22nd November 2004

ASSESSMENT OF THE EC 3RD RAILWAY PACKAGE

Proposed Directive on Market Access for International Passenger Services

Final Report for Department for Transport
Volume 1

NERA
Economic Consulting

MMC Marsh & McLennan Companies

TABLE OF CONTENTS

1.	**INTRODUCTION**	1
1.1.	The Study	1
1.2.	The Proposal	1
1.3.	Our Approach	2
1.4.	Structure of the Report	2
2.	**PURPOSE AND INTENDED EFFECT**	4
2.1.	Objectives	4
2.2.	Background	4
2.3.	Risk Assessment	4
3.	**SUPPORTING INFORMATION**	5
3.1.	Current International Rail Services in the United Kingdom	5
3.2.	Scope for Services Beyond London	6
3.3.	Proposals for CTRL Domestic Services	7
3.4.	Existing Provisions for Moderation of Competition	9
3.5.	Potential Effects of On-Rail Competition	9
4.	**OPTIONS**	13
4.1.	Option 1 - Base Case	13
4.2.	Option 2 - Full Implementation of the EC Proposal.	13
4.3.	Option 3 - The EC Proposal but Without Restriction on Cabotage	13
4.4.	Summary of Options	14
5.	**BUSINESS SECTORS AFFECTED**	15
6.	**BENEFITS**	16
6.1.	Option 1 – Do Minimum	16
6.2.	Option 2 – Full Implementation of the EC Proposal	16
6.3.	Option 3 – The EC Proposal but Without Restriction on Cabotage	19
7.	**COSTS**	24
7.1.	Option 1 – Do-Minimum	24
7.2.	Option 2 - The EC Proposal but Without Restriction on Cabotage	24
7.3.	Option 3 - The EC Proposal but with No Protection at All	24
8.	**THE IMPACT ON SMALL FIRMS**	25
9.	**COMPETITION ASSESSMENT**	26
10.	**SUMMARY**	27

1. INTRODUCTION

1.1. The Study

This is volume 1 of the draft final report in NERA's study for the Department for Transport (DfT) on the European Commission's 3rd Railway Package. This particular volume deals with the proposed Directive amending Council Directive 91/440 /EEC on the development of the Community's railways. The proposal concerns increasing market access for international rail services.

The final report presents the evidence base for a regulatory impact assessment of the four legislative proposals contained within the 3rd railway package. The report consists of four volumes, one for each proposal, as follows:

1. A draft Directive concerning opening the market for international passenger services by rail;
2. A draft Regulation setting out the rights and obligations of international rail passengers;
3. A draft Regulation on contractual quality and compensation requirements for rail freight services; and
4. A draft Directive on train driver licensing.

This report has draft status: our findings for this proposal will be refined in the light of comments and further information and presented in our final report.

1.2. The Proposal

Key features of the draft Directive on further market opening are that

- Whereas now, under Directive 91/440/EEC, international services are open to international groupings of operators (i.e. any association of undertakings based in more than one Member State), the proposed Directive will allow individual operators to introduce international services;
- International operators will be able to provide cabotage in the countries in which they operate – this means that they will be able to pick up and set down passengers within particular countries as part of an international train service;
- The proposal allows Member States to restrict competition in particular markets where this is strictly necessary to maintain the "economic equilibrium" of the public service and has been approved by the regulatory body.

1.3. Our Approach

NERA's project team consists of economists with extensive experience of working on studies in the rail sector and on appraisal / cost benefit analysis techniques. Our team has worked on a wide range of projects in the rail sector, including a study in year 2000 for the former British Railways Board on the market for rail passenger services to and from Europe from beyond London.

We held discussions with the following stakeholders with respect to this proposal, and are grateful for the considerable assistance we received:

- The Association of Train Operating Companies (ATOC);
- Department for Regional Development, Northