

Chapter 4 Rail transport reform

Rail transport is one of the classic utilities, and its market failure was recognised early on. Even in the US, where the free market has always been an article of faith, governments sought to curtail the monopoly power and to prevent the subsequent unreasonable tariffs of railroad companies almost from the beginning. Many of the American public utility commissions, regulators of all utilities at state level, started their lives as Railroad Commissions. The Texas Railroad Commission for instance still goes by that name, and was founded in 1891 and had jurisdiction over rates, operations of railroads, terminals, wharves and express companies¹.

In Europe, characteristically, market failure was prevented by the state operation of railroads, usually in the form of national public railway companies that grew out of smaller private initiatives that were consolidated under state pressure. For instance *Deutsche Bundesbahn*, the German rail monopolist, finds its origins in the small state level (*Länder*) companies that were active before the German unification of 1870. In 1920, these were united in one *Deutsche Reichsbahn* (Denkhaus and Schneider, 1997:80).

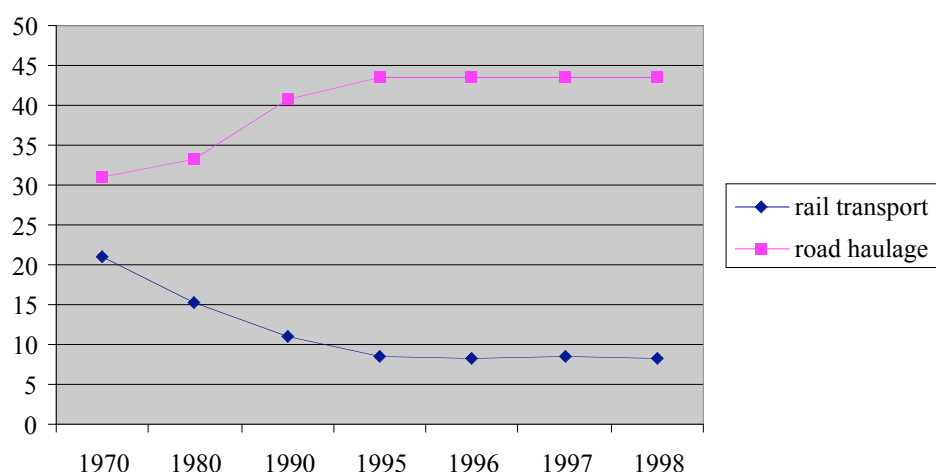
Railway reform first rose to prominence on the political agenda in the United States in the mid-1970s. In the US the railroads were the second industry, after the airlines, to be deregulated, in a bipartisan move that would “dramatically loosen government controls on these industries” (Keeler, 1984:104)².

¹ 1891 Tex. Gen. Laws, ch. 51.

² Keeler finds this timing surprising because a new set of theories on regulation had just become accepted in economics. Research indicated that regulation is subject to economic and political processes, implying amongst other things that regulators can be “captured” and can be guarding corporate interests rather than public interests. More instead of less government control would be justified if this were the case. This underscores that not all theories find their way to political prominence, only those that are acceptable or useful to politicians, as is suggested by Kingdon (1995).

In Europe, railway reform has focused on the liberalisation of rail transport (freight transport) rather than on passenger transport, and it has been carried out from the viewpoint of, and as a solution to, the structural problems of the rail transport sector. These problems are indeed large. Although transport volume in the EU has risen continuously over the past decades³ transport by rail has declined in the same period, whereas all other modes of transport have shown positive growth rates. In figure 4-1 only the percentage of total goods transport volume carried out by rail and by road is charted, but the grand picture is the same when rail transport is compared to transport by inland waterways, pipelines and intra-EU sea traffic⁴.

Figure 4-1: Percentage of goods transport volume going by road and by rail.



Source: European Commission⁵.

The European Commission, in 1996 reflecting on more than a decade of railway misery, attributed the decline to “the rise of other modes (of transport) that offered more flexible and less expensive transport: buses, lorries and the private car. Citizens and businesses increasingly turned to road transport, which led to the construction of road networks to meet this demand. At the same time traditional, heavy industries whose products were transported by rail declined in importance. The railways did not find new freight markets to compensate for this loss, offering services often consid-

³ European Commission, 2000. *EU Transport in figures, statistical pocket book 2000*. p. 11.

⁴ European Commission, 2000. *EU Transport in figures, statistical pocket book 2000*. p. 59.

⁵ Calculated from: European Commission, 2000. *EU Transport in figures, statistical pocket book 2000*. p. 59.

ered inflexible, unreliable and expensive, even in the sectors where they could be competitive”⁶. To end this situation the European Commission has proposed legislation aimed at an overhaul of the industrial organisation of rail transport. In line with the general economic and regulatory climate of the late 1980s and early 1990s, the overhaul comes down to liberalisation and deregulation of the sector⁷.

The goal of this chapter is to measure the extent to which the EU rail reforms have led to real changes in national legislation and the structure and characteristics of markets. Part 1 describes the national railroad sectors and policies as they existed before the EU took initiative, part two researches the four broad variables with indicators relevant to the railway sector. Part 3 summarises the findings.

PART 1: NATIONAL AND EUROPEAN POLICY INITIATIVES

Early initiatives

The member states

Prior to the implementation of European policy, *Denmark's* railways were operated by the Danish State Rail company (*DSB*), which was responsible for infrastructure and operation⁸. Post-war transport policy focused on the creation of fixed connections between the various islands that Denmark consists of, and this resulted in a number of large infrastructure projects like the Great Belt project, Øresund project, and the Sound projects (Lemberg, 1995:265). These projects accounted for a large proportion of investments in railways in Denmark in the 1980s and early 1990s (Bukold, et al, 1996:85). The organisation of railroads was left untouched. Another

⁶ European Commission, 1996. *A strategy for revitalising the Community's railways*. White Paper. (COM(96)421 final), p. 9.

⁷ Whether the liberalisation of rail transport is the best solution to the problems of rail transport or, in view of the general economic climate in the late 1980s, a solution waiting for a problem in the spirit of Kingdon (1995) is not the topic of this dissertation. Fact is that a liberalisation of rail transport was proposed to change the proportion of rail transport to road transport in a favourable direction.

⁸ OECD, 1998, “Railways: Structure, regulation and Competition policy”, *Competition Policy Roundtables No. 15*. DAFFE/CLP(98)1, p. 71.

feature of post-war transport policy is an orientation on the other Nordic countries and influence of industries, as exemplified by *Scandinavian Link*, a lobby organisation of Nordic companies and banks⁹, a group that the Nordic governments regard as important (Lemberg, 1995:273).

In France the *Société Nationale des Chemins de Fer Français (SNCF)*, founded in 1938 as a consequence of the nationalisation of public services by the Popular Front government of Léon Blum, is the main post-war actor in French railways, functioning as national transport authority (so: responsible for planning) and monopolist operator (so: responsible for running trains) at the same time (Domenach and Teurmier, 1999:307). The company followed two leading principles: *service public* and *aménagement du territoire*. In practice, the first principles means that the *SNCF* guarantees continuity of service, adaptation to demand and equal treatment of all users, wherever in France¹⁰. The second principle involves a vision of the future in which in 2015 no Frenchman, wherever in France, will be more than a 45-minute drive away from a railway station served by a high-speed TGV train¹¹ (Bukold et al, 1996:97).

The public service idea is also implicit in the relation between the state and the *SNCF*. To ensure that the *SNCF* can perform its public function the state is by law obliged to subsidise operating losses (Domenach and Teurmier, 1999:311). These losses were considerable. By 1990, the *SNCF* had a cost recovery rate of just over 60 per cent (Cole, 1998:242). The public service notion underlying French post-war railroad policy “is totally distinct from a rationale grounded in market forces” (Bukold et al, 1996:98) but widely supported in France¹².

The main post-war development in *Germany*'s rail transport sector, executed by the state owned *Deutsche Bundesbahn* is a long slide downward. In 1950, *DB* still moved 60 per cent of total German freight. In 1990 this percentage had declined to 29 per cent. *Deutsche Bundesbahn* felt the deteriorating conditions: its debts and deficits were continuously rising (Denkhaus and Schneider, 1997:80-1). In 1990 it managed to earn back a little over 50 per cent of its operating cost - the rest of its cost had to be subsidised (Cole, 1998:241-42).

⁹ Amongst others: *Volvo, Asea, Nokia, Carlsberg*.

¹⁰ Laid down in the *Loi d'Orientation des Transports Intérieurs*.

¹¹ Laid down in the *Loi d'orientation pour l'aménagement et le développement du territoire* of 4 February 1995, also called the Pasqua Act. The 45 minute standard also counts for motorways or expressways.

¹² “They love it”. *The Economist*, 24-05-2001

During this long decline, few structural measures were taken to turn around the situation. Staff reductions and the subsidising of deficits were for a long time the only measures. Only in 1989, when it became clear that EU-led liberalisations in road haulage would further undermine the position of railroads, did the federal government establish an independent governmental commission to investigate the future development of railroads in Germany. Before this federal commission had been able to come with meaningful proposals, the rail sector was already in a state of turmoil: because of the German reunification in 1991 *Deutsche Bundesbahn* was united with the former East German rail company, *Deutsche Reichsbahn*. This was an over-staffed former communist state company, which added few positive things to the state of German railroads in general. By then, however, the European Commission had come with its plans to revitalise railroads, and German railroad policy shifted to implementation of EU policy (Denkhaus and Schneider, 1997:81 2).

In 1941, the monopoly of the *Spanish* state in railroads was put down in the Rail and Road Transport Act of 24 January¹³. Spanish rail remained a monopoly throughout the Franco years. In the 1970s, the transition to a democracy and the general economic downturn caused great troubles in all Spanish state companies, lasting well into the 1980s when the González government took over. *RENFE*, the Spanish monopolist, was not spared the general fate of the Spanish public sector and booked large losses (Boix, 1997:266-7). The problems had a large structural component and after the democratisation political attention was - understandably - not focussed on infrastructure policy (Bukold et.al., 1996:185). Given the fact that in countries with strong industries, like the UK and Germany, rail transportation suffered a long post-war decline, it seems likely that the Spanish rail problems are attributable to similar factors rather than to the problems of democratisation - although the lack of political attention may have contributed to the problems.

The González government, during the 1980s, aimed at rationalisation without deep structural change (Boix, 1997:267). Public companies were trimmed, aiming at improvement of productivity, but privatisation was relatively limited. For *RENFE* the consequences were a slight improvement of financial results, although the result remained negative throughout the 1980s (Boix, 1997:267-8), in spite of a tripling of

¹³ OECD, 1998, "Railways: Structure, regulation and Competition policy", *Competition Policy Roundtables No. 15*. DAFPE/CLP(98)1, p. 119.

investment in the late 1980s (Boix, 1997:270). Structural revision of the rail company was not undertaken, until EU policy became a force of importance.

British railways were nationalised in 1948 (Preston and Root, 1999:5). The rail transport sector suffered a long post-war decline: between 1953 and 1980, more than 50 per cent of tonnage was lost to other transport modes¹⁴. Subsidising losses remained the answer to this crisis until in the 1970s criticism began to emerge focusing on “low productivity, inappropriate investments, managerial inefficiency and spiralling subsidies” (Preston and Root, 1999:5). The 1977 White Paper¹⁵ sought to provide a framework but offered “nothing theoretically or practically novel to the perennial problem of securing allocation efficiency in the transport sector” (Beesley and Gwillam, 1977:420). However, for all its shortcomings, the White Paper did promote the idea that market forces would improve efficiency, and it can thus be regarded as the first step of a gradual move toward full privatisation of British Rail.

The right way to privatise railways was under serious discussion by the late 1980s and choices had to be made between privatisation of *British Rail* as single unit, a series of geographical businesses, a series of product-based businesses, and (what was to become the main point of the ultimate solution) a separation of infrastructure and operations. Ultimately the 1993 Railway Act would implement the privatisation (Preston and Root, 1999:7). The fact that the 1993 Railway Act, the key reform bill for British railways, is *not* the main implementing instrument for the railway reform of the EU (the 1992/1994 Railway Regulations are) is a clear sign of how much the UK was on its own, or rather following the US and apart from the EU in the Thatcher years.

The nature of early reform

In spite of the deterioration of railroads, “under siege” as they were of road, air, water and pipeline transport (see Spsychalski, 1997:43ff) few governments took action to turn the situation around. The Danish government was mainly occupied with extending the infrastructure, and Germany and Spain simply neglected their railways. In France the fact that railroad lost its competition with other modes of transport was more or less accepted as a given, and the losses of *SNCF* were financed in order to

¹⁴ European Commission, 2000. *EU Transport in figures, statistical pocket book 2000*. p. 64. and StatBase®, is the on line accessible database, made available by HM Government.

preserve the public service, which is at least a policy with a clear goal, although it obviously did not result in a better situation of rail finances in France.

Only in the UK, likely inspired by deregulation in the US, privatisation schemes were under discussion. Concrete steps were not taken however until the early 1990s. No other member state in this study proposed market reform to change the situation in railways. That does not necessarily mean that railways did not receive attention; in terms of investment in infrastructures some authors point at a “railway bias” (Bukold, 1996:17), but the investments simply failed to increase the number of passengers or the amount of freight carried. Following Kiriazidis (1994:33) the lack of initiative of the member states can be interpreted as an acknowledgement of the fact that railroads are a public service offered to the public at a certain cost. Only when in the 1980s the post and telephone privatisations seemed successful governments became ready to apply the economics of the new right to railways.

The European initiatives

Early measures

The Treaty of Rome unequivocally orders the establishment of a common transport policy¹⁶, which is plausible because “The principle of a common market is inconsistent with any frustration to the access from one member state to another which is serious enough to hinder trade and mobility of people” (Kiriazidis, 1994:31). However, the development of such a policy was slow, partly because “other areas of EU policy, such as agriculture and monetary ties, have been given priority, but lack of immediate progress also reflects divergent views on the type of policy that should be initiated.” (Button, 1997:160). Some early measures were taken aimed at eliminating distortions of competition emanating from state intervention. These measures¹⁷ intended to create more autonomy for railway administrations, improve transparency of state financial contributions, and lay down uniform principles for the pricing of in-

¹⁵ H.M. Government, 1977, *Transport Policy*. CMND 6836.

¹⁶ Article 70 (ex Article 74) states: The objectives of this Treaty shall, in matters governed by this Title, be pursued by Member States within the framework of a common transport policy.

¹⁷ Regulations 1191/69, 1192/69, 1107/70, 2830/77 and 2183/78.

ternational railway traffic¹⁸. These measures could have had more effect, the Commission later argued, had the railway sector been exploited more commercially (Kiriiazidis, 1994:31). During the 1980s - reflecting the economic climate of the moment - the Commission developed plans for commercial operation of railways, in which the state would be responsible for infrastructure operation, while commercial undertakings would deliver the transport services (Kiriiazidis, 1994:32). This idea would be the core of the current liberalisation of railways. However, formidable obstacles block the ready liberalisation and commercial operation of railways.

The problems to be overcome

Railways, the first utilities with a more than local reach, were considered to fall naturally within the sphere of interest of government in Europe. "The theory of economics propounded by Adam Smith and developed by Cobden, Bright and Ricardo never contemplated a monopoly left unchecked by the state, and the control of railways was sanctioned by the strictest canons of laissez faire" (Hibbs, 2000:46). All over Europe, railways were built by governments in contrast to the US where laissez faire was the guiding principle¹⁹ (Hibbs, 2000:47). The national public railways companies that by the 1980s dominated - and monopolised - all aspects of railway operation in Europe could however not be readily privatised.

The state enterprises controlled both infrastructure (rails, electric power lines, stations, traffic control), rolling material (locomotives and wagons) and access to the network (the stations). Simply selling off the state stock in the national rail carrier and declaring an open market would not amount to much because there is no real possibility for a competitor to challenge the incumbent railway. Without regulation the incumbent would have no incentive to allow other companies to use its railway infrastructure²⁰ so a competitor would be forced to build its own - parallel to the infrastructure of the incumbent. Problems related to spatial planning and other second-

¹⁸ According to the European Parliament, this was far from satisfactory. In 1983, the Parliament challenged the Council and brought a case for the Court for failure to fix a framework for the common transport policy. The Parliament lost the case because it had not stated with sufficient precision the measures the Council had failed to take to make it possible for the Council to comply (Case 13/83 European Parliament v. Council).

¹⁹ Resulting in exploitation, particularly in the American West, and the subsequent establishment of railroad commissions to regulate the industry (Goddard, 1997:30).

²⁰ Given the nature of decreasing marginal cost it would even raise the incumbent's own operating cost, further discouraging opening of the infrastructure (see Appendix).

dary issues aside this would be a large and largely unnecessary investment since more efficient use of the existing infrastructure would probably suffice.

The European Commission has chosen for competing rail services that take place on a shared or open existing infrastructure. In addition to the positive effects of competition the infrastructure will be used more efficiently, which will add to the benefits of competition²¹.

For optimal service competition on shared rail tracks it is very important that the management of the infrastructure is completely taken from the hands of the incumbent state railway companies. The extent to which the infrastructure is opened to competitors (which eventually determines the success of liberalisation of the sector) depends on the extent to which the infrastructure manager can allow competing companies to use the track. To be as free as possible to exploit the railway infrastructure, and to be able to work for whatever client, any formal or functional tie to the incumbent should be cut. The remaining informal ties between infrastructure company and incumbent railway company alone (a result of decades of membership of the same incumbent state railway company) are a formidable barrier for open competition, let alone formal and functional ties.

Access to the infrastructure should be non-discriminatory, meaning that there are hard and strict criteria to allow or disallow railway access. Pricing should also be non-discriminatory, so also based on transparent, published criteria. In general, for a real market to emerge, there should be no uncertainty as to who is allowed access against what price.

Further, the European Union wants to diminish the role of the state in the day-to-day operation of railways, because, in line with the economic thinking of the 1980s and 1990s, it is expected that private companies will be more effective in handling the rail business. The European Union does not however propose a complete withdrawal from the rail sector - the relation to overall transportation policy and economic policy is probably too close - but only from company management.

The European Union has drawn up legislation addressing these issues. The directives 91/440/EEC, 95/18/EC, and 95/19/EC form the core of the liberalised railway framework. The standards set in these directives will be measured in this chapter.

²¹ For a further discussion of the advantages of open access to railway infrastructures, bearing on previous experience in natural gas, see: De Vany and Walls, 1997.

Directive 91/440/EEC

The preamble to directive 91/440/EEC states the goal of liberalisation quite clearly: “in order to render railway transport efficient and competitive as compared with other modes of transport, Member States must guarantee that railway undertakings are afforded a status of independent operators behaving in a commercial manner and adapting to market needs”²².

To reach this, the directive obliges Member States to:

(1) Separate the operational management, company structuring and investment decisions of railways from the state completely. The management, administration and internal control over administrative, economic and accounting matters are in the hands of the railway; assets, budgets and accounts are separate from those of the state²³.

(2) Separate infrastructure management from transport service provision. The development, maintenance and management of the national railway infrastructure remain a state responsibility. The state establishes or appoints a manager of the infrastructure who charges a fair user fee, and possibly on the basis neutral indicators such as mileage, train composition, speed, axle load, degree or period of infrastructure use²⁴.

(3) International operators must be granted right of access and transit to national railway infrastructures.

What the European Commission introduces is a common carrier principle in railway transport. The providers, the railway companies operating locomotives and wagons and handling transport of goods for clients, can rent capacity from the infrastructure operator (who is or works closely with the state who is responsible for infrastructure development) against non-discriminatory tariffs. This resembles the situation in telecommunications where interconnection rights ensure equal (and non-discriminatory priced) access to the telecommunications infrastructure. The goal is the same: to encourage competition at the level of services (in the case of rail transport that means competing on the basis of transport fares and pick up and delivery frequency) while access to and pricing of the infrastructure does not affect the behaviour of operators.

²² 91/440, preamble.

²³ 91/440, Art. 4 and 5.

Directive 95/18/EC

A further initiative to change the problematic situation of rail transport was taken with directive 95/18/EC concerning the criteria of licensing of railway undertakings²⁵. The directive obliges the Member States to establish or designate a body responsible for issuing licenses²⁶. Any company which satisfies the criteria should be given a license, and the company can then ask for access to the railway infrastructure. The criteria relate to “good repute, financial fitness, professional competence and cover for civil liability”²⁷. The goal of the license is to create neutral, Community-wide standards for access to the rail infrastructure. In principle, this should improve access for other companies than the state railway company because any party satisfying the conditions of the license should be granted access²⁸.

Directive 95/19/EC

The directive lays down principles and procedures that will have to be applied by the Member States regarding the allocation of railway infrastructure capacity and the charging of fees for use of the infrastructure. The following obligations are listed:

- (1) Member States shall designate an allocation body, which shall be informed of all available train paths. The task of this body is to ensure railway capacity on a fair and non-discriminatory basis and to allow optimum effective use of the infrastructure.²⁹
- (2) The pricing and decision making must be transparent³⁰.
- (3) The application and decision process must be transparent³¹, and applicants must satisfy certain requirements to obtain a safety certificate³².

²⁴ 91/440, Art. 6, 7, 8.

²⁵ The directive is not applicable to urban, suburban or regional services and the Channel Tunnel.

²⁶ 95/18/EC, Art. 3.

²⁷ Quoted from 95/18/EC, Art. 5. The criteria are worked out in detail in Art. 6 to 9.

²⁸ Licensing is a double-faced instrument. It can serve to improve the conditions of access, but it can also be used to put up a barrier for market entry. In railway transport, it improves the access conditions because the infrastructure operators, who usually once were part of the incumbent railway company, can no longer cite all sorts of operational difficulties (scheduling problems, capacity problems) to deny new operators access to the infrastructure.

²⁹ 95/19/EC, Art. 3.

³⁰ 95/19/EC, Section III lays down the details.

³¹ 95/19/EC, Art. 10.

³² 95/19/EC, Art 11.

Rail freight freeways

An important suggestion on the organisation of rail transport was the Commission's idea to establish rail freight freeways³³. International (intra-EU) freight transport is obstructed by the existence of national railway companies with different organisation and procedures. This frequently leads to problems with documents and causes time losses at borders. International railway paths, connecting places along a few main lines with easy shipping and handling procedures (“one-stop shopping”) should diminish the problem. The freeways’ operation principles are first, equal, fair and non-discriminatory access for all licensed railway operators in the EU. Second, the operation (access and pricing) must conform to 95/18/EEC et 95/19/EEC. Third, cabotage, which means that goods can be loaded at any begin point, unloaded at any terminal point, by a party anywhere in Europe (in other words, an German company can load goods in Bordeaux and deliver them to Paris). Fourth: they should offer fair and non-discriminatory access.

Reactions of the member states

The proposals of the European Union did not stir up great controversies in or adverse action by the member states. In fact, the member states generally accepted the European framework and quietly started working on the implementation. In the end many member states went even further than the minimum requirements set by directive 91/440/EEC³⁴. There was opposition to these plans from the side of trade unions - not surprising when a sector with a high union density will undergo changes (Pedersini and Trentini, 2000). However, with the exception of some serious trade union opposition in the UK³⁵ trade unions generally consented.

It seems likely that three factors contributed to the political acceptance of, and the relative silence around the rail transport proposals. First, although the measures would have consequences for the operation of railways in general, they were initially aimed at (or disguised as) mere rail *transport* policy, not a political hotspot. If transport policy was addressed at all, usually road haulage received most of the atten-

³³ European Commission, 1996. *A strategy for revitalising the Community's railways*. White Paper. (COM(96)421 final), p. 16.

³⁴ For example Germany. See: Denkhaus and Schneider, 1997:83 and Julitz, 1998.

³⁵ “Rappelant le conflit des mineurs de 1984-1985 la grève dans les chemins de fer britanniques menace la politique de privatisations du gouvernement”. *Le Monde*, 12-08-1994.

tion³⁶. Second, solution of railway problems was needed urgently because of the long post-war decline, which led to the subsidizing of debt, not to mention the quality of service or lack thereof in some member states³⁷. In some countries the plans coming from Brussels were felt as a badly needed “new wind” (Denkhaus and Schneider, 1997:83) shaking up the field. And third, the proposed measures were in line with the current political economy of governments, so there was little reason to oppose the rail transport plan of the European Commission.

PART 2: ASSESSMENT OF THE EXTENT OF IMPLEMENTATION

Variables and indicators

Printed in table 4-1 below are the broad variables and indicators (which are in fact the projected changes European legislation is supposed to create) that will be used to establish the extent to which EU legislation regarding rail transport has been implemented.

Regulatory renewal, the extent to which the European framework has been transformed into national frameworks that potentially deregulate railways, is established by looking at the transposition of EU directives (*implementation of core directives*). This measures the fulfilment of the obligations of the member states towards the European Union. To see whether a *viable* framework has been created the extent to which the frameworks create real changes has also been established, in *disaggregating of railways* (measuring the extent to which legislation will be able to create separate infrastructure and operating companies), *organisation of railway allocation* (evaluating whether newcomers have a real chance of gaining access to the network)

³⁶ For example in 1991 the UK government proudly announced that rail was, from now on, again a topic for political consideration: “Changement de voie : pour tenter de résorber la crise du transport, le gouvernement britannique veut aider au développement du chemin de fer. Rompant avec l'un des héritages les plus contestés du thatchérisme, la préférence systématique donnée à la route au détriment du rail, M. Malcolm Rifkind, ministre des transports, a annoncé mardi 28 mai, au cours de la conférence sur le transport à Londres organisée par le Financial Times, une série de mesures destinées à développer le trafic ferroviaire”. “Retour au rail à Londres“, *Le Monde*, 30-05-1991.

and *organisation of regulation* (evaluating whether effective and independent regulation can be carried out in the member states).

Table 4-1: Overview of variables measuring liberalisation in rail transport.

Main variables	Indicators
Regulatory renewal	
The extent to which an effective competition framework is implemented	<ol style="list-style-type: none"> 1. <i>Implementation of core directives</i> 2. <i>Disaggregating of railways</i> 3. <i>Organisation of railway allocation</i> 4. <i>Organisation of regulation</i>
Market renewal	
The extent to which the market becomes competitive	<ol style="list-style-type: none"> 5. <i>Market structure</i> 6. <i>Privatisation</i> 7. <i>Market power of incumbents</i>
Efficiency and innovation	
The extent to which the market is more efficient and innovative	<ol style="list-style-type: none"> 8. <i>Efficiency</i> 9. <i>Innovation</i>

The extent to which actual changes have occurred is measured in *market renewal* and *efficiency and innovation*. The indicators for *market renewal* establish the position of companies and the functioning of the market. *Market structure* evaluates the market in terms of the number of active companies and *privatisation* the extent to which the incumbents have become “normal” market parties. *Market power of incumbents* measures the position of incumbents in terms of percentage of freight they move on national markets.

Efficiency and innovation (and the indicators of the same names) establish whether the improvements of efficiency and innovation that deregulation is supposed to create are actually observable.

Limitations and scope

The research focuses on three major legal initiatives: one directive from 1991 and two from 1995. These aim at restructuring the setting or conditions surrounding the rail industry, and form a coherent liberalisation initiative that is in its aims comparative with those in other utility sectors. As far as the period or situation that is meas-

³⁷ In the UK quality of service was, in the early 1990s, generally considered low, and it was reported in newspapers that only six out of ten provincial services met the standards for reasonable fares, cleanliness and punctuality set by the Monopolies and mergers Commission (Kiriazidis, 1994:33).

ured is concerned, an attempt to measure the effects of the 1991 and 1995 directives separately has not been made. The measures are taken as one framework and the second half of the 1990s is the period in which effects have been gauged.

The measurement of variables encountered two other important setbacks. First, it has not always been possible to restrict measurement to rail transport, as opposed to railways in general, completely. Some measures, although legally confined to rail transport, affect railways as a whole, for example the separation between infrastructure and operation. In no member state has this measure been restricted to rail transport companies, since the incumbents were active in both passenger and freight services. Generally, this has not been a problem, only in the case of the measurement of efficiency the figures for rail transport could not be separated from general railway figures. The efficiency figure thus includes both passenger and freight operations.

A second, and more important, problem was the variable *price development*. In general, privatisation and deregulation of utilities was carried out to redress their deficient financial and operational performance (Denkhaus and Schneider, 1997:72). The protection of the state, more precisely the absence of competition, had created large and lazy public companies with low levels of service and high prices, and the market, more precisely, the competition with other companies delivering the same service, would create lean and mean private companies, with high levels of service and low prices³⁸. In this constellation, the price is a telling indication of increased competition, because the overstuffed (Denkhaus and Schneider, 1997:72) and technologically backward³⁹ public companies, faced with smaller and technologically more competent challengers would have to cut cost and lower prices.

There is however a fundamental difference between rail and the other utilities: unlike in telecommunication and electricity there exist competing industries delivering exactly the same service: the movement of cargo over distances. Road haulage, water transport and for some goods pipeline transport offer alternatives of identical quality to rail transport - and the proof is that the alternative transport modes have been cutting the marketshare of rail transport. No other utility has faced strong competition

³⁸ The spectrum of rationales is wider than the one presented here which focuses on management and efficiency (See: Denkhaus and Schneider, 1997:72).

³⁹ "Power to the people", *The Economist*, 26-03-1998

from services of comparable quality yet⁴⁰. Rail transport faces stiff competition from other transport modes, and the fact that the competition was winning played a large part in initiating deregulation policies in the U.S. and Europe (Spsychalski, 1997; Button, 1997). The consequence is that rail freight charges are not a good indicator for changes in the rail transport sector itself because any development in tariffs can be the effect of either new entrants or other modes of transport. This would make conclusions from price movements as regards to the state of competition from other rail transport companies too tentative to be of value. Hence, the choice has been made not to establish price developments in rail freight.

Establishing regulatory renewal

Implementation of core directives.

The first, and simplest, test of implementation is to see whether legislative action has been taken by the Member States and if that has resulted in the legal implementation of the directives. Table 4-2 shows the implementation of the three core directives. All member states were late implementing the main instrument, directive 91/440/EEC, although not excessively late⁴¹. Regarding the 1995 directives, only Denmark managed to transpose these on time, so it is clear (see also table 4.2) that the transposition of the rail directives is not an astounding success. However, this should not be taken as open hostility towards the measures Brussels was proposing. Given that the European package, the core of which was a more commercial operation of rail freight services, was in line with the general economic climate of the day, and fully in line with broader European goals regarding integration and free movement of goods, there is no need to assume wilful obstruction across the board.

⁴⁰ There is however evidence that mobile telecommunications is now replacing (one way substitution) fixed telecommunication, to some extent. In a survey executed by *dotecon*, ordered by BT 9.5 per cent of respondents of a survey sample size of 2970 did have no other phone than a mobile phone, the percentage increasing as respondents came from smaller households (See: Dotecon, 2000, *Fixed-mobile substitution. Second report for BT*, p. 9). At the time of the telecom liberalisation this effect must have been much smaller, and hence unimportant.

⁴¹ Full implementation in Spain extended to 1997, yet the core implementing instrument is the law that was passed in 1994.

Table 4-2: Dates of implementing measures transposing liberalising directive.

	91/440/EEC Implementation date: 01-01-1993	95/18/EC Implementation date: 27-06- 1997 ⁴²	95/19/EC Implementation date: 27-06- 1997 ⁴³	Assessment
Denmark	Late • 1994 (law)	On time • 27/12/1996 (law) 26/6/1997 (decree)	On time • 27-12- 1996 (law) • 26-06- 1997 (de- cree) • 26-06- 1997 (de- cree)	3
France	Late • 09/05/1995 (decree)	Late • 26-12- 1998 (de- cree)	Late • 26-12- 1998 (de- cree)	1
Germany	Late • 27-02- 1993 (law)	On time • 27/10/1994 (decree) • 17/02/1997 (decree)	Late • 17-12- 1997 (de- cree)	2
Spain	Late • 30/07/1987 (law) • 23/07/1964 (decree) 12/1/1994 (decree) • 30/12/1997 (law)	Late • 02-10- 1998 (de- cree)	Late • 02-10- 1998 (de- cree)	1
UK	Late • 1992 (regula- tion) • 1992 (regula- tion) 1994 (regula- tion)	Late • 1998 (regula- tion) • 1998 (regula- tion) • 1998 (regula- tion)	Late • 1998 (regula- tion) • 1998 (regula- tion) • 1998 (regula- tion)	1

Source: CELEX database.

It is more likely that the legal preparation of the liberalisation of a sector that was traditionally seen as a very natural government activity took more time than the two

⁴² Usually one of the closing articles of a directive mentions a date for implementation to be completed, this directive only mentions (Art. 16-2) that member states need to be in compliance within two years of publication in the Official Journal. The directive was published in OJ L 143 on 27-06-1995.

⁴³ Usually one of the closing articles of a directive mentions a date for implementation to be completed, this directive only mentions (Art. 14-2) that member states need to be in compliance within two years of publication in the Official Journal. The directive was published in OJ L 143 on 27-06-1995.

years the Commission had given the member states. Supporting this is the fact that *all* members were late in transposing the directive⁴⁴.

The scores are attributed on the basis of the number of late implementations: each count of a late implementation leads to subtraction of one point of the maximum score of 4.

The disaggregating of railways

The disaggregating of European railways was a major instrument of the EU to introduce commercial principles, allow free access to national railways and enable international competition (Kiriiazidis, 1994:35, Cole, 1998:119). The formerly integrated railways were to be split-up, in a company responsible for management of the infrastructure and in a company (or more companies) providing transport services⁴⁵. The state explicitly remains responsible for the planning and expansion of the infrastructure in the long run⁴⁶, probably (no reason is given in the directive) because decisions on rail infrastructures at large need to be taken together and in conjunction with national economic, spatial and wider transportation policy.

Railway infrastructure companies make the existing infrastructure available to operators, according to some agreed access charging system⁴⁷ covering the infrastructure cost and being transparent to the user⁴⁸. This might include all or some of the following (chargeable) activities:

(1) Operation, maintenance and expansion of the government's railways

⁴⁴ Latest implementing measures of the other member states (EU-12): Belgium: 1997, Greece: 1996, Ireland: no notification, Italy: 1994, Luxemburg: 1999, The Netherlands: No notification, Portugal: 1995 (Source: CELEX database).

⁴⁵ 91/440/EEC, Art. 1.

⁴⁶ 91/440/EEC, Art. 7.1. According to the same article member states also remain responsible for laying down and monitoring safety standards.

⁴⁷ The minimum conditions on network access laid out in 91/440/EEC, Art 10. are that international undertakings shall be granted transit rights, that undertakings from other member states shall be granted access on the basis of reciprocity, and that users of railway infrastructure shall conclude arrangements with the managers of the infrastructure with a view to safety and traffic control. So, one should not show up unexpectedly with a train, but first arrange which safety conditions apply, which tariff applies, and which tracks on which times one can use. Access is not automatic, but depends on successful conclusion of these arrangements. The member states are however free to make more liberal arrangements. All member states comply with the minimum requirements (which is why network access has not been included as a separate variable); Denmark, Germany and the UK have more liberal arrangements. Access charging systems vary across Europe. See: Community of European Railways, 2000. *Implementation of directive 91/440 in EU member states and candidates countries* [report]. See also: Cole, 1998:112ff.

⁴⁸ 91/440/EEC, Art 8 states that the user fee "shall be calculated in such a way as to avoid any discrimination between railway undertakings".

- (2) Control and monitoring of the traffic on the railway network
- (3) General traffic schedule planning
- (4) Allocation of capacity to the individual operators
- (5) Charging fees from the operators for the use of the rails⁴⁹.

It should be noted that the directive does not specify any organisational, legal or accounting measures for the way the separation between infrastructure provision and service provision is to get its final shape, and that the member states are, as a consequence, free to choose their own modes. The ownership of companies (private or public, Cole, 1998:119 - the orientation is on operation rather than on ownership) is also left to the member states.

The separation of the rail infrastructure company and the service providers should be as complete as possible. For liberalisation to be effective the management, accounting and operations of the infrastructure company and the incumbent should be separated completely. Only this can prevent the existence or (re)emergence of formal and informal relations between infrastructure operator and incumbent that could obstruct competition. In all countries in this study infrastructure management used to be a task of the incumbent but is now left to a new body whose staff might still be attached to and used to the (former) state railway operator, which gives the latter an undue advantage in the complex negotiations and decisions that come with opening the infrastructure to competitors. The former incumbent is also still the largest operator or at least started out as such, with superb connections in the railway world, both in the capitals and in the industry, so the informal means of pressure are formidable. Only a very strict and complete separation will ensure the independence of the infrastructure company from pressures of the incumbent. The reason is simple, and in view of the goals of the EU somewhat disconcerting. Rail is an interdependent system of transportation, and a separate infrastructure company “will lose the considerable benefits associated with vertical integration and the economies of co-ordination” (Kiriazidis, 1994:35). A strict separation should place these benefits⁵⁰, of which

⁴⁹ For example, a division of the infrastructure and service responsibilities was introduced in Sweden and Switzerland in the late 1980s. The national infrastructure companies were responsible for provision and maintenance of rail capacity, signalling, electric power, the stations and terminals (Kiriazidis, 1994:35).

⁵⁰ Foregoing these benefits in theory should be compensated by the lower prices and stronger service orientation competition and market conditions create. There is evidence that private firms hired to perform operational tasks in infrastructure provision achieve cost savings up to 30 per cent (Poole, 1997:95).

some can be reached through informal ties as good as through formal ties, out of practical reach. Effective regulation is also a prerequisite. Informal separation can of course not be measured, but a *strict* formal separation is in any case a *conditio sine qua non* for independence.

Table 4-3: Disaggregating the railways. Infrastructure companies and their relation to the incumbent rail operator, assessment scores.

	name	relation to incumbent (and partial assessment indicator)	Assessment scores
Denmark	Banestyrelsen	Separate	4
France	Réseau Ferré de France (RFF)	Formal contracts. RFF has handed over op- eration and mainte- nance of the network to the incumbent, SNCF	1
Germany	Deutsche Bahn (DB)	Business unit of in- cumbent that has holding structure. Accounting and man- agement separate from other business units	1
Spain	Gestor de Infraestruc- turas Ferroviarias (GIF)	Separate	4
UK	Railtrack	Separate	4

Sources: Danish ministry of transport (Trafikministeriet), Gestor de Infraestructuras Ferroviarias . OECD⁵¹. Domenach and Teurnier, 1999. Lehman, 1999. Prestonn and Root, 1999.

Table 4-3 gives an overview of the status of infrastructure companies and the relation to the incumbent railway companies. In three countries, Denmark, Spain and the UK, there is a formal separation. These countries receive assessment scores of four on that point.

In France the infrastructure company, *RFF*, has contracted out most of its work back to the *SNCF*, with the effect that *SNCF* has the “monopoly of the provision of day-to-day management, maintenance, infrastructure operations and design of train circulation” (Domenach and Teurnier, 1999:329). The independence of *RFF* is further in doubt because of the dependence on the state and the regions (Domenach and Teurnier, 1999:326), and it is even suggested that *RFF* is a mere ploy to act as debt settlement corporation for the *SNCF* (Domenach and Teurnier, 1999:327). Whatever the intentions, *RFF* does not operate as an independent rail manager and its more

⁵¹ OECD, 1998, “Railways: Structure, regulation and Competition policy”, *Competition Policy Roundtables No. 15*. DAFPE/CLP(98)1.

than cosy relations with the incumbent *SNCF* leaves most of the functions that according to directive 91/440/EEC should be in the hands of an independent company in the hands of the incumbent. This results in a low score of 1.

In Germany, the infrastructure operator is a business unit of the incumbent, *Deutsche Bahn (DB)* (Lehman, 1999:150), which also reduces the separation to a mere formality. Being a business unit, the division responsible for infrastructures is supposed to contribute to the profit of *DB* and would hurt the position of *DB* if it will grant access to the rail infrastructure to competitors of *DB*. This is an open invitation to favouritism. Consequently the assessment score is very low, 1.

Organisation of railway allocation

Directive 95/19/EC sets up the framework for allocation of rail capacity and charging for use of rail. These arrangements are crucial because they determine which operator gets access to which tracks and at what price. The organisation of these vital access conditions goes a long way to determining the state of competition on the track⁵². Naturally, the allocating body should not be institutionally linked to the incumbent railway, or at least member states should take as much care as possible to prevent institutional ties. Again, the powerful benefits of an aggregated railway company should be out of practical reach for the allocating agency and the incumbent.

Table 4-4: Organisation of railway allocation .

	Agency	Assessment score
Denmark	Infrastructure company (<i>Banestyrelsen</i>)	4
France	Infrastructure company (<i>RFF</i>). <i>SNCF</i> is responsible for train path studies	1
Germany	Infrastructure company (<i>DB Netz AG</i>)	1
Spain	Rail company (<i>RENFE</i>)	1
UK	Infrastructure company (<i>Railtrack</i>)	4

Source: CER⁵³.

⁵² Operators should have a license before they can apply for track to be allocated for use. Licensing and the conditions for obtaining a license are arranged in directive 95/18/EC. The licensing regimes of the member states do not significantly diverge from the requirements of the directive, so there is almost no variation between the member states, which is the reason why licensing has not been made into a separate variable. See: Community of European Railways, 2000. *Implementation of directive 95/18 in EU member states and candidates countries.*

⁵³ Community of European Railways, 2000. *Implementation of directive 95/19 in EU member states and candidates countries.*

Generally the first responsible for allocation is the infrastructure company. Where the independence of that company is guaranteed, as in the UK and Denmark (see table 4-4), the condition for at least a formally sound organisation of allocation has been fulfilled, hence maximum scores for the UK and Denmark. Table 4-3 also indicates that general infrastructure management in Spain is in the hands of an independent organisation, the *Gestor de Infraestructuras Ferroviarias (GIF)*. However, operational allocation decisions are left to *RENFE*, the incumbent railway operator, which is the worst possible institutional arrangement, hence the low score.

In Germany the infrastructure company is responsible for operational allocation decisions, however, the independence of that company can be challenged because it is a division of the incumbent railway, so it has, as does *RENFE* has in Spain, a commercial interest in allocating the best slots to other divisions of the incumbent. The score is set low for that reason.

In France, the infrastructure manager, *RFF*, is responsible for allocation. It had already been established that the independence of *RFF* was questionable because the day-to-day management of the infrastructure was left to *SNCF*, the incumbent railway. Theoretically allocation decisions could be the exact location of the last remnant of independence of *RFF*, however, given the fact that *SNCF* has a role in designing rail paths (so, designing which actual tracks and routes will be used to get from one point to another) there is every chance of, to put it mildly, the case of *SNCF* being somewhat overrepresented in the eventual decision. Accordingly, a low score has been awarded.

Organisation of regulation.

The importance of an independent regulator can hardly be overstated, yet the directives do not oblige the member states to establish one. Nevertheless, given that the restructuring of rail is based on the American system of regulation, given the fact that independent regulators are common institutions in the telecommunications sector, and in particular given the fact that separating legislation, production and regulation is an important theoretical notion in itself in utility economics (For example Melody, 1997:22) it would be reasonable to expect that an independent regulator is part of the structure of liberalised railroads.

Table 4-5: Responsible for regulation. Agency taking operational decisions on licensing and/or access issues, competition, quality of service.

	Responsible for regulation	Assessment
Denmark	Ministry	1
France	Ministry	1
Germany	Ministry	1
Spain	Ministry	1
UK	Office of the Rail Regulator	4

Table 4-5 gives an overview of the organisations that are responsible for regulation in the operational sense (like licensing and access matters, ensuring competition or quality of service).

Only the UK has a really independent regulator. In all other countries, the transportation ministry still performs this function. Naturally, the legal responsibility of the general competition authorities and courts specialised in competition matters extend to rail companies also, so the fact that there is no special regulator should not be seen as an indication that there is no regulation at all. Yet, it leaves the rail sector vulnerable. In particular, the new railway infrastructure companies with formal ties to the incumbent railway in both Germany and France need to be supervised closely, preferably with ex ante rules. They offer access to the infrastructure, and in view of the fact that many of them are former departments of the incumbents favouritism is a real danger and competition can be seriously hampered as it is easier to open the infrastructure to just one large party than to many parties, all with their own claims to infrastructure use. Not having a truly independent regulator can thus only be seen as a serious shortcoming in the performance of the national government in planning and executing railway liberalisation.

Overview

Table 4-6: Overview of regulatory renewal scores. Maximum = 16.

	Implementation of core directives	Railway disaggregation	Organisation of railway allocation	Organisation of regulation	Variable: Regulatory renewal
Denmark	3	4	4	1	12
France	1	1	1	1	4
Germany	2	1	1	1	5
Spain	1	4	1	1	7
UK	1	4	4	4	13

Establishing market renewal

Market structure

Through the introduction of commercial principles (Kiriazidis, 1994:35) on the track the Commission wants to render railways efficient and competitive with other modes of transport. If this is to be successful there should be more than one provider of railway transport services.

Table 4-6 presents the market structure in 2000. The research from which these data emanate (Pedersini and Trentini, 2000) makes a distinction between markets characterised by monopoly (no competition), markets characterised by a dominant company (one dominant operator with some competition) and multi-operator markets, shared between competitors of whom none has a dominant position.

Table 4-7: Market structure in 2000.

	Market structure	Assessment score
Denmark	Dominant company (<i>Danske Statsbaner, DSB</i>)	2
France	Dominant company (<i>Société Nationale des Chemins de Fer, SNCF</i>)	2
Germany	Dominant company (<i>Deutsche Bahn, DB</i>)	2
Spain	Dominant company (<i>Red Nacional de Ferrocarriles Españoles, RENFE</i>)	2
UK	Multi-operator market	4

(Source: Pedersini and Trentini, 2000. Table 1.)

Clearly, with the exception of the UK, the market structure has not moved far from the traditional monopoly in utilities. Markets with one dominant⁵⁴ operator define the picture in continental Europe. Given these structures the UK receives a score of four because it has reached a complete change of market structure and the other countries receive a score of two because the incumbents have more than 50 per cent market shares. They do not receive the lowest score because they are not characterised by monopoly.

What is the relation between the regulatory package and the emergence of multi-operator markets? Only in Denmark are there no multi-operator markets, while the regulatory renewal is within acceptable standards. In France, Germany and Spain

⁵⁴ In EU competition law, this is a company that has a “position of economic strength (...) which enables it to prevent effective competition being maintained in the relevant market by giving it the

there are no multi-operator markets, but the implementation of the EU package, as measured by regulatory renewal, was also generally deficient, while in the UK, where the regulatory renewal is considerable, there has also emerged a multi-operator market. Only Denmark is anomalous: it has favourable score on regulatory renewal, but no multi-operator market⁵⁵. If this is not a random occurrence, and if the regulatory framework is the only determinant factor for market structure⁵⁶ then what could account for the situation - deregulation but no market change - in Denmark?

Interestingly, although the scores for regulatory renewal are generally high for Denmark, there is one aspect of the regulatory framework on which Denmark had a low score of 1: the organisation of regulation. The operational decisions on licensing, access issues, competition and quality of service lie with the ministry instead of with an independent regulator. In fact, the pattern of organisation of regulation matches perfectly with that of market structure: high scores for the UK and low scores for the other countries in the sample (table 4-8).

Table 4-8: Matching pattern for two sets of scores: organisation of regulation and market structure.

	Scores for organisation of regulation	scores for market structure
Denmark	1	2
France	1	2
Germany	1	2
Spain	1	2
UK	4	4

Does this mean that the other regulatory variables do not matter, and that the assessment of the quality of the regulatory framework can be reduced to the assessment of the organisation of regulation? Yes and no. Yes, because an independent regulator can be seen as a *conditio sine qua non* for effective deregulation without which other factors do not matter. For example, the organisation of allocation decisions (who may use which track and what time) is moot if the regulator can use or abuse licensing and demands to safety and quality of service to keep competitors off the track because there will simply be no need to take any allocation decisions. Moreover, it is

power to behave to an appreciable extent independently of its competitors customers and ultimately of its customers” (United Brands v Commission, Case 27/76).

