infrastructure manager;
- Services for exceptional and/or dangerous transport services can be provided, on request, by the infrastructure manager.

Charging for services

23.17 Charging principles are based on the Decision of the Ministry of Finance of the Slovak Republic. The charge for the use of rail infrastructure is included in the list of regulated prices and was published in the price decision act of the Ministry of Finance of Slovak Republic no. 01//R/2003, valid from 1 January 2004 (Financial journal no. 20/2004). This act defines the maximum price to be applicable for all potential railway undertakings authorised to carry out their business activities in the Slovak Republic.

23.18 According to the Network Statement regulated prices are set to take into account marginal costs and a mark-up. The rail infrastructure network to be charged is outlined in the annex to the Act of the NC SR no. 258/1993 for the railway of the Slovak Republic.

23.19 The services not included in track access charges are the following:

- Electric traction energy;
- Non-traction electric energy;
- Water consumption;
- Heat consumption;
- Rental of the ZSR premises; and
- Telecommunication services of a commercial nature.

23.20 These services are charged through individual contracts between the client and ZSR. Furthermore, ZSR offer the following paid services:

- Training and examination of employees of the carrier based on a contract scheme;
- Safety and health protection;
- Exam preparation according to the regulations of ZSR;
- Obligatory training;

- Psychological examination;
- Special medical care and medical checks; and
- Regulation provision.

23.21 The current charging system sets the following maximum charges for the use of rail infrastructure in domestic passenger and freight transport²⁴:

TABLE 23.3 MAXIMUM CHARGE PER TYPE OF TRAIN (NET OF VAT)

Type of train	Track category	SKK/ Train-km		SKK/ Thousand gross tonne-km	Per train
		Cz	Cd		
Passenger					
	1	48.74	22.69		178.15
	2	47.9	20.17		178.15
	3	42.86	17.65		178.15
Freight					
	1	286.55	23.53		1,428.57
	2	285.71	21.85		1,428.57
	3	196.64	18.49		1,428.57

Source: Network Statement, Railways of Slovak Republic

23.22 The maximum charge for the movement of individual traction units of all types accounts to SKK 48.74 for passenger trains and train kilometre and SKK 126.05 for freight trains per train kilometre. The parameters in the table above have the following meaning:

- **Cz** is the maximum charge per train kilometre for passenger or freight trains on the relevant track category;
- **Cd** is the maximum charge per thousand gross tonne kilometres for passenger or freight trains on the relevant track category;
- **Cp** is the maximum charge for passenger and freight trains for the access to infrastructure.

Stakeholder analysis

Problems/complaints

23.23 The stakeholder interviews in our sample did not mention any problems or complaints in terms of access to railway related services. This does not mean however that there are no current problems in the Slovak Republic. We suggest that the market background should be taken into account when looking at the current situation.

²⁴ The main network charges have been included in this section as they include in them access to the various rail-related facilities.

- 23.24 As opposed to the goals of the former Government that was more in favour of liberalisation of the railways, the new one, elected in 2005, does not see this process as positive. A decision whether to continue with the privatization of ZSSK Cargo, will be taken by the Government by the end of this year. This decision will have important consequences on the market further enhancing the migration of new railway operators to the neighbouring networks, a phenomenon in relation to which there is already some evidence. One reason for this is that deregulation has been more successful in other networks. Railway undertakings need a foreseeable guarantee that their investments will be successful but the conditions in the Slovak Republic may not be satisfying the necessary requirements. This situation may change when the process of deregulation accelerates and more experiences on the efficient working of the market for railway services can be obtained.
- 23.25 We have been informed that the Slovakian Antimonopoly Office (PMU) has recently fined ZSSK for having locked-in its customers to its own brand of cargo carriage seals, thus abusing its dominant position in the market. Following a complaint made by LTE – Logistik und Transport GmbH – the competition authority has imposed a SSK30.052 million fine (approx. €750,000) and given the state-owned railway company 30 days to remove this condition from its customer contracts. ZSSK missed the appeals deadline and has been fined an additional SSK30.000 million (approx. €750,000) for each day of delay.

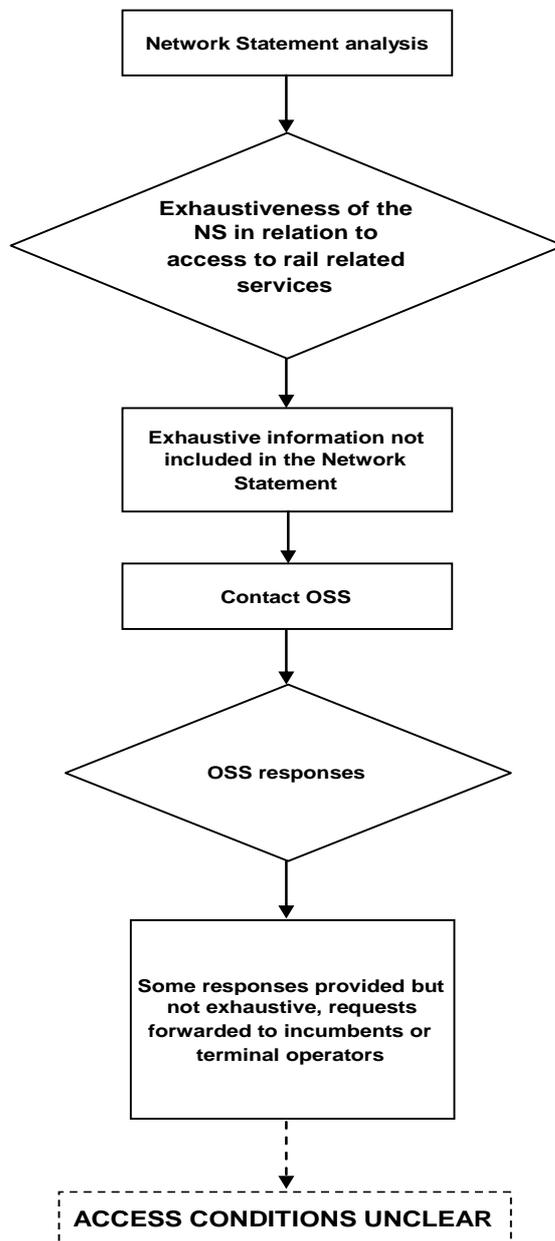
Stakeholder views

- 23.26 We were able to gather statistical information on the markets and the services and access to their facilities, but we were not able to gather detailed opinions and experience from most of the stakeholders. The reasons for this reluctance to respond to the questions was based on several reasons:
- Some of the interviewed did not want to reveal confidential company information;
 - The market for railway services is dominated by the former state-owned companies having access to the main facilities and related services. New entrants will have to use these facilities or will have to invest substantial amounts of funds to build their own facilities.
- 23.27 Some freight forwarders explained that individual contract dealings with ZSR is a tedious and time consuming process, they explained that these were a serious market barrier to enter the market.
- 23.28 Some potential railway companies on the threshold of entering the railway market pointed out that road transport is more flexible than rail transport and new railway services could suffer from heavy competition. This refers especially to the high charges for infrastructure access and related railway services as well as the high investment to be undertaken in future years to replace life expired rolling stock.
- 23.29 Some industry players, during the interviews, mentioned that large entry barriers exist due to the fact that new entrants cannot benefit from economies of scale as compared to ZSR.

Case study

23.30 For the case study we contacted the One Stop Shop in Slovakia to obtain further information on the access conditions, the figure below sets out the process that we followed for this network as well as the progress in terms of obtaining further data.

FIGURE 23.3 CASE STUDY PROCESS



23.31 As can be seen from the figure above, access conditions to rail-related services are unclear. The Network Statement does not include specific information to facilitate access to these services and the OSS is not able to provide additional information other than those included in the Network Statement. The OSS contact refers any requests to the incumbent and terminal operators to obtain detailed information about access to terminals and services, but further information is not available.

24. SLOVENIA

Introduction

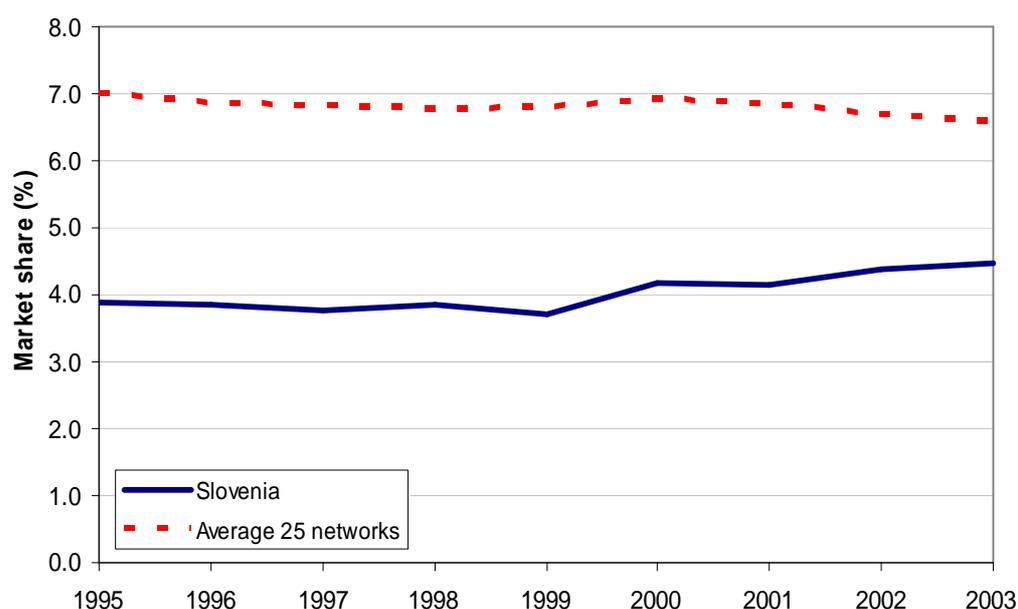
24.1 The Slovenian railway market is currently going through a slow process of liberalisation. In March 2003 Slovenske Železnice (SZ) was privatised as a 100% state-owned stock corporation. The new holding company consists of three main operating companies with separate accounting systems: passenger transport, freight and infrastructure (primarily maintenance and traffic control). Despite this separation, SZ is still the only player in the rail market.

Market information

Market shares

24.2 As noticed in the Railimplement study, both passenger and freight markets have grown in the last ten years. In 2005 passenger traffic amounted to 15.7 million passengers, 6% more than in 2004. Freight traffic grew by 1% to 18 million tonnes, while the amount of tonne-km increased by 3.2%.

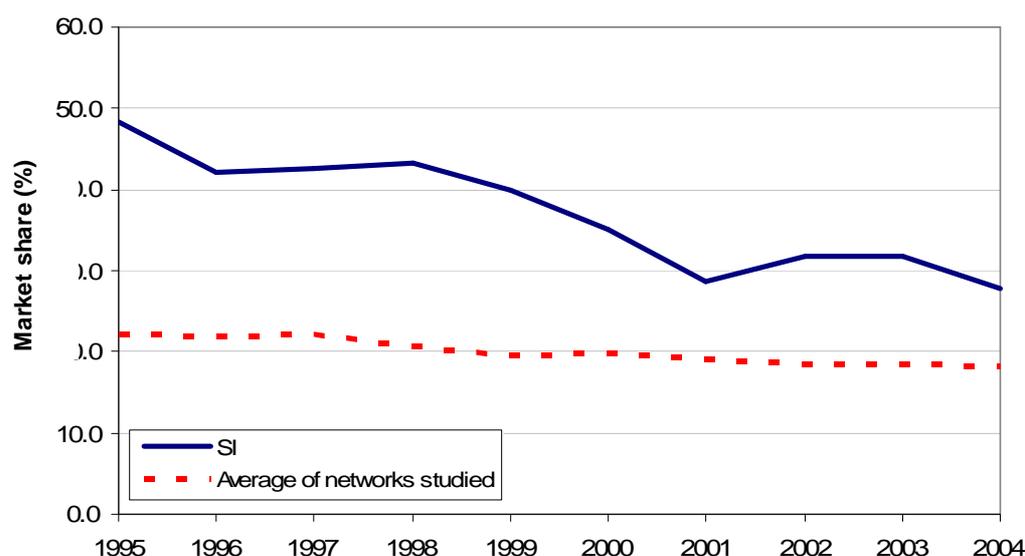
FIGURE 24.1 RAIL PASSENGER INTERMODAL MARKET SHARE



Source: European Commission and Steer Davies Gleave analysis

24.3 The company's aims are to become the central freight transport company on the 5th and 10th Trans European corridors as well as a provider of integrated and customer focused passenger services whilst maintaining the highest possible safety standards.

FIGURE 24.2 RAIL FREIGHT INTERMODAL MARKET SHARE



Source: European Commission and Steer Davies Gleave analysis

Implementation into national law of the provisions relating to access to railway services

- 24.4 The First Infrastructure Package of Directives was implemented in Slovenia through amendments to the Railway Transport Act *ZzeIP* 1999. More in detail, this law states the general requirements for rail-related services as set out in Directive 2001/14/EC.
- 24.5 The directives included within the Second Package have not as yet been transposed into national law.

TABLE 24.1 EU LEGISLATION TRANSPOSED INTO NATIONAL LAW

EU Legislation	Title	Implemented (and when, in which piece of legislation)
Directive 2001/14/EC	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Yes Railway Transport Act (ZzeIP, 1999) and amendments

Access conditions

The minimum access package and other services

- 24.6 According to the 2007 Network Statement of PRI (the infrastructure manager), the legal basis for defining the services of the public rail infrastructure is defined in articles 9 and 10 of the *Law on Rail Transport*, OJ RS n. 26/05, that define the public train infrastructure and its components and articles 22 and 23 of the *Regulation on the Allocation of Train Slots* and the *User Fees for the Use of Public Railway Infrastructure* OJ RS Nr. 26/01, 91/01, which define the minimum level of service and additional services.
- 24.7 The minimum level of service, provided by the infrastructure manager and included in

the user charge consists of the following services:

- handling of train path requests;
- use of the allocated path;
- use of switches and crossings on the allocated train slot;
- use of the electrical network on the allocated train slot (without electric energy supply);
- train control, together with signalling, regulation, dispatch and train communication and providing information on train movement; and
- other information.

24.8 In addition to this there are a number of additional services that the infrastructure services must provide for, they are:

- use of electrical charging equipment where available;
- use of refuelling equipment;
- use of passenger stations, their buildings and other related objects - use of cargo stations and terminals;
- use of shunting stations;
- use of train formation facilities;
- use of loading and unloading tracks;
- use of equipment for service and maintenance of rail vehicles;
- use of other technical devices.

24.9 Finally, the infrastructure may provide the following ancillary services to those operators that request these services:

- assistance with non-standard loads, dangerous goods and their shunting;
- pre-heating of passenger trains;
- supply of electrical traction energy;
- supply of diesel fuel;
- running of museum trains;
- back-up services;
- access to the telecommunication network;
- providing additional information;
- technical inspection of rail vehicles.

24.10 The table below sets out which companies are looking after each of the rail-related services.

TABLE 24.2 RAIL-RELATED SERVICES BY PROVIDER

Service	Provider
Electricity for traction	Slovenian Railway – infrastructure manager
Diesel fuel for locomotives	Slovenian Railways - operator
Locomotive pushing services	Slovenian Railways - operator
Back-up services	n/a
Services in marshalling and shunting yards	Slovenian Railways – infrastructure manager
Train formation services	Slovenian Railways - infrastructure manager
Services in freight terminals	Slovenian Railways - operator
Telematics services for freight operations	Slovenian Railways - operator
Services in passenger stations	Slovenian Railways - operator
Computer reservation services for passenger transport	Slovenian Railways - operator
Training facilities	Slovenian Railways - operator
Leasing of rolling stock and staff	n/a
Maintenance	Central maintenance workshop - Slovenian Railways – IM and RU
Rolling stock cleaning	Central maintenance workshop - Slovenian Railways
Services in storage sidings	Operator
Provision of on-board train protection systems; telecom and communications services	n/a
Services in border stations	Slovenian Railways - operator
Technical inspection services	Slovenian Railway – infrastructure manager

Charging for services

Essential services

24.11 According to the 2007 Network Statement and the aforementioned laws, the formula for the user charge calculation is the following:

$$U = (Q_{vlkm(reg)} \times P_{(reg)} + Q_{vlkm(g)} \times P_{(g)}) \times C_{vlkm} \times K \times F + Z$$

24.12 Where:

- U is the User charge for the allocated train slot;
- $Q_{vlkm(reg)}$ is the number of train kilometres performed on regional rail line;
- $Q_{vlkm(g)}$ is the number of train kilometres performed on main rail line;
- $P_{(reg)}$ is the weighting coefficient for regional rail lines;
- $P_{(g)}$ is the weighting coefficient for main rail lines price;
- C_{vlkm} represents the train kilometres;

- K is the coefficient for track wear out;
- F is the factor, expressing carrier's demands regarding the timetable;
- Z is the special carriers' demands for additional and other services (a combination of two or more quoted elements are possible).

24.13 Currently, this formula leads to only one fee of € 2.23 for each train kilometre.

Additional and other services

Passenger station access fee

24.14 The user charge for the use of passenger stations is calculated from the following formula: $U_{pp} = V \times S$, where:

- U_{pp} , is the user charge for the use of passenger stations;
- V, is the number of timetable stops of a passenger trains;
- S, is the station or halt category [1st category, € 5; 2nd category, € 3; 3rd category, € 2; 4th category, € 1]²⁵.

Use of sidings and rolling stock suspension tracks

24.15 The user charge is calculated from the following formula: $U_{og} = D \times J$, where:

- U_{og} , is the user charge for suspension tracks;
- D, is the number of days;
- J, is the price for one day and one vehicle and is equal to € 2.

Use of tracks for wagon loading or unloading

24.16 The user charge for the use of specified tracks used to load or unload the rail wagons in a previous agreed time period, is calculated by the following formula, $U_{nr} = N \times L$, where:

- U_{nr} , is the user charge for the use of tracks for loading or unloading;
- N, is the number of wagons to be loaded/unloaded;
- L, is the price for one rail vehicle and is equal to € 0.30 per rail vehicle.

Use of shunting stations

24.17 The user charge for the use of shunting stations is charged for each entrance of the train into the shunting station and is € 14.60.

24.18 The prices/costs for the other services are not available.

²⁵ The list of the stations per category is included in the PRI Network Statement.

Stakeholder analysis

Problems/complaints

- 24.19 Despite the implementation of the First Package Directives, no licenses have been issued as yet. Two railway companies have already requested their licenses but the issuing process is proceeding very slowly. According to current practices a new entrant willing to obtain a license to operate on the Slovenian network would wait at least two years, this is not however the official timescale for obtaining a licence which, as shown in the Railimplement report, was expected to be four to six months.
- 24.20 International train operations in Slovenia are guaranteed through bilateral intergovernmental agreements signed with Slovenian's neighbouring countries: Hungary, Italy, Croatia and Austria. Between the incumbents of these countries there is strong cooperation in the field of transport operations, IT and marketing activities. The maintenance and repair services in depots areas are organised so as to give priority to the incumbent.

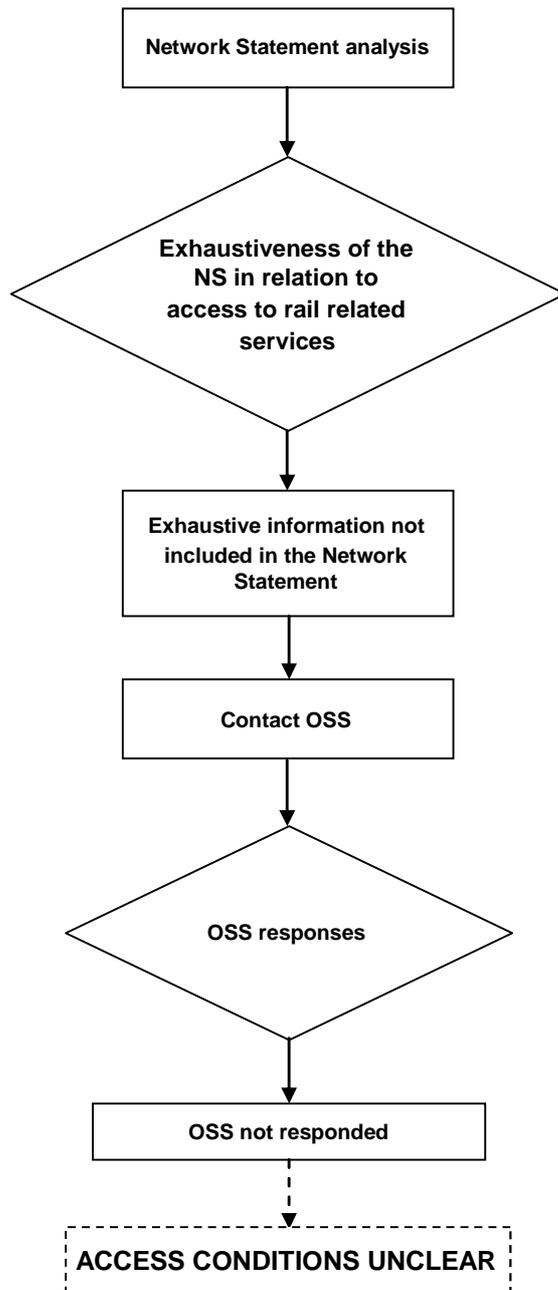
Stakeholder views

- 24.21 We contacted the majority of the stakeholders within the industry, mainly the different sections of SZ however they all pointed us to the infrastructure manager for detailed views, as such the views below reflect mainly those views.
- 24.22 The infrastructure manager stated that the Network Statement contains enough information and details to make sound business decision in terms of prices and access requirements to services. The provision of services such as shunting, marshalling, traction power, maintenance of rolling stock and equipment, is directly provided by the infrastructure manager.
- 24.23 The stakeholders also mentioned that they believed that the tariffs levied for the services are appropriate. The minimum access package should however be expanded to include some additional and ancillary services. The time required for services in border stations is between 60 and 120 minutes.
- 24.24 In the stakeholder's opinion the freight related and depot facilities are not exploited 100% and in certain terminals there is room for expansion. In the terminals the security costs have increased in the last years. In the Koper Port terminal the expenditures for security have increased by the 200%. Security is here based on ASPS security program and is technologically supported by a system of cameras installed on fences facilities.

Case study

- 24.25 For the case study we contacted the One Stop Shop in Slovenia to obtain further information on the access conditions, the figure below sets out the process that we followed for this network as well as the progress in terms of obtaining further data.

FIGURE 24.3 CASE STUDY PROCESS



24.26 As can be seen from the figure above, the Network Statement does not include detailed information with respect to access to rail-related services. We also contacted the local OSS but they have not responded to our survey. Therefore we must conclude that the access conditions are unclear.

25. SPAIN**Introduction**

- 25.1 Railway market liberalisation is just at its initial stage in Spain. Unlike other countries, Spain did not address the issue until Spanish Law 39/2003 of the Railway Sector was implemented. As a result, the Infrastructure manager (ADIF) was completely separated from the incumbent operator (RENFE) only on the 1st January 2005.
- 25.2 At present, there are no private companies operating other than the former public company RENFE, although four licenses to operate freight services have already been awarded (RENFE, Comsa Rail Transport SA, Continental Rail SA and Press Cargo Tren) and there are four other companies applying for freight operator licenses.
- 25.3 However private freight companies have not begun operations as the regulatory framework has not yet been finalised. This is required to govern the operation of services including the professional capacity of the managing and technical employees and safety.
- 25.4 In addition, the Ministry of Public Works has just enacted the Ministerial Order FOM/233/2006 that establishes the conditions and requirements for the accreditation and registration of the rolling stock allowed to circulate on the railway network and the maintenance centres, as well as the tariffs to be applied in relation to access and services.

TABLE 25.1 RAIL-RELATED SERVICES BY PROVIDER

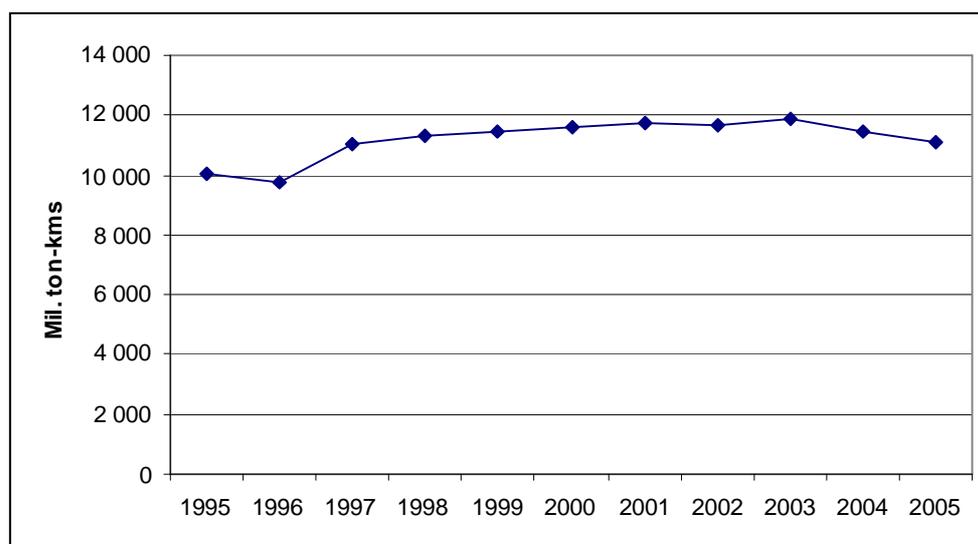
Service	Provider
Electricity for traction	ADIF (The infrastructure manager)
Diesel fuel for locomotives	RENFE Operadora
Locomotive pushing services	ADIF
Back-up services	ADIF
Services in marshalling and shunting yards	ADIF
Train formation services	ADIF
Services in freight terminals	ADIF
Telematics services for freight operations	ADIF
Services in passenger stations	ADIF
Computer reservation services for passenger transport	RENFE Operadora
Training facilities	RENFE Operadora
Leasing of rolling stock and staff	RENFE Operadora
Maintenance	Operator/Manufacturer
Rolling stock cleaning	RENFE Operadora
Services in storage sidings	RENFE Operadora
Provision of on-board train protection systems; telecom and communications services	Manufacturers of the equipment
Services in border stations	ADIF
Technical inspection services	ADIF

Market information

- 25.5 As no private operator have yet entered the market, the only existing information source is RENFE-Operadora (the public operator).

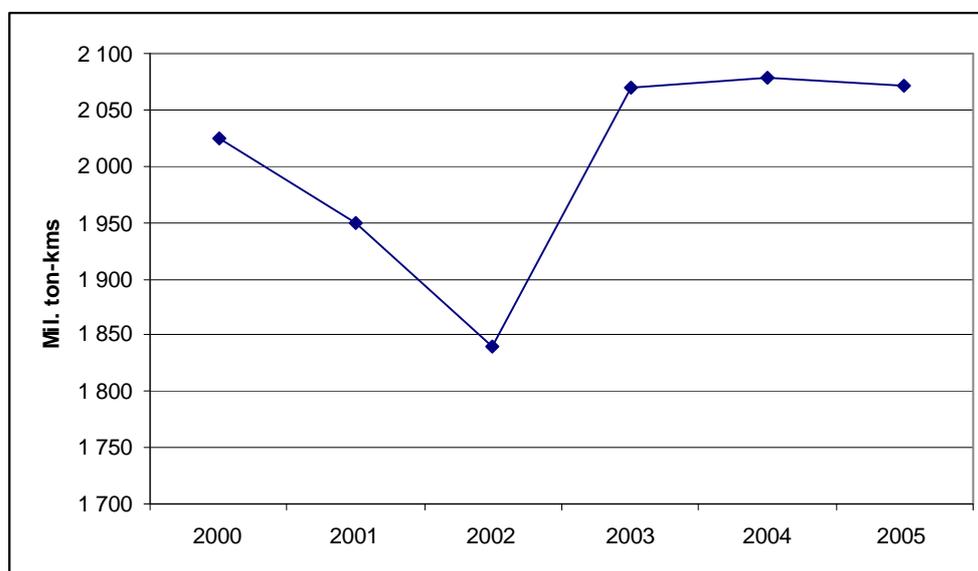
Market trends

- 25.6 Rail freight has declined in the last ten years. In terms of tonnes transported, it has decreased from 26.2 million to 24.7 million tonnes (-5.6%) between 2004 and 2005, and in tonnes-kilometres, the decline has been even greater, from 11,838 million to 10,823 million (a decline of 8.6%). The figure below shows the change in transported volumes for the past 10 years.

FIGURE 25.1 FREIGHT VOLUMES 1995-2005

Source: European Commission and Steer Davies Gleave analysis

- 25.7 There has also been a decline in the international part of the rail freight market from 4.945 to 4.429 million tonnes between 2004 and 2005 (-10.4%). In terms of tonne-kilometres, the international market decreased marginally from 2,078 million to 2,071 million (-0.3%). The change in the amount of goods transported internationally is shown in the figure below.

FIGURE 25.2 INTERNATIONAL FREIGHT TRAFFIC 2000 TO 2005

Source: Railimplement and UIC

- 25.8 In terms of international passenger transport, RENFE signed an agreement with SNCF in 1996. Through this agreement, each of the companies was the owner of 50% of the “*Trenes Talgo Trans-Pirineos*” (Trans-Pyrenees Talgo Trains), an AEIE, (Agrupación

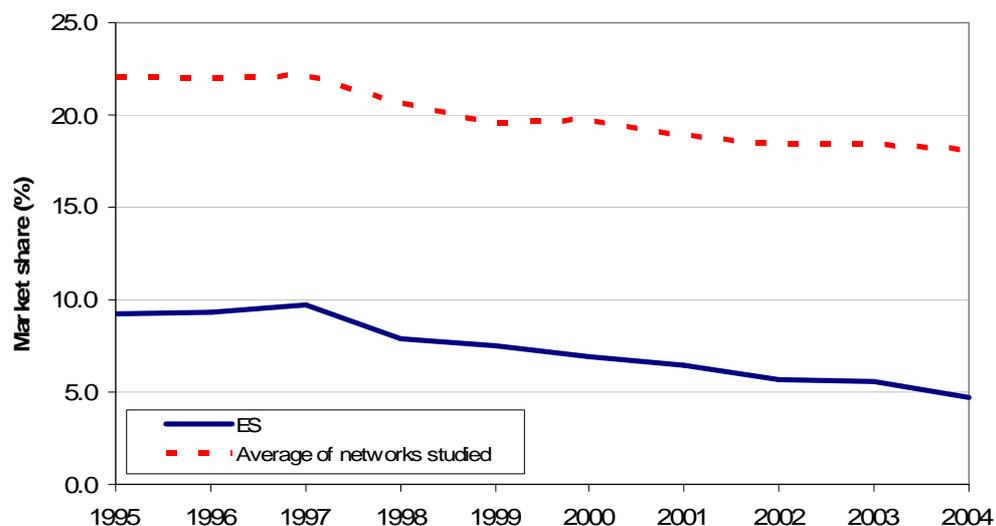
Europea de Interés Económico or European Economic Interest Group).

- 25.9 Through this AEIE, RENFE and SNCF jointly managed the following services: Madrid-Paris, Barcelona-Paris, Barcelona-Zurich and Barcelona-Milan. Due to the very good results, both companies decided to create a Limited Liability Company (and changed the name from AEIE to *Elipsos Internacional S.A.*

Market shares

- 25.10 The figure below shows the change in the modal share of rail freight in Spain in the last 12 years.

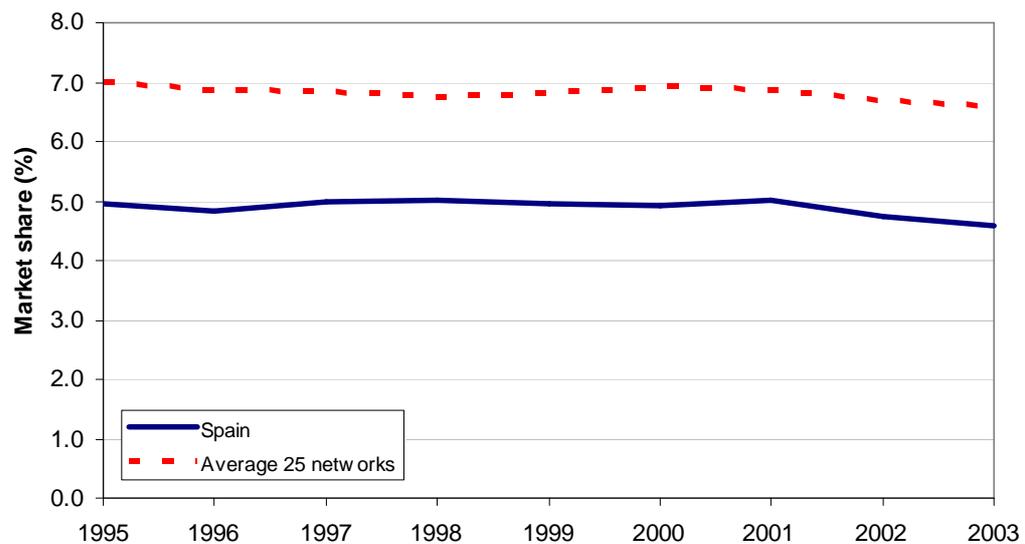
FIGURE 25.3 RAIL FREIGHT INTERMODAL MARKET SHARE



Source: European Commission and Steer Davies Gleave analysis

- 25.11 Since 1997 there has been a gradual decline in the market share of rail freight, from its highest point of just over 10% in 1997 to less than 6% in 2003. As for the intramodal market share, there is still no competition and consequently RENFE has virtually 100% control over the market.
- 25.12 Passenger rail transport has also decreased in recent years. However, according to UIC²⁶ statistics, the number of passengers transported by rail increased from 484.4 million to 505.5 million (4.4 %) between 2004 and 2005. Furthermore, rail passenger kilometres increased from 19,016 million to 19,835 million (4.3%).

²⁶ <http://www.uic.asso.fr/stats/synopsis.html>

FIGURE 25.4 RAIL PASSENGER INTERMODAL MARKET SHARE

Source: European Commission and Steer Davies Gleave analysis

Market participants

Renfe-Operadora

- 25.13 Renfe-Operadora states that its objective is the transportation of passengers and freight with the highest level of safety, with enhanced customer focus, high quality and continued innovation. The freight business does not focus on one type of freight, but offers services for the transportation of intermodal, container and other traffic, running over 400 trains a day, equivalent to over 8,500 lorry journeys a day.

Transfesa

- 25.14 Transfesa is an international transport company. It is privately owned but RENFE and SNCF each have a 20% share in the company. It provides freight train services between Spain and other countries, particularly France. It uses its own wagons and owns some associated facilities (for example, facilities for changing between gauges at frontier stations), but RENFE operates its trains. RENFE provides locomotives and drivers as well as track access, energy, etc. At the moment all TRANSFESA trains use RENFE's traction units, but they are interested in getting an operator licence (Activa Rail) in order to be able to operate their own trains. To date Transfesa have applied for and been granted infrastructure capacity.

Implementation of EU Directives on Rail Improvement and Open Competition

- 25.15 In 2003, Spain enacted a specific law, Law 39/2003 of 17th of November of the Railway Sector (*Ley 39/2003, de 17 de noviembre del Sector Ferroviario*), which embodies all the European Union directive requirements.

TABLE 25.2 EU LEGISLATION TRANSPOSED INTO NATIONAL LAW

EU Legislation	Title	Implemented
Directive 2001/14	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Law 39/2003

25.16 Since the approval of the law in 2003, the following pieces of legislation have been published which now complete the implementation of the Directives:

- Royal Decree 2387/2004, of 30th of December, which approves the Railway Sector Regulations;
- Royal Decree 2395/2004 and 2396/2004, defining ADIF's and RENFE Operadora's statutes respectively;
- ORDEN FOM/897/2005: capacity allocation specifications;
- ORDEN FOM/898/2005: infrastructure access charges;
- ORDEN FOM/233/2006: rolling stock certification;
- ORDEN FOM/2520/2006: Security and staff specifications

Access conditions

25.17 The Law 39/2003 establishes the main principles that must be contained in the Network Statement. Refer to ORDEN FOM/897/2005 for more details.

25.18 The object of the *ORDEN FOM/897/2005* of the 7th April 2005 is to regulate the preparation, contents and publishing of the Network Statement, as well as the process for allocating rail network capacity. The Network Statement must explain the characteristics of the infrastructure made available to railway undertakings. It also details the regulations, procedures and criteria in terms of capacity allocation, railway charges and pricing policies as well as any other information required at the time of capacity allocation. *ORDEN FOM/2520/2006* is also important as it shows the conditions for training, and hence the conditions for access to trained staff.

The minimum access package and other services

25.19 As stated in Law 39/2003, and developed in the Royal Decree 2395/2004, ADIF, or a company certified by them, is responsible for the provision of the rail-related services. ADIF will also have to fix and collect the charges for the additional, complementary and ancillary services.

25.20 The Network Statement of ADIF states that the **minimum access package** covers the following services:

- Access to the General Interest Rail Network
 - Allocation of capacity
 - Use of the allocated capacity
 - Traffic control including signal systems, traffic monitoring, train dispatching, and the transmission and provision of train movements
- Access and use of stations and connected buildings

- Use of passenger stations by their passengers
 - Train access and platform usage at the stations
 - Access and use of storage sidings and depots
 - Usage of gauge change facilities
 - Use of intersections and link routes;
 - Any other information that is needed in order to carry out or operate the rail traffic for which the capacity has been allocated.
- 25.21 In addition to this there are a number of compulsory services that the infrastructure manager must provide, these **additional services** are:
- Access and use of freight terminals and sidings;
 - Access to fuel depots;
 - Use of electricity for traction infrastructure where it is available;
 - Train-formation services;
 - Access to maintenance and other technical facilities;
 - Shunting services.
- 25.22 The infrastructure manager will also provide (where available) **complementary services** following a timely request made by the railway undertaking:
- Traction current supply;
 - Pre-heating before the departure of passenger trains;
 - Fuel supply;
 - Access and use of marshalling and shunting yards;
 - Other services provided at the above facilities for track access services:
 - Road access
 - Access to outer facilities such as ports, workshops, other stations etc
 - Intermodal items handling
 - Storage
 - Tailor-made services for controlling the transportation of hazardous materials;
 - Tailor-made services for assistance with the operation of non-standard trains;
 - Accreditation of specific centres to certifying the adequacy of the rolling stock and personnel training;
 - Freight transfer at the border terminals of Irún and Port Bou.
- 25.23 Finally, the infrastructure manager may provide the following **ancillary services** to those operators that request these services:
- Access to telecom network;
 - Cleaning, maintenance and technical inspection of rolling stock;
 - Provision of extra information (not related to the programming of trains);
 - Water replenishment;
 - Leasing of machinery, auxiliary means and technical facilities;
 - Storage of Intermodal Transport Units;

- Waste handling and disposal;
- Parking facilities;
- Feasibility studies for specific paths; and
- (Re-)Opening of facilities and/or lines that have been closed or are in disuse (any extra costs arising from this (re-)opening fall on the operator).

Charging for services

Charges for using the General Interest Railway Network

- 25.24 The Infrastructure manager (ADIF) is responsible for collecting the charges associated with the use of infrastructure, and if necessary any tariffs resulting from other complementary services. However, it is the *Ministerio de Fomento's* responsibility to establish the charging framework, and if necessary decide whether to modify them.
- 25.25 Also, one of the main responsibilities of the Railway Regulation Committee (Comité de Regulación Ferroviaria), integrated in the Ministerio de Fomento, is ensuring that the railway access charges (canons) are in accordance with the Law 39/2003 and are non discriminatory.
- 25.26 The following paragraphs describe the charges levied to the users of the General Interest Railway Network for the different concepts. These different charges are defined in Article 74 of the Law 39/2003 of the Railway Sector, and the Ministerial Order ORDEN FOM/897/2005 of 7th of April defines the exact structure and amount of these charges.
- 25.27 Four different categories or types are defined:
- Category A: **Access Charge** for the general use of the General Interest Railway Network or one part of it;
 - Category B: **Capacity Reserve Charge** for the availability of the selected path;
 - Category C: **Circulation Charge** for the effective use of the reserved capacity;
 - Category D: **Traffic Charge** for the registered traffic on the railway infrastructure.

Access to terminals

- 25.28 As mentioned above, no rail companies, except the former public railway company (RENFE), are currently operating. Therefore we are not currently able to analyse how new companies are accessing railway stations and other facilities.
- 25.29 However, Article 75 of the Railway Law establishes the charges that railway undertakings will have to pay in order to use the railway stations and other facilities included in the General Interest Railway Network. In principle, all railway undertakings will have equal access to these facilities.
- 25.30 There are five charging categories other than the ones previously described for the use of this infrastructure, the details of which are defined as follows:
- Category A: charge for the usage of stations by the passengers;

- Category B: charge for train access and platform usage at the stations;
- Category C: charge for the usage of gauge change facilities;
- Category D: charge for the usage of sidings;
- Category E: charge for the usage of other services.

Passenger Station Access Charge (Category A)

25.31 This charge only applies to passenger railway services and varies depending on the distance travelled as well as the category of the station where the trip starts and ends. For those trips where there is a connection, each leg will be counted as a separate journey. The amount to be paid will be the result of multiplying the number of passengers by the unitary rates shown in the following table:

TABLE 25.3 PASSENGER STATION ACCESS CHARGE

Category	Journey (€/passenger)			
	A	B	C	D
1 st	0.77	0.43	0.2	0.08
2 nd	0.48	0.3	0.15	0.06
3 rd	0.04	0.04	0.04	0.02

Source: Railway Law

TABLE 25.4 LEVEL OF DISTANCE TRAVELLED

Level	Distance Travelled
A	>250 km
B	126 – 250 km
C	80 – 125 km
D	<80 km

Source: Railway Law

Train Station Access Charge (Category B)

25.32 This charge only applies to non-regional or commuting trains stopping for over 15 minutes between 07:00-23:59 (table 25.5). It varies depending on the category of the station as well as on the stopping time. The amount to be paid will be the result of multiplying the number of trains by the unit rates shown in the following table:

TABLE 25.5 TRAIN STATION ACCESS CHARGE

Category	Stabling		
	A	B	C
1 st	2	3	4
2 nd	1	1.5	2

3 rd	-	-	-
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Source: Railway Law

TABLE 25.6 DWELL TIME TARIFFS

Tariff	Description
A	For every additional 5 minutes between 15 and 45 min.
B	For every additional 5 minutes between 45 and 120 min.
C	For every additional 5 minutes over 120 min.

Source: Railway Law

Gauge Change Facilities Charge (Category C)

25.33 All trains using this facility will be charged € 100 per usage.

Siding Usage Charge (Category D)

25.34 This charge does not apply to trains using sidings during the off-peak periods described in table 1.5. It varies depending on the line, as defined in table 1.3, and the time of usage.

TABLE 25.7 SIDING USAGE CHARGE

Type of line	Sidings Access (€/train)			
	A	B	C	D
A	14.45	1.9	2.8	36
B-C	-	-	-	-

Source: Railway Law

TABLE 25.8 TARIFF PER CATEGORY

Tariff	Time of Usage
A	Between 1 and 6 hours
B	Every hour between 6 and 12 hours
C	Every hour between 12 and 24 hours
D	Whole day

Source: Railway Law

Land Use for Other Services Charge (Category E)

25.35 This charge depends on the type and surface area of the occupied land belonging to the Public Railway Domain.

TABLE 25.9 LAND USE FOR OTHER SERVICES CHARGE

Type of land	€/ m2 – per month
Urbanised	0.6
Non-urbanised	0.5

Source: Railway Law

- 25.36 In order to establish the charges for the additional, complementary and ancillary railway services provided by the Infrastructure manager (ADIF) or any other company with its authorization, ADIF takes account in particular of the cost of the infrastructure, the state of the transport market and the characteristics of supply and demand, and of the need to optimise the use of the national rail network and to harmonise intermodal competition.
- 25.37 The updated Network Statement provides both the charges for access to rail-related services and the equipment available in the various facilities, while it does not provide many details on the access conditions, it does provide more information than is available in some networks.
- 25.38 This shows there is still a substantial amount of work to be done in terms of defining and implementing the access conditions for a number of the rail-related services. In the mean time the system lacks transparency and investment certainty as future operators are not clear about the best way to deal with future costs.

Stakeholder analysis

Problems/complaints

- 25.39 Given the absence of a complete regulatory framework and therefore private operations, no problems or complaints relating to the provision of services or competition have yet been cited.