⁵⁵ The correlation between the scores for regulatory renewal and market structure is high *without* Denmark ($r = 0.95$), and low when Denmark is included ($r = 0.66$), indicating that Denmark is the anomaly.

not wholly unthinkable that Denmark, favouring the Nordic tradition of a strong state, would want to protect its state railway company against too much competition. No, because care should be taken not to resort to a too simplistic explanation. Movements of and on markets are highly complex, and there may be operational factors this research does not cover that perfectly explain the situation in Denmark without focussing on one factor to explain market conditions in Denmark.

Privatisation

Although directive 91/440/EEC does not explicitly order member states to privatise their railway companies (Cole, 1998:119) the privatisation of state railway companies can be used to gauge the seriousness of the intent of governments to open their railways to the forces of the market. After all, nothing creates such a clear separation between policy and regulation and operation as the removal of the operator from the protective sphere of government.

Ownership of railway companies varies (see table 4-9). The UK has completely privatised its railways (which earns it a maximum assessment score) between 1995 and 1997. The Danish national railway company, *DSB*, has not been privatised, but its freight services have been (maximum score) to the extent that the state, through *DSB*, only owns a marginal percentage of the new railfreight company (2 per cent).

France and Spain constitute the low end of the spectrum. The French line towards the role and ownership of *SNCF* is quite clear. The state is responsible for the solvency of the company, which is regarded as providing an essential public service. In a time when most annual reports of former utilities celebrated the market Louis Gallois, *SNCF*'s group chairman, wanted the company "to be the model for public service companies in Europe by the year 2002"⁵⁷. The words "market" and "competition" are conspicuously absent from his message in the 1999 annual report⁵⁸.

Table 4-9: Status of the incumbent railway company.

⁵⁶ Which it need not be - it could for instance be that Denmark's rail transport market is simply unattractive and, favourable regulation or not, will never be able to attract competitors.

⁵⁷ In: SNCF [Société Nationale des Chemins de Fer Français] (2000). *Annual report 1999*, p. 2. 2001 and 2002 were "anni horribili" for both the British and Dutch railways where the travellers were plagued with low or absent punctuality, strikes and rising cost. In both countries, the railway crisis was high on the political agenda. With TGV's crisscrossing the "hexagone" and service at a high level it is hard to deny *SNCF* some success.

⁵⁸ The word "market" is actually used, once. But not in the normative sense indicating the sought after economic adjustment mechanism it is usually used in.

	Status of incumbent	Assessment score
Denmark	<i>DSB</i> is independent public corporation (since 01-01-1999); ministry of transport is sole owner. <i>DSB</i> 's freight services have been privatised in 2000 and 2001 ⁵⁹ .	4
France	<i>SNCF</i> is formally the transport authority responsible for managing and operating the state owned infrastructure. By law the state is responsible for its solvency ⁶⁰	1
Germany	<i>DB</i> 100% state owned public limited company, freight company is <i>DB Cargo</i> , a wholly owned subsidiary. Public offering of stock is planned for 2003	2
Spain	<i>RENFE</i> is 100% state owned. There are no concrete plans to privatise the company	1
UK	Completely privatised between 1995 and 1997	4

Sources: *DSB*⁶¹; *Domenach and Teurnier, 1999:311-2*; *DB*⁶²; *RENFE*⁶³; *Preston and Root, 1999:6-7, Pedersini and Trentini, 2000*.

In Spain, privatisation is presented as a future possibility. The 2000 annual report does not set out any timetable or prediction of privatisation. Mention is made of deregulation⁶⁴ as a condition that will touch *RENFE* in the future, likely in the form of more competitors. The 1999-2000 Contract Programme, the mutual obligations and performance criteria binding *RENFE* and the government, makes some careful openings in the direction of company rationalising, but does not specify any concrete preparations for privatisation⁶⁵. The absence of privatisation in France and Spain is assessed with a score of 1.

In Germany *Deutsche Bahn* is also still a government asset, but a public offering of stock is planned for 2003, hence a slightly higher score of 2.

Market power of incumbents

⁵⁹ On 1 August 2000 *DSB Stykgods* (Part Loads) was sold to *DF Logistik A/S*, a subsidiary of *Danske Fragtmænd*. On 1 January 2001, *DSB Vognladning* (Full Loads) merged with the *Railion Group*. A subsidiary - *Railion Denmark A/S* - owned by the *Railion Group* has been founded, of which *DSB* will hold two per cent of the shares.

⁶⁰ Loi relative aux astreintes prononcées en matière administrative et à l'exécution des jugements par les

personnes morales de droit public. Formally its status is that of *EPIC* (Etablissement Public à Caractère Industriel et Commercial), a state company with autonomous management, a type of undertaking created by the *Loi d'orientation des transports intérieurs*.

⁶¹ *DSB* [*Danske Statsbaner*], 2001. *DSB Annual Report 1999*, p. 3, and: *DSB* [*Danske Statsbaner*], 2001. *DSB Annual Report 2000*, p. 10.

⁶² *DB* [*Deutsche Bahn*], 2000, *Annual report 1999*.

⁶³ *RENFE* [*Red Nacional de los Ferrocarriles Españoles*], 2001, *Annual Report 2000*.

⁶⁴ *RENFE* [*Red Nacional de los Ferrocarriles Españoles*], 2001, *Annual Report 2000*, p. 133.

⁶⁵ *RENFE* [*Red Nacional de los Ferrocarriles Españoles*], 2001, *Annual Report 2000*, p. 17ff.

Has the deregulation has had any significant effect on the position of the incumbent railway company? The access regime set out in 91/440/EEC and the allocation regime set out in 95/19/EC should, in theory, lead to competition on the rail track. “The extension of access rights to infrastructure would allow new railways enterprises to enter the market”⁶⁶.

Table 4-10: Market positions of incumbent freight operators.

	Company	% of total freight moved ⁶⁷	market position	Assessment score
Denmark	<i>DSB (Danske Statsbaner)</i>	99,3	monopolist	1
France	<i>SNCF (Société Nationale des Chemins de Fer Français)</i>		monopolist	1
Germany	<i>DB (Deutsche Bahn)</i>	97,5	monopolist	1
Spain	<i>RENFE (Red Nacional de los Ferrocarriles Españoles)</i>	100	dominant player	2
UK	<i>EWS (English Welsh and Scottish Railway)⁶⁸</i>	63,8	significant market power	2
		> 95 ⁶⁹		

Sources: European Commission⁷⁰ DSB⁷¹; SNCF, 2001:9; DB⁷²; RENFE⁷³.

⁶⁶ European Commission, 1996. *A strategy for revitalising the Community's railways*. White Paper. (COM(96)421 final), p. 3.

⁶⁷ Transport volume of incumbents expressed in percentage of total transport volume, expressed in tonnes/kilometre. Denmark: average of 1996 - 1999; France: average of 1998 - 1999; Germany: 1999 figure; Spain: average of 1993 - 1999.

⁶⁸ *English Welsh & Scottish Railway (EWS)* is owned by Wisconsin Central, an American railway company (since October 2001 part of the *Canadian National Railway Company, CN*). Wisconsin Central bought large parts of *British Rail Freight*, the freight branch of *BR*, in 1996, after the privatisation of that company. So, although formally EWS is a newcomer on the British freight market, it carries the inheritance of British Rail, and it will be treated as the incumbent for that reason. “L'américain Wisconsin veut conquérir le fret ferroviaire en Europe”, *Le Monde*, 10-02-1998; “CN/WCTC merger agreed”, *WorldCargoNews*, February 2001.

⁶⁹ The exact percentage of freight moved by the largest UK freightliner is harder to pinpoint since *English Welsh & Scottish Railway (EWS)* does not supply precise information. However, according to the Railway Forum *EWS* moves 100 million tonnes annually, which is close to the total amount of rail freight moved in Britain, which varies between 101 and 105 million tonnes between 1995 and 2000. Other measures also indicate that *EWS* is the largest operator. It operates 1000 daily trains, against 100 for *Freightliner* and 120-150 for *Eurotunnel*, the other large operators. It further owns 19000 wagons, *Freightliner* 1500 and *Eurotunnel* 350. By any measure a sizable company (Data: The Railway Forum, *Factsheet No 2*, 10-04-2000).

⁷⁰ European Commission, 2000. *EU Transport in figures, statistical pocket book 2000*, p. 64, and: European Commission, 2001. *European Union Energy & Transport in figures*, table 3.4.7.

⁷¹ DSB [Danske Statsbaner], 2001. *DSB Annual Report 2000*, p. 38.

To assess whether this has really happened the percentage of freight carried by the incumbent railway companies has been measured. This assessment will - in connection with an appraisal of other factors affecting market position - lead to a categorisation as: monopolist (close to 100 per cent, assessment score 1), significant market power (over 75 per cent, assessment score 2), dominant party (over 50 per cent, assessment score 3) or player (less than 50 per cent, assessment score 4)⁷⁴.

In Denmark, France and Germany no meaningful competition has emerged, in spite of the open access regime. In Spain, *RENFE*, has a marketshare of around two thirds of the total market, but it should be noted that *RENFE* already had that share in 1993⁷⁵, so before the full package was implemented. Spain has regional rail operators and private rail operators carrying freight⁷⁶, which move a considerable amount of freight. These other railway companies do not necessarily compete with *RENFE*, they are often regional in scope and may operate networks with different technical characteristics that exclude a speedy integration. For example *FEVE* (*Ferrocarriles de Vía Estrecha*), a regional company operating in the north, is a narrow-gauge railway⁷⁷. This confines it to its own infrastructure, and the existing infrastructure can hardly be used as a starting point for real competition with *RENFE* since most of its rolling material will not fit on the standard Spanish track size. If *FEVE* want to challenge the position of *RENFE*, it will have to invest in new rolling material, which makes it a less likely contender. Therefore *RENFE* is, in spite of its lower share in national freight transport, a party with significant power. Spain receives a score of 2. In the UK *EWS* is not an outright monopolist, but given the large share of goods it moves it is a party with significant market power, hence a score of 2.

The question that remains is: why do incumbents still dominate the market? Kiriazidis (1994:35) has already pointed at the interdependent character of railways, and the fact that a disaggregated railway company loses many benefits that the tradition-

⁷² DB [Deutsche Bahn], 2001, *Annual report 2000*, p. 53.

⁷³ RENFE [Red Nacional de los Ferrocarriles Españoles], 2001, *Annual Report 2000*, p. 56.

⁷⁴ The difference with market structure, presented in table 4-7, is that here the assessment is based on marketshare, so on actual market performance, while in table 4-7 the number of companies, so the existing, and shorter term, market structure was assessed.

⁷⁵ *RENFE* carried 5.3 billion t/km of a total of 8.1 billion t/km in 1993. In: European Commission, 2000, *EU Transport in figures, statistical pocket book 2000*, p. 64 and RENFE [Red Nacional de los Ferrocarriles Españoles], 2001, *Annual Report 2000*, p. 56.

⁷⁶ OECD, 1998, "Railways: Structure, regulation and Competition policy", *Competition Policy Roundtables No. 15*. DAFPE/CLP(98)1, p. 199.

⁷⁷ 1 meter, against 1.7 meter (5-foot 6-inch) for *RENFE* (E-mail of *FEVE* to the author).

ally organised railways reaped. A likely explanation is that, whatever the formal arrangements, competition on the rail track is difficult to reach because a newcomer still faces huge investments and because allocation authorities still like to work with the lowest possible number of operators on the track since that makes their life a lot less difficult.

Another explanation could lie in the low profitability of railway companies, which make them a less attractive investment, with the consequence that new entrants will not form simply because the money needed to establish them cannot be raised on the capital market. Rail, however, does attract private investments. For example, in the UK between 1993 and 2000 private rail investment rose steadily from 0 to 3.4 billion pounds⁷⁸. The fact that that money went to the large incumbent railways and was apparently not used to invest in smaller competitors might indicate that investors do not expect the smaller railway companies to grow much, for instance because the investors doubt the reliability of regulation. There are indications that new entrants have most to lose from regulatory uncertainty⁷⁹.

Overview

Table 4-11: Overview of market renewal scores. Maximum = 12.

	Market structure	Privatisation	Market power of incumbents	Variable: market renewal
Denmark	2	4	1	7
France	2	1	1	4
Germany	2	2	1	5
Spain	2	1	2	5
UK	4	4	2	10

Establishing efficiency and innovation

⁷⁸ Department of the Environment, Transport and the Regions, 2000. *Transport 2010. The 10 Year Plan*, Annex 1.

⁷⁹ Comments prepared by Harold Furchtgott-Roth (American Enterprise Institute) on the paper “Exporting U.S. Telecom Policy: The Case of Local Telecommunications” By Robert W. Crandall Presented at the *Telecommunications Deregulation Conference / Telecommunications Policy as Trade Policy: Negotiations with Japan over Interconnection Pricing*, American Enterprise Institute Dec. 12, 2001.

Efficiency.

An important goal of railway deregulation as carried out in the EU is to “render railway transport efficient and competitive as compared with other modes of transport”⁸⁰, which is in line with the general idea behind public sector reform that a big public sector creates efficiency problems (Lane, 1997:13-14).

If efficiency has improved this should be observable in a better proportion of some output indicator to some input indicator (where the output indicator grows and the input indicator decreases over time, to express that more has been produced with less means). Unfortunately, while output indicators are available for transport only, there is no input indicator (labour) for transport only covering all investigated countries and/or a long stretch of time in the 1990s, partly because not all companies organised their administrations in product groups⁸¹. Macro data⁸² reflect this and usually provide only personnel data for railway companies as a whole, rather than for the cargo sections separately. For these reasons efficiency has been measured for the whole sector, so passenger transport and freight combined.

Table 4-12 presents the data on staff size decrease and output increases. Countries are assessed based on the size of the decrease in staff combined and the sizes of the increases in passenger and goods transport volumes. This is jointly expressed in the cumulative z-scores for all three volume indicators.

As far as the general picture is concerned, a high score for the UK and Denmark, and lower scores for the other countries, this is consistent with the pattern found in the disaggregating of railways (table 4-3) and organisation of railway allocation (table 4-4). It appears that these structural changes in the industry have had favourable effects on efficiency and productivity.

Table 4-12: Productivity change measures⁸³.

⁸⁰ 91/440/EEC, preamble.

⁸¹ For example, the 2000 Annual Report of RENFE is the first that presents results and figures for business units (such as freight) separately. In: RENFE [Red Nacional de los Ferrocarriles Españoles], 2001, *Annual Report 2000*, p. 14.

⁸² For example those collected by Eurostat, which form the basis of *EU Transport in figures, statistical pocket book 2000* published by the European Commission in 2000 and 2001.

⁸³ Change of staff size (average periodical decrease, in per cent of previous period), change of passenger transport (average periodical increase in bn. passengers/km, in per cent of previous period), change of goods transport (average periodical increase in bn. tons/km, in per cent of previous period); z-scores, cumulative z-scores and assessment scores. Years: the Eurostat data for employment in rail-

	staff size decrease	z-scores	passen- ger transport increase	z-scores	goods transport increase	z-scores	cumula- tive z- scores	Assess- ment scores
Den- mark	16,18	0,85	3,92	0,61	1,96	-0,95	0,51	3
France	4,59	-1,05	1,78	0,25	1,41	-1,22	-2,02	1
Ger- many	5,81	-0,85	-9,93	-1,68	5,74	0,90	-1,63	1
Spain	10,19	-0,13	0	-0,04	4,99	0,53	0,36	2
UK	18,23	1,19	5,49	0,86	5,39	0,73	2,78	4

4 = 2.78 / 1.58, **3** = 1.58 / 0.38, **2** = 0.38 / -0.82, **1** = -0.82 / -2.02.

Source: European Commission⁸⁴.

The success of railway deregulation in Britain, underscored by these figures, may be hard to believe in view of the recent railway crisis, but until 2001, and in terms of efficiency (rather than punctuality) the success of rail in Britain did exist and show up in figures and research. For example, in April 2000 *The Economist* reported that in spite of “serious rail crashes, poor punctuality, overcrowded trains, deteriorating track quality and delays in introducing new rolling stock (which) have led to a widespread view that the railways are in crisis” the good news was that “in many ways, the privatised railways are a remarkable success. Since privatisation, passenger numbers have risen by 30 per cent and revenues by 50 per cent, and there are an extra 1,500 trains a day”⁸⁵.

Innovation

The main innovation in moving goods is not a strictly technical innovation, but a combination of technical and organisational improvement⁸⁶. Two developments contribute to this innovation, First, better communications and tracking technology are made possible by the application of information and communication technology. Second, new types of organisations are made possible by deregulation because rules about who could move what kinds of goods are being erased. Transport productivity in the US has improved because of “intermodal” transport, or “one-stop shopping”

ways only give figures for 1990, 1995, 1998 and 1999. All calculations, also for goods transport and passenger transport are based on these years.

⁸⁴ Calculated from: European Commission, 2001. *European Union Energy & Transport in figures*, tables 3.1.7, 3.4.7, and 3.5.8.

⁸⁵ “Odd coupling”. *The Economist*, 20-04-2000

⁸⁶ European Commission, 2001. *Freight intermodality. Results from the transport research programme*.

transport where the chain of different transport modes and the changes on the way are arranged by one company, such as FedEx and UPS⁸⁷.

The European Commission stresses the importance of technological innovation for intermodal transport in its new integrated transport policy: “Technological innovation provides an excellent opportunity to integrate the transport modes, optimise their performance, make them safer and help make the European transport system compatible with sustainable transport development. The European Union is very actively involved in technological innovation in transport. Its research and development programmes are promoting innovation upstream, while the trans-European networks lend themselves perfectly to large-scale application. The technologies emerging from the Information Society can make an outstanding contribution here”⁸⁸.

A first step towards intermodal transport in the EU involving railways has already been taken in the form of Trans-European Rail Freight Freeways, proposed in the 1996 White Paper⁸⁹. The obstructions blocking efficient international (but intra EU) freight transport, a consequence of the existence of national railway companies with different organisation and procedures, should be relieved. International railway paths, connecting places along a few main lines with easy shipping and handling procedures (“one-stop shopping”), should diminish these problems. The freeways must be set up according to the following principles:

- (1) equal, fair and non-discriminatory access for all licensed railway operators in the EU.
- (2) operation (access and pricing) must conform to 95/18/EEC et 95/19/EEC.
- (3) cabotage: goods can be loaded at any begin point, unloaded at any terminal point, by a party anywhere in Europe (in other words, an German company can load goods in Bordeaux and deliver them to Paris)
- (4) Non-discriminatory and fair access.

A considerable number of measures have to be taken for the freight freeways to take off. The European Shippers Council, a public interest organisation, has made the following overview.

⁸⁷ “Delivering the goods”, *The Economist* 13-13-1997

⁸⁸ European Commission, 2001. *European transport policy for 2010: time to decide*. White Paper (COM(2001) 370 final, p. 119.

Table 4-13: European Shippers Council overview of measures necessary to implement freight freeways.