Stakeholder views

- 25.40 From RENFE's point of view, development of the rail-related services is quite slow and focused primarily on ADIF. The market for rail-related services is still relatively new and developing, for the moment it is functioning solely through bilateral relationships with service suppliers. Of those services provided by ADIF, the charges relate to the costs directly incurred by ADIF.
- 25.41 RENFE also explained that they use a number of freight facilities and terminals in a number of Member States but they have not had any specific access problems. They have however had problems in some countries getting access to shunting facilities in some inland waterway ports.
- 25.42 There is still some uncertainty with regards to how rail-related services will be taken forward as not all of the secondary legislation has been enacted, furthermore, ADIF has had some problems implementing some of the decisions in relation to the new regulations relating to staff formation and rolling stock homologation as these activities are currently only provided by RENFE which must provide them also to

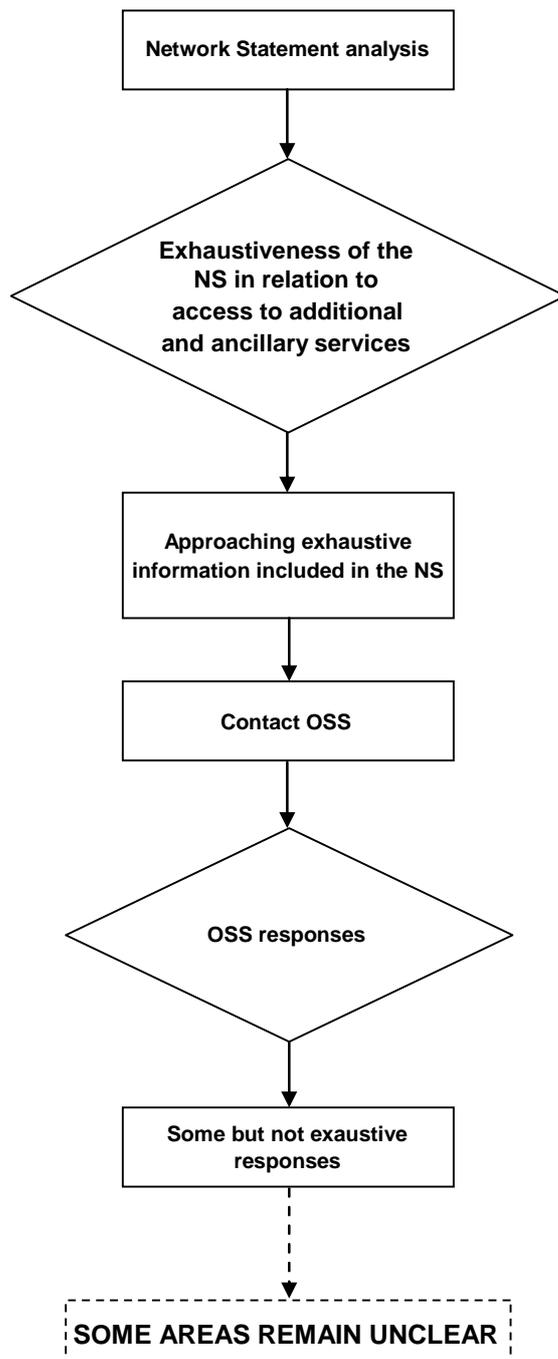
third parties until others obtain the necessary certification to provide the service.

- 25.43 We have been informed that the freight related infrastructure (terminals etc.) is underutilised at the moment as there are currently no integrated logistics platforms available.
- 25.44 One stakeholder mentioned that access conditions are specified in the Network Statement, however not in great detail. The Network Statement lacks of a commercial point of view, as well as of a good definition of the auxiliary and complementary services.

Case study

- 25.45 For the case study we contacted the One Stop Shop in Spain to obtain further information on the access conditions, the figure below sets out the process that we followed for this network as well as the progress in terms of obtaining further data.

FIGURE 25.5 CASE STUDY PROCESS



25.46 As can be seen from the figure above, the Spanish Network Statement contains substantial information regarding access to rail-related services. Despite this some areas remain unclear. The lack of detailed information may be due to the fact that while terminals, marshalling yards and fuelling points belong to ADIF, the depots and maintenance installations usually belong to the incumbent who must provide maintenance services to new entrants until the maintenance market will be fully opened.

26. SWEDEN

Introduction

- 26.1 All EEA countries can access the Swedish rail market which is seen as one of the most open markets in Europe. New entrant operators have taken some market share both in passenger and freight services and their impact on the market is increasing. As a result, there are a number of operators that are using the various rail-related services that are needed for access to the network.
- 26.2 The rail-related services in Sweden are undertaken by a number of undertakings. The table below sets out which companies provide each of the rail-related services.

TABLE 26.1 RAIL-RELATED SERVICES BY PROVIDER

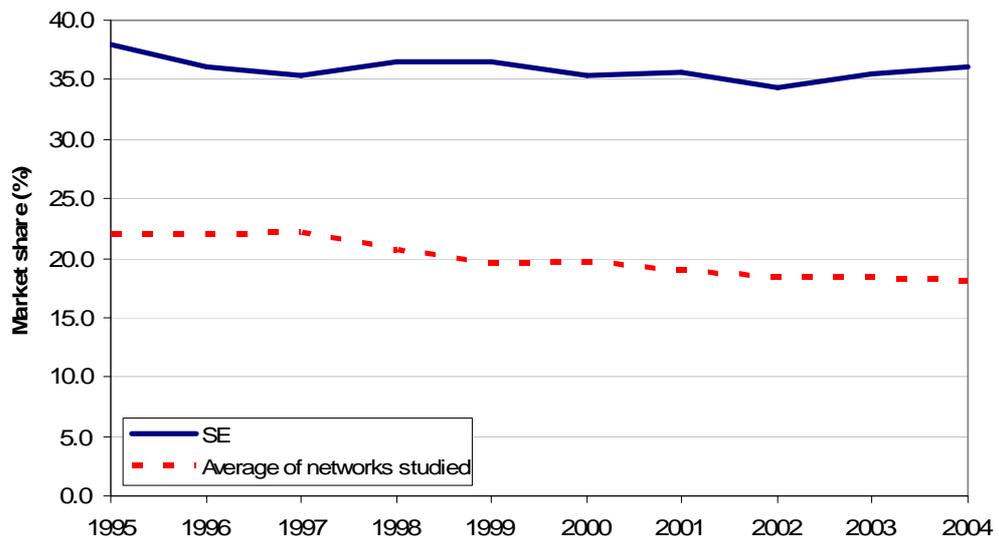
Service	Provider
Electricity for traction	Banverket
Diesel fuel for locomotives	Each operator independently
Locomotive pushing services	Each operator independently
Back-up services	Each operator independently
Services in marshalling and shunting yards	Currently the Operators but will be transferred to Bankverket soon
Train formation services	Banverket
Services in freight terminals	Operators when operators own the terminals
Telematics services for freight operations	Banverket
Services in passenger stations	Jernhusen
Computer reservation services for passenger transport	Each operator
Training facilities	Banskolan
Leasing of rolling stock and staff	AB Transitio and others
Maintenance	Independent private companies
Rolling stock cleaning	Each operator independently
Services in storage sidings	Each operator independently
Provision of on-board train protection systems; telecom and communications services	Operators
Services in border stations	Each operator independently
Technical inspection services	Banverket

Market information

- 26.3 The market in Sweden has developed since the liberalisation process began in the late 1980s. The incumbent operator has seen its market share being eroded over this period to just over 50% in the market for regional passenger services and about 75% in the freight sector. In the last 10 years, the rail freight sector has maintained a market share

of about 24% in the long distance transportation of freight. The figure below shows the evolution of the market share for the rail freight transportation when compared to all forms of land based freight transportation. It can be seen that looking not only at long distance transport but also short distance flows, the market share of rail freight has been falling until very recently, but it has remained at a very high level when compared to the other networks being analysed.

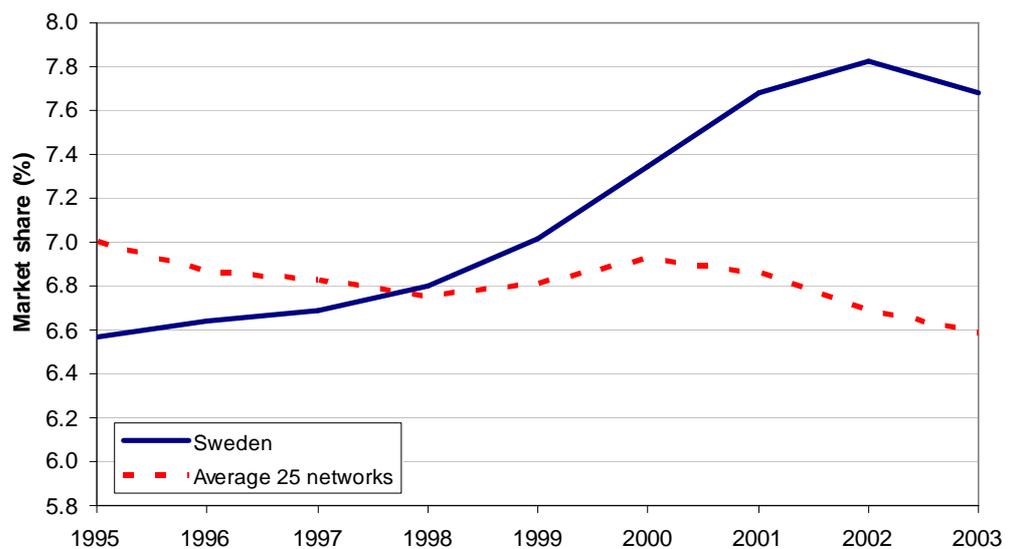
FIGURE 26.1 RAIL FREIGHT INTERMODAL MARKET SHARE



Source: European Commission and Steer Davies Gleave analysis

- 26.4 The figure below shows the change in market share for passenger transport when compared to other forms of transport.

FIGURE 26.2 RAIL PASSENGER INTERMODAL MARKET SHARE



Source: European Commission and Steer Davies Gleave analysis

26.5 It can be seen that the market share of passenger transport has increased substantially in recent years. Although the market share in 2003 once again started to decrease, it still remains well above the average of the 25 networks.

Train operating companies

26.6 While the markets for passenger and freight operations are still dominated by the incumbent operators (SJ and Green Cargo respectively) there are a number of new entrants that have entered both the freight and passenger markets; the freight market numbers 17 operators, while the passenger market numbers 11 operators. As a result, there are a large number of operators seeking to access rail-related services.

Implementation into national law of the provisions relating to access to railway services

26.7 Although many of the provisions for market opening have been part of Swedish national law for many years, the implementation of the First Infrastructure Package of Directives was only completed in 2004 with the publication of various railway acts and regulations. The legislation focusing on rail-related services can be found in the Järnvägslag (Railway Act), specifically in chapters 6 and 7.

TABLE 26.2 EU LEGISLATION TRANSPOSED INTO NATIONAL LAW

EU Legislation	Title	Implemented (and when, in which piece of legislation)
Directive 2001/14	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	Järnvägslag 2004:519

26.8 The legislation that has been introduced meets the requirements of the Directive with respect to rail-related services, these services are explained in more detail in the Network Statement.

Access conditions

26.9 The conditions for access to the Swedish network are derived from the national law implementing the EU directive and are included in the Banverket Network Statement. There are many services that are not undertaken by the infrastructure manager and thus the details of the conditions are not included in the Network Statement. The key examples are the now independent training centre for locomotive drivers (Banskolan) and Jernhusen, the company that manages the stations in Sweden.

The minimum access package and other services

26.10 Banverket offers the following rail-related services divided between the minimum access package, track access services, complementary services and additional services.

26.11 The services included in the minimum access package are the following:

- Processing of capacity requests;
- The right to use the capacity assigned;

- The use of points and crossovers;
 - Traffic control systems including signalling, etc; and
 - All other information necessary to carry out a service.
- 26.12 The infrastructure manager shall also provide access to the following facilities in a non-discriminatory manner:
- Electricity supply infrastructure;
 - Fuelling points;
 - Passenger station facilities;
 - Freight Terminals;
 - Marshalling yards;
 - Train formation facilities;
 - Storage sidings; and
 - Maintenance and technical facilities.
- 26.13 The infrastructure manager may choose to provide the following complementary services:
- Electric current (available only from Banverket)
 - Pre-heating for passenger trains
 - Services supplied in the facilities mentioned in the previous paragraph; and
 - Tailor-made contacts for hazardous or non-standard trains.
- 26.14 In addition, Banverket may choose to supply the following additional services:
- Access to the telecommunications network;
 - The provision of extra information; and
 - Technical inspection of rolling stock.
- 26.15 The setting up of Banskolan, independent of SJ, has changed the access conditions for staff training services, this was done to ensure that there would be equal access to drivers for all the companies wishing to run rail services, but it was also done to ensure that there was an entity whose sole role was to train drivers in a market where there is currently a significant shortfall.
- 26.16 Part of the reason for the creation of Jernhusen was to ensure that there would be non-discriminatory access to stations in Sweden, the access charges are regulated through the agreements that are entered into by the operator and Jernhusen. Terminals, on the other hand, are mainly administered by Banverket, although the activities within the terminals remain the domain of Green Cargo; the same is true for shunting yards.
- Charging for services**
- 26.17 Charging for access to the network in Sweden is based on a marginal cost approach. The minimum access package charge is the user fee that each train must pay to access the network, equivalent to SEK 0.0086 per gross tonne-km hauled for passenger

services and SEK 0.0028 per gross tonne-km hauled for freight services. In addition to these charges there is also an accident fee for both passenger and freight trains per train-km (SEK 1.10 and SEK 0.55 respectively) and a fee for freight traffic using the Öresund Bridge per train crossing (equivalent to SEK 2,325).

26.18 Looking specifically at the fees for other rail-related services, the Network Statement provides the fees for the services that are offered by the infrastructure manager, they include:

- Passenger Information fee (SEK 0.0020 per gross tonne-km hauled);
- Diesel charge (SEK 0.31 or SEK 0.155 per litre consumed depending on the rolling stock used);
- Marshalling yard fee (SEK 4.00 per wagon shunted); and
- Electric consumption fee (see table below).

TABLE 26.3 ELECTRICITY CONSUMPTION RATES

Category	Wh/ Gross tonne-km (€)
Passenger traffic	
Locomotive train < 130 km/h	30.4
Locomotive train > 130 km/h	32.7
X2 < 160 km/h	29.8
X2 > 160 km/h	33.4
X1/X10 SL traffic	82.7
X10 GL and Skånetrafiken train	70.3
Other EMUs (mean value)	52.1
Freight traffic	
Single commodity train	18.9
Ore train	11.2
Combined rail train	20.5
Mail train > 130 km/h	37.2

Source: Baneverket Network Statement

26.19 The prices for access to the rail-related services not included in the information listed above are subject to private negotiations and contracts with the various providers of the services, both public and private; as a result we were not able to obtain the for a majority of the services.

Stakeholder analysis

Problems/complaints

26.20 There have been about 10 complaints in Sweden mainly in relation to the practices of SJ and Green Cargo, however none of these have been accompanied by strong enough evidence to warrant further action through the courts. Of these complaints two examples focusing on rail-related services were in relation to difficulties in shunting

when the shunting was undertaken by Green Cargo and the difficulty in obtaining contractual agreements with ports where Green Cargo is the facility manager.

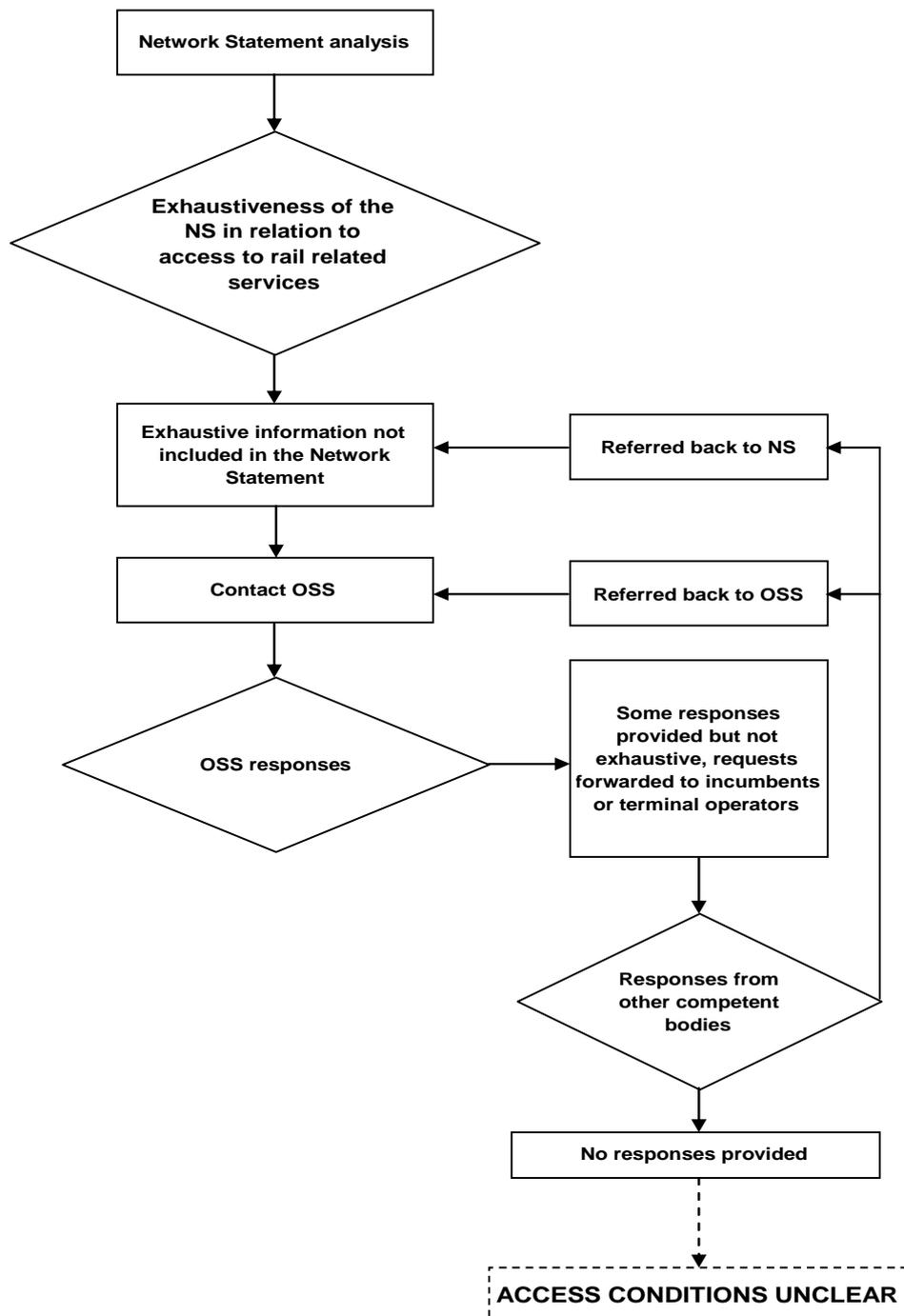
Stakeholder views

- 26.21 The stakeholders that we spoke to have explained that although the laws in relation to rail-related services have been applied in Sweden, in some cases, the reality on the ground is not always as required. There are often doubts about the prices that are to be charged for rail-related services, and in those cases where they are clear, some stakeholders have mentioned that they are too high.
- 26.22 The fact that the company in charge of training has been separated from SJ and that station access is granted by an independent company has helped access to these facilities and their services. This has also been accompanied by a number of companies that have been set up to undertake rolling stock maintenance, which shows the trend to introduce competition into the market.
- 26.23 Generally however, our discussions have shown that the overall market position is fairly open and that the problems that are being witnessed at the moment are transitory and they are being addressed by the Jarnvagsstyrelsen through an ongoing monitoring of the market aimed at addressing equality and structural difficulties within the market.

Case study

- 26.24 For the case study we contacted the One Stop Shop in Sweden to obtain further information on the access conditions, the figure below sets out the process that we followed for this network as well as the progress in terms of obtaining further data.

FIGURE 26.3 CASE STUDY PROCESS



- 26.25 As can be seen from the figure above, access conditions to rail-related services are unclear. The Network Statement does not include enough detailed information. The OSS was not able to provide more specific information other than those contained in the Network Statement and referred us to other organizations for more detailed information. In one case, the facility owner did not provide us with further information and referred us back to the OSS. Given this information loop, it can be seen that access conditions are unclear.

27. SWITZERLAND

Introduction

- 27.1 Switzerland is not a member of the European Union, however through bilateral agreements is still subject to the majority of European laws. Given this, the fact that Switzerland is in a strategic location in Europe and is an essential part of the transit routes of the North-South corridor for rail freight, it has been included in the analysis.
- 27.2 In Switzerland the rail-related services are undertaken by a small number of companies. Besides SBB a broad selection of services are provided by small sized companies. The table below sets out which companies offer each of the various services domestically.

TABLE 27.1 RAIL-RELATED SERVICES BY PROVIDER

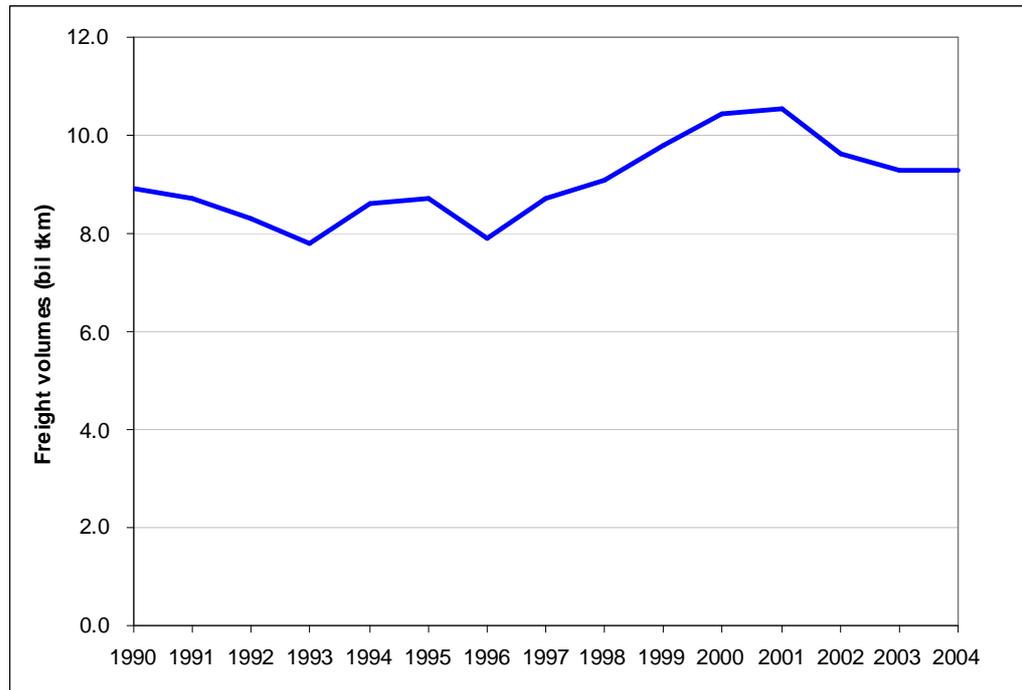
Service	Provider
Electricity for traction	SBB Infrastructure (infrastructure manager)
Diesel fuel for locomotives	SBB Infrastructure
Locomotive pushing services	Each operator independently
Back-up services	Each operator independently
Services in marshalling and shunting yards	Marshalling yards yet almost exclusively used by SBB Cargo
Train formation services	Sometimes offered by SBB. Otherwise each operator
Services in freight terminals	Each operator (mostly SBB)
Telematics services for freight operations	Each operator
Services in passenger stations	Each operator
Computer reservation services for passenger transport	Each operator
Training facilities	Retraining: each operator Training institutes mainly by SBB/log.in
Leasing of rolling stock and staff	Private lessors, Separate leasing of staff
Maintenance	Operator, manufacturer, lessor
Rolling stock cleaning	Operator (subcontractor)
Services in storage sidings	Operator (subcontractor)
Provision of on-board train protection systems; telecom and communications services	Manufacturers of the equipment
Services in border stations	SBB Infrastructure and operator

Market information

- 27.3 Since the Railimplement project, the market as a whole has levelled off as shown in the graph below. The figure shows the freight volumes transported by rail over the last

14 years.