Barriers	Measure	Responsible
Institutional barriers	Separation of rail infrastructure management and train operations to allow those other than existing operators to run services	EU institutions
	Shippers and logistics companies to become 'Authorised Applicants', able to purchase their own train paths	EU Member States and OTIF ⁹⁰
	Liability regimes for rail freight to reflect market conditions and be clarified	EU institutions
Cultural barriers	Commission's proposals on infrastructure charging to be implemented	EU institutions
	Railway managers to work to understand the needs of the supply chain	National Railways
Technical barriers	Railways to explore means of achieving greater interoperability of equipment used for international freight transport	National Railways
	Development of routes for use of longer, heavier, higher gauge trains	National Railways
	Technical standards to be set by a body independent of national railways	EU institutions
Commercial barriers	Shippers to consider rail options when placing tenders for contracts	Shippers
	Shippers to work with the railways to help them understand their needs	Shippers
	Competitive situation of European railways to reflect normal business practices. Mergers, alliances and takeovers to be scrutinised by competition authorities with the same rigour that exists in the business world	National Railways
	Railways to embrace key performance indicators	EU institutions
Cost	Rail track owners and operators to work to reduce the cost of access to infrastructure For example the cost of track per gross tonne mile in the US is one third the cost of track access in the UK	Infrastructure owners

Source: Improving European Rail Freight, Public Statement of the European Shippers Council, May 1999.

What is important about this overview is the extent to which the successful implementation depends on activities in the member states rather than at the EU level. Of the 14 entities that have to take action, 8 (member states, national railways and infrastructure owners) reside in the member state, which implies that taking this innovation to its logical conclusion - a working system - is a national activity. Table 4-14 gives an overview of what has happened in the member states so far.

The freight freeways were slow starters, and the UK-Sopron freeway has not opened for business yet, which proves right the words of Lord Tony Berkley, chairman of a

⁸⁹ European Commission, 1996. *A strategy for revitalising the Community's railways*. White Paper. (COM(96)421 final), p. 16.

⁹⁰ Organisation intergouvernementale pour les transports internationaux ferroviaires. Until the signature of the Protocol of 3 June 1999, (Protocol of Vilnius) for the amendment of COTIF, the objective of this Governmental Organisation was principally to develop the uniform systems of law which apply to the carriage of passengers, luggage and freight by rail.

major freightgroup, who already in 1999 complained that the Scotland-Hungary line was “certainly not dead, but it is taking a damn long time to get here”⁹¹. Where the concept was successful, and started its operations, shippers were not exactly stampeding to get their cargos on the freeways. The Belifret freeway, which has trains rolling right from the start, proudly announced in January 2001 that it had operated already 3000 trains. This would have taken *English Welsh and Scottish Railway* exactly three days, since that company operates around 1000 trains each day⁹².

Table 4-14: Status of the freight freeways in 2001.

	Freeways in which the Member State participates	Formal establishment	Actual operation	Assessment
Denmark	Scanways	January 1998	Running from 1998	3
France	Belifret	January 1998	Running from 1998	4
Germany	North-South	January 1998	Running from 1999	3
Spain	Belifret	January 1998	Running from 1998	4
UK	UK - Sopron	March 1999	Not yet running (2002)	1

Sources: Belifret⁹³; Speech of N. Kinnock⁹⁴; WorldCargoNews⁹⁵; The Journal of Commerce⁹⁶; B-Cargo News⁹⁷.

The sorry state of the freeways is generally attributed to political and organisational factors. The innovative ideas underlying the freeways are sound, as the success of intermodal transport in the U.S.⁹⁸ underscores. The director of the British Rail Freight Group blamed the railway companies: “Greed, mutual distrust and institutional rigidity are currently preventing the idea delivering any real benefits”⁹⁹. The European Shippers Council blames the lack of incentive for railways to participate¹⁰⁰ - which ultimately leads back to competition: the experience in the U.S. shows that intermodal transport cuts cost. So apparently cutting cost is not necessary for survival

⁹¹ “Rail Freight Freeways Stalled”. *Transport Topics*, 18-01-1999.

⁹² The Railway Forum, *Factsheet No 2*, 10-04-2000.

⁹³ Press statement, 24th January 2001

⁹⁴ *Trans European Rail Freight Freeways*, speech by EU Commissioner Neil Kinnock, The Economist Conferences, Brussels, 16-01-1998

⁹⁵ “UK-Sopron OSS deal signed”, *WorldCargoNews*, March 1999

⁹⁶ “Austrian Rail to link Hungary-Scotland”, *The Journal of Commerce*, 16-03-1999.

⁹⁷ “Tweeduizendse trein via deze corridor voor genral cargo.” *B-Cargo News*, June 2000.

⁹⁸ “Delivering the goods”. *The Economist*, 13-11-1997.

⁹⁹ “Rail Freight Freeways Stalled”. *Transport Topics*, 18-01-1999.

on the European rail freight market, which further indicates that competition is far from stiff.

Overview

Table 4-15: Overview of efficiency and innovation scores. Maximum = 8.

	Efficiency	Innovation	Variable: efficiency and innovation
Denmark	3	3	6
France	1	4	5
Germany	1	3	4
Spain	2	4	6
UK	4	1	5

PART 3: FINDINGS ON IMPLEMENTATION IN RAIL TRANSPORT

The general picture

Table 4-16 gives an overview of the scores for the extent of implementation in rail transport.

Table 4-16: Variable and overall scores for extent of implementation in rail transport. Maximum score = 36, Mean = 19.6, Standard deviation = 6.65.

	Extent of implementation	Market renewal	Regulatory renewal	Efficiency and innovation
Possible maximum	36	12	16	8
Denmark	25	7	12	6
France	13	4	4	5
Germany	14	5	5	4
Spain	18	5	7	6
UK	28	10	13	5

The average score of 19.6, out of a possible maximum of 36, is middle-of-the-road at best - the general picture is that the liberalisation and deregulation of railways is far from complete. The Commission has acknowledged this, although not with so many words. The new railway package that is on the table now proudly proposes measures to revitalise railways, and describes the crisis railways are in, without much reference

¹⁰⁰ *Improving European Rail Freight*. Press statement of the European Shippers Council, May 1999.

to the 1991 and 1995 directives. It is as if the Commission has looked at railways for the first time, which is likely the clearest confession of the lack of success of railway policy that will ever be printed. The earlier reform is now reduced to “a number of promising developments”¹⁰¹.

Table 4-17: The weak areas of the member states. Based on indicators with an assessment score of 1 and 2.

Member state	Low score on:	Rank
Denmark	<ul style="list-style-type: none"> • organisation of regulation • market structure 	2
France	<ul style="list-style-type: none"> • market power of incumbents • implementation of core directives • railway disaggregating • organisation of railway allocation • organisation of regulation • market structure • privatisation • market power of incumbents • efficiency 	5
Germany	<ul style="list-style-type: none"> • implementation of core directives • railway disaggregating • organisation of railway allocation • organisation of regulation • market structure • privatisation • market power of incumbents • efficiency 	4
Spain	<ul style="list-style-type: none"> • implementation of core directives • organisation of railway allocation • organisation of regulation • market structure • privatisation • market power of incumbents • efficiency 	3
UK	<ul style="list-style-type: none"> • implementation of core directives • market power of incumbents • innovation 	1

The reason railway reform has not flourished is most likely that the basic problem has not changed. The other modes of transport remain financially more attractive and more practical. In that sense, the reforms have missed their goal. The problem may not have been the structure of the industry, but the low prices of the alternatives. The solution, the disaggregating of railways, may actually have worsened the problem since the benefits of integration have been sacrificed. Kiriazidis predicted this in 1994: “Generally speaking the splitting between management of infrastructure and

¹⁰¹ European Commission, 2002. *Communication from the commission to the council and the European Parliament. Towards an integrated European railway area* (COM(2002)18 final), p. 3.

the provision of services would make communications more difficult, would reduce efficiency and safety and would not promote greater access or introduce competition in the sector” (Kiriazidis, 1994:37). In 2001 the chairman of *Deutsche Bahn*, Hartmut Mehdorn also stressed that he wanted *DB* to stay in one piece¹⁰².

There are however, differences between the member states. Denmark and the UK perform above average, while France, Germany and Spain perform below average, although Spain is somewhat closer to the average. Table 4-14 gives an overview of their weak areas.

Obviously, Denmark and the UK have few weak areas, but it is telling that in spite of all the changes that have been implemented the incumbent rail company still reigns the market. The other countries are simply weak in all areas. There are nine indicators, and France and Germany are weak in eight, and Spain in seven areas. The regulatory renewal indicators weigh most heavily because the market changes may well not be coming because of the fundamental competition disadvantage with other transport means.

That France scores low is an understandable consequence of consciously carried-out policy. Rail is a public institution, with public goals. The *SNCF* is not just a rail company. It operates the TGV, symbol of technical - and above all French - ingenuity. *The Economist* wrote cynically that the only reason France finally established a separate infrastructure company was that *SNCF* was “going as bust as only a nationalised industry could, halfway through spending FFr300 billion on its TGV network. So the huge debts were shunted into the new state-owned company—where the grim financial picture is still tucked away”¹⁰³. Ultimately the French government does not care - it is the price of a public service.

Spain and Germany have also been protective for their incumbent railway companies (*RENFE* and *DB* respectively), but less openly enthusiastic than France has. In Spain railway policy was not a priority before the European rail transport policy came along, and it may simply not have risen to prominence because there were so many other inheritances of the Franco age keeping Spain’s political classes busy. That Germany scores low is somewhat surprising, because railway policy was high on the agenda, and the European measures were even welcomed as a boost to railway im-

¹⁰² “Light at the end of the tunnel”. *The Economist*, 08-02-2001.

¹⁰³ “Très grand void”. *The Economist*, 31-05-2001.

provement. However, the implementation of the European package did not result in a tough separation of track and services, but in a rather lame and somewhat cosmetic separation in business units within the incumbent. This is very likely a sign of enduring corporatism, of which there are others. For example, member of the European Commission Bolkestein complained of Germany's "atavistic reflexes of a corporatist nature" and "economic nationalism"¹⁰⁴.

This chapter makes clear that liberalising this most traditional of utilities has not proved to be an easy task. Whether this constitutes a general rule is difficult to say but the next chapter in which another traditional utility, the electricity sector, will be treated, might give some indication.

¹⁰⁴ "Now for the big push?". *The Economist*, 29-11-2001.