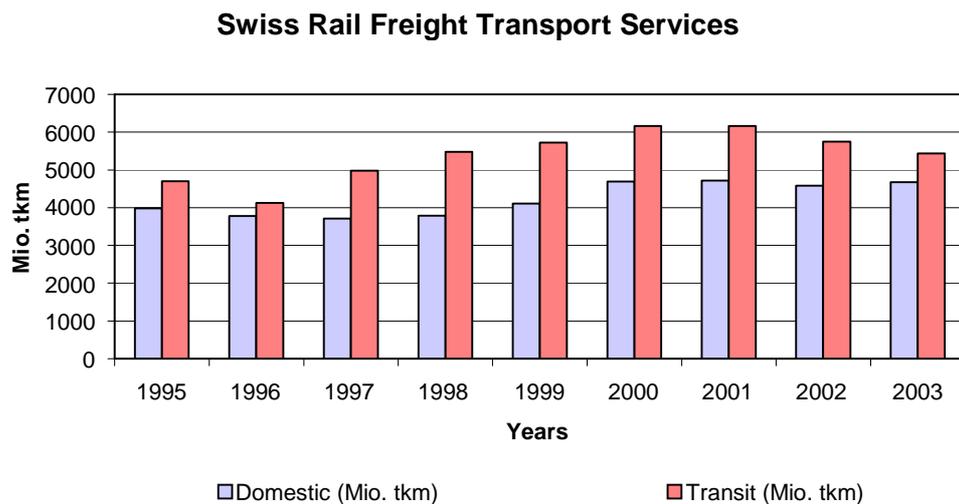
FIGURE 27.1 SWISS RAIL FREIGHT TRANSPORT VOLUMES



Source: European Commission and Steer Davies Gleave analysis

27.4 The figure below shows the breakdown of the flows above, between domestic and transit services.

FIGURE 27.2 SWISS RAIL FREIGHT TRANSPORT SERVICES



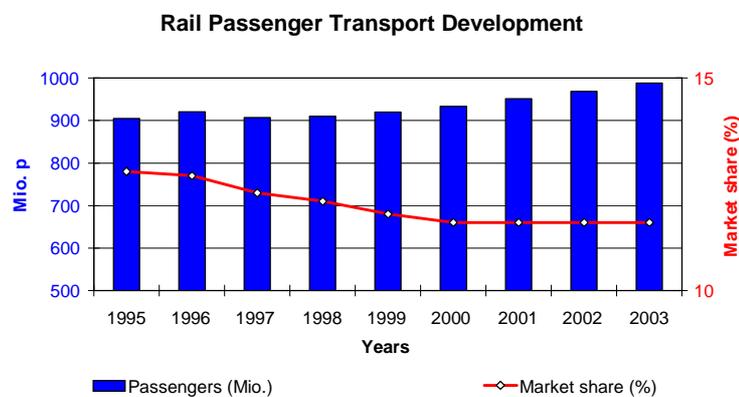
Source: SBB

27.5 The volume of rail transport services decreased slightly lasting recent years. In 2003

5.4 billion tonne-km were moved domestically and about 4.7 billion tonne-km were moved internationally. Whereas the domestic services decreased slightly the transit figures increased, experts predict that in the coming years a 50:50 split may be achieved.

- 27.6 The international intermodal market share of rail freight transport passing through Switzerland is increasing as a result of further growth in Alpine traffic. The domestic market share is however continuing to decrease. In 2003 about 13% of all transport services were undertaken by the rail sector.
- 27.7 The situation in the Swiss rail passenger market is more positive in absolute terms with the amount of passengers travelling by rail approaching 1 billion in 2003. However, during this period, passenger rail has continued to lose market share and in 2005 decreased to 11.5%. The figure below shows these trends.

FIGURE 27.3 RAIL PASSENGER TRANSPORT DEVELOPMENT (PASSENGER)



Source: SBB

- 27.8 The most important player in Switzerland remains SBB. It is the largest rail infrastructure manager and at the same time the largest carrier of passengers and goods. To meet the demands of the Directives a joint infrastructure company was founded together with BLS.
- 27.9 The railway sector remains strongly influenced by public bodies. The majority of the companies besides SBB are owned by regions and cantons and have a regional focus. There are also some pure private entities active in the market, however, in relation to the competing public sector the number of companies remains small. The most notable private companies are Rail4Chem and Transalpine.
- 27.10 One major change at the end of 2005 concerned the freight business of RM Regionalverkehr Mittelland. The freight and logistic unit "Logistik + Güterverkehr" named "Crossrail" was sold to Babcock & Brown, a private investment company.

TABLE 27.2 SUMMARY OF MAIN MARKET PLAYERS

List of operating companies		
SBB Schweizerische Bundesbahnen	SBB Cargo	BLS Bern-Lötschbergbahn AG
BLS Cargo AG	SOB Schweizer Südostbahn	THURBO
RM Regionalverkehr Mittelland (Crossrail)	TPF Transports publics fribourgeois	TMR Transports de Martigny et Régions
DVZO Dampfbahn-Verein Zürcher Oberland	CIS Cisalpino	Ev Eurovapor
VMK Verein Mikado 1244	Vpac Verein Pacific 01 202	VDBB Verein Dampfbahn Bern
HEG Historische Eisenbahn-Gesellschaft	HSB Verein Historische Seethalbahn	VVT Vapeur Val-de-Travers
CSG Club del San Gottardo	BDB Ballenberg-Dampfbahn	BC Chemin de fer musée Blonay-Chamby
LSE Luzern-Stans-Engelber-Bahn	TNT Association Train Nostalgique de la Vallée du Trient	RHB Rorschach-Heiden-Bergbahn
AT70 Association du Tram 70	R4CT Rail4Chem Transalpin	TXL TX Logistik

Source: Railimplement

- 27.11 Official figures regarding the intramodal competition are not available. For example the utilisation of the network by SBB, public and private railway companies was published for the last time in 2003. According to this, in 2002 nearly 98% of passenger train paths were sold to SBB and 2% to other public passenger transport companies. With respect to freight related train paths about 96% were used by the SBB freight division.
- 27.12 SBB Cargo recently decided to stop serving some of the sidings which were no longer economically viable. Through these efficiency improvements, SBB has saved €54.4 million. Furthermore, SBB predicts that they will reduce their staff figures in 2006 by about 250 employees and in 2007 by 110.

Implementation into national law of the provisions relating to access to railway services

- 27.13 The process of the Swiss railway reform started in 1999 with the “Bahnreform 1” and included revisions to the legal framework (“Eisenbahn-Gesetz”). Further modifications of the EbG in 1996 concerned the tendering processes for the procurement of regional transport services.
- 27.14 The Directive 91/440/EC has been implemented. The First Railway Package is still waiting for approval. Directive 2001/12/EC (Development of railway companies) and Directive 2001/13/EC (Licensing of railway undertakings) have been transposed into national law. It was expected that Directive 2001/14/EC (Allocation of infrastructure capacity, determination of access charges as well as safety certificates) would have

been introduced into national law before the end of 2005 (see table below). However the Swiss "National Assembly" decided in autumn 2005 to decline the "Bahnreform 2" initiative. The aim of this reform was to create a real level playing field between state owned, public regional and private railway companies.

TABLE 27.3 EU LEGISLATION TRANSPOSED INTO NATIONAL LAW

EU Legislation	Title	Implemented (and if so, in which piece of legislation)
Directive 2001/14	Allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification	In parts yes. To be completed. Basis: Art. 9, 19 SR 742.101

- 27.15 In order to meet the requirements of the Commission regarding non-discriminatory access to the network (separation of dedicated functions) "Trasse.ch" was founded. This entity is a company jointly owned by SBB, BLS and SOB and covers c. 94% of the total network. Three of the five members of the administrative board are representatives of these companies. "Trasse.ch" is in charge of distributing in a non-discriminatory manner the train paths for the annual timetable. Furthermore, this company assists the infrastructure managers as well as the applicant railway undertakings to develop a non-discriminatory network approach. In case of potential capacity constraints measures are taken to address the situation, if this is not possible the relevant routes will be declared as saturated.

Access conditions

- 27.16 The BAV offers a guide ("Leitfaden Netzzugangsbewilligung und Sicherheitsbescheinigung", V.3.1., 1.5.2005) which describes in detail the necessary procedures and preconditions to be fulfilled by the applicants.
- 27.17 Currently two versions of the Network Statement are available through the SBB website. The version for 2007 is already more detailed than the one for the previous year.
- 27.18 The Network Statement explicitly refers to assets such as track and interfaces like platforms or underpasses, as well as the energy supply facilities. For example, information regarding marshalling yards is not detailed and must be obtained separately by mail. The same is true for sidings, maintenance facilities and technical facilities.
- 27.19 Despite the huge number of documents, interested parties can understand the general access conditions in detail with a small amount of effort. Nevertheless additional work has to be done to learn the details about sidings, combined terminals, marshalling yards and other rail-related services.

The minimum access package and other services

- 27.20 The services that are made available to the railway undertakings are described in a service catalogue ("Leistungskatalog") and include basic services (train paths), additional services (e. g. shunting, water and energy supply, use of cranes, balances) and finally special services like driver trainings, feasibility studies, shunting with staff

and traction, train composition, signalling of the last wagon of the trains, the testing of brakes and information of the locomotive drivers.

- 27.21 The facilities accessible for applicants like stations, terminals, and shunting yards are mentioned, but not described in detail. The heading "additional services" contains all the service categories included in the Directive, but the necessary details are not given and had to be investigated separately.

Charging for services

- 27.22 The legal basis for the prices being charged in Switzerland for rail-related services is the Rail Access Decree Execute Statement AB-NZV 742.122.4 published by the BAV. The document provides the details concerning price figures set out in the following table.

TABLE 27.4 COMPONENTS OF MINIMUM PRICE OF RAIL ACCESS

Components	Remarks
<i>Share of Energy Supply</i>	
0.11 CHF/kWh for the supply from catenary 06:00 - 22:00 (peak tariff)	
0.07 CHF./kWh for the supply from catenary 22:00 - 06:00 (low tariff)	With the exception of testing drives, drives with historical vehicles, service trains of the infrastructure managers
0.003 CHF./Btkm for trains hauled with thermal traction on electrified routes	
<i>Share of Performance-linked Maintenance</i>	
0.002 CHF./Btkm on routes with light track	
0.0025 CHF./Btkm on other routes	
<i>Share of Staff Cost for the driving service</i>	
0.40 CHF./train-km	Not on tramway routes (Drives on sight)
<i>Share of Cost per arrival / departure for stations at network knots</i>	
5.00 CHF for large stations at network knots	Stations with at least 40 switches
3.00 CHF for other stations at network knots	Stations with at least 15 switches

Source: BAV

- 27.23 Energy consumption has to be measured by each railway company, as such each network user has to install, calibrate and maintain the necessary equipment on their own vehicles and at its expense. Shunting services are offered as additional services to be provided to railway undertakings. The working hours are limited from 12.00 - 04.00. On marshalling yards located at the border stations, shunting services are offered all day.
- 27.24 The service catalogue of the infrastructure managers defines a minimum prices given in the following table. The price for a train path is composed of three elements: the minimum price, the marginal income plus potential surcharges on top of the marginal income.

TABLE 27.5 COMPONENTS OF MINIMUM PRICE ACCORDING TO THE SERVICE CATALOGUE 2006

Components	Price (CHF)	Unit	Remarks
Maintenance for combined transport	0,0010	Btkm	Gross ton kilometre
Other types of transport	0,0025	Btkm	Gross ton kilometre
Driving Service	0,4000	Train/km	Train kilometre
Energy consumption Daytime 6.00–21.59	Day factor resp. x 0,64	Btkm	Day factor see below
Night-time 22.00 - 5.59		Btkm	
Trains hauled with diesel traction on electrified routes	0,0030	Btkm	According to NZV, Art. 19 and AB-NZV, Art. 1.1
Surcharges for network knots			
Large nodes	5.00	per arrival / departure	Nodes according to AB-NZV, annex 1
Small nodes	3.00	per arrival / departure	Nodes according to AB-NZV, annex 1

Source: SBB

27.25 For the consumption of energy there are various standard prices during day time (06.00 - 21.59) and night time (22.00 - 05.59). The basis is the standard energy charge of the day. The energy price for the night is calculated using the coefficient shown in the table below. The trains are classified according to the train operation figures that the railway companies provide to the infrastructure managers. To make the freight and passenger business comparable a seat of a passenger trains is considered to be equivalent to 20 kg. The table shows the different price levels between the infrastructure managers SBB, BLS and RM (incl. STB, Turbo, and port of Basel).

TABLE 27.6 ENERGY STANDARD FIGURES FOR DIFFERENT TYPES OF TRAINS

Type of Trains	Energy				Unit
	SBB Day / CHF	BLS Day / CHF	RM Day / CHF	Night co-efficient	
Intercity/Eurocity	0,0029	0,0043	0,0031	0,64	Gross tons
Fast trains/Interregio	0,0029	0,0043	0,0031	0,64	490
Regional trains	0,0058	0,0062	0,0062	0,64	240
Fast urban trains	0,0058	0,0062	0,0062	0,64	295
RegioExpress	0,0029	0,0031	0,0031	0,64	490
Long distance freight trains	0,0027	0,0029	0,0029	0,64	1050
Regional freight trains	0,0038	0,0041	0,0041	0,64	780
Tractor trains	0,0038	0,0041	0,0041	0,64	180
Locomotive trains	0,0044	0,0047	0,0047	0,64	140
Empty passenger trains	0,0044	0,0047	0,0047	0,64	280

Source: Swiss infrastructure managers

- 27.26 Additional services ("Zusatzleistungen") such staff rooms, installations and facilities as are also offered by the infrastructure managers. Shunting operations are commonly executed by the railway companies themselves. The prices for shunting include the agreed procedure, the use of the signal-box, the permission to move the trains, the utilisation of the transport facilities and the energy consumption excluding the use of the catenary. Currently the BAV provides a partial rebate for the cost of shunting on the SBB shunting yards.

TABLE 27.7 SHUNTING CHARGES FOR DIFFERENT TYPES OF TRAINS

Number	Type	Unit	Price (CHF)
1. Adjusting of shunting routes in marshalling yards			
	Shunting with electric vehicles	Each shunting SBB/RM	4.00
		Each shunting BLS	6.00
	Shunting with diesel vehicles	Each shunting SBB/RM	3.00
		Each shunting BLS	5.00
2. Shunting on marshalling yards of SBB			
	Wagon handling		
	- arrival	Each wagon	5.00
	- departure	Each wagon	5.00
	Composition groups	Up to 2. group	100.00
	Surcharge special shunting	Each wagon	20.00

Source: Infrastructure managers

- 27.27 Stabling of wagons and vehicles is also offered as an additional service to railway undertakings. Dangerous goods cannot be stabled on any part of the networks.

According to the size of the facilities and the specific situations the cost of stabling can vary from 40 CHF per metre-year to 120 CHF. Short-term parking is for free of charge. The utilisation of sidings is free for loading and unloading as long as the rolling stock is not stabled there for more than 8 hours.

TABLE 27.8 STABLING OF VEHICLES

Number	Charge per metre	Per day	Per month	Per year
3	Large facilities (and Interlaken East and Zweisimmen)	3.00	30.00	120.00
	Small facilities (and Belp, Bern Bümpliz Nord, Frutigen, Goppenstein, Grenchen Nord, Heustrich-Emdthal, Ins, Interlaken West, Kandersteg, Uetendorf)	2.00	20.00	80.00
	Other stations	1.00	10.00	40.00

Source: Infrastructure managers

- 27.28 The prices for the supply of water and energy are shown in the table below. As diesel traction only plays a minor role there are no details available in relation to the supply of diesel fuel.

TABLE 27.9 SUPPLY OF WATER AND ELECTRIC ENERGY

Number	Category	Unit	CHF
4	Water	Each m ³	5,00
		Per wagon	1,00
	Electric energy at SBB, RM	Each kWh	0,10
		Per wagon and 1/2 hour	9,10
	Electric energy at BLS pre-heating	Per wagon and 1/2 hour	5,00
	<u>Electric energy ex catenary</u>		
	-with rail tractor		5,00
	-with locomotive	Per wagon and 1/2 hour	7,00
	-only locomotive		5,00
	-light railcar		5,00

Source: Infrastructure managers

- 27.29 If operators need to use facilities outside the working hours defined by the infrastructure operator a surcharge of 106 CHF has to be paid for the staffing of that station. For the loading/unloading procedures infrastructure operators offer cranes, SBB and RM charge 80 CHF per hour for their use while BLS charges 10 CHF for every 15 minutes of use, but there is a minimum charge of 20 CHF per event.
- 27.30 The infrastructure manager defines clear interfaces between themselves and applicants for the use of such services as pre-heating of rolling stock and water supply, these services are the responsibility of the infrastructure manager. If unplanned stops are needed by railway companies at stations or freight terminals, they must be negotiated

with the infrastructure manager that charges 50,00 CHF for every additional stop.

- 27.31 Further information can also be obtained from the infrastructure manager, this is charged for in relation to the time it takes for the employee to gather the information, that is 200 CHF per hour or 50 CHF per quarter-hour. There is a minimum charge of 200 CHF.
- 27.32 For services that are not included in the rail-related service portfolio as set out in the Directive the price must be negotiated between the infrastructure manager and the railway undertaking. This category of service comprises distribution services, the baggage handling, and the management of accidents which do not hinder the rail operations as well as the cleaning services for vehicles.
- 27.33 The infrastructure managers also offer training services for train drivers to obtain route knowledge. Four journeys are necessary to obtain this knowledge and the charge for each session is 300 CHF.
- 27.34 As described most of the important services and prices are given in the service catalogue published by the infrastructure managers. However, many of the prices will only be quoted on demand or will be calculated according to direct cost. As a result, the total amount that a railway undertaking needs to pay for network access can only be seen in detail after a more detailed calculation and probably intensive negotiations with the infrastructure managers.

Stakeholder analysis

Problems/complaints

- 27.35 The market in Switzerland can be seen as being fairly open. Activities like the growth in transit traffic on the North-South corridors demonstrate the ability of the railway sector to perform successfully under the condition of inter- and intramodal competition. However, the market information provided above provides an overall picture which is not overly positive; the sector's growth is only moderate and substantial modal shift may not be achieved in the short to medium term. Furthermore, intramodal competition remains low, the incumbent has to face numerous challenges like the promotion of growth of the rail business, profitability and clearance of deficits, internationalisation especially of the freight business to name a few.
- 27.36 We have not been made aware of any specific problems or complaints in Switzerland in relation to rail-related services.

Stakeholder views

- 27.37 In general the new entrants said that not all the prices for rail-related services were transparent. One of the major issues in this context is that all prices for services according to Art. 23 of the document SR 742.122 are fully negotiable, that is the infrastructure manager is not obliged to apply the same prices to all operators. If the parties can not agree upon a price, the service will not be provided.
- 27.38 The availability of training facilities is said to be provided to all parties equally. The activities of the incumbent were transferred to the company "log.in". This is a non-

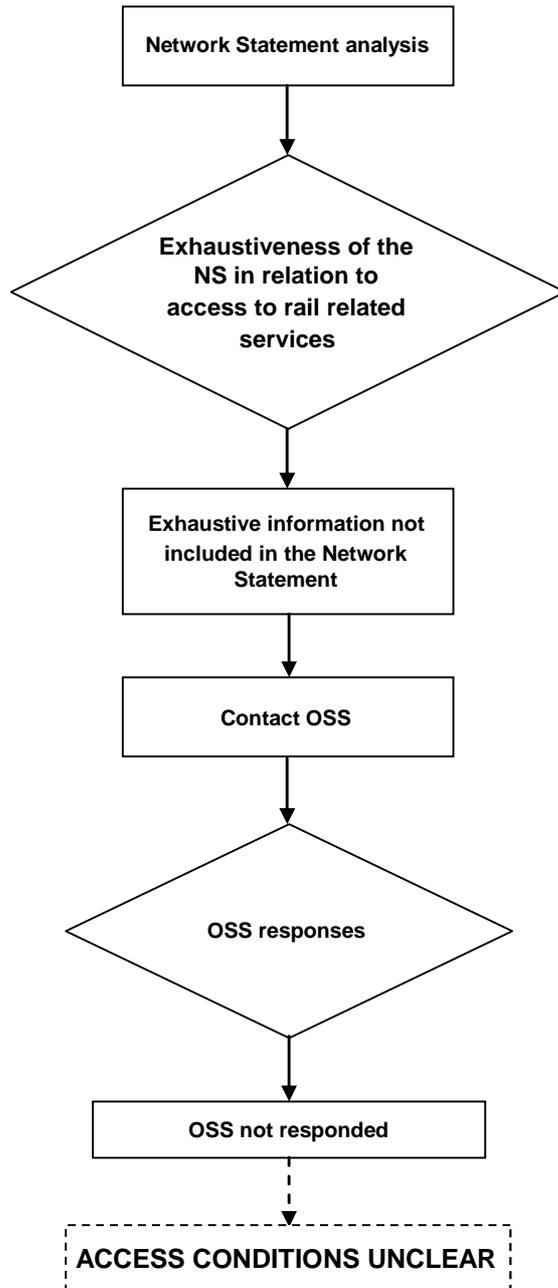
profit organisation which organises the training for all of the 33 companies of the public sector. A broad range of education topics are offered, of which training of locomotive drivers plays an important role.

- 27.39 Stakeholders have expressed concerns about the potential acquisitions by incumbent operators of smaller operators in the rail sector. This step would primarily concern the publicly owned railways, most of them operate on a local level and endeavour to run trains efficiently. As business in the railway sector is strongly influenced by international traffic, incumbents in Switzerland but also in Italy, Germany and the Netherlands try to enter new markets through acquiring a stake in domestic transport companies. This acquisition policy (e.g. DBAG's acquisition of RAG and some intermodal hauliers, etc; SBB with shares in Ralpin, Hupac and Termini; Trenitalia with participations in TX Logistik) also extends to services such as terminal owners, intermodal transports and logistics solutions and as such these acquisitions may have an impact on access to a number of other facilities and companies.

Case study

- 27.40 For the case study we contacted the One Stop Shop in Switzerland to obtain further information on the access conditions, the figure below sets out the process that we followed for this network as well as the progress in terms of obtaining further data.

FIGURE 27.4 CASE STUDY PROCESS



27.41 As can be seen from the figure above, the Network Statement does not include complete information with respect to access to rail-related services. We also contacted the local OSS of SBB but they have not responded to our survey. As a result we must conclude that access conditions are unclear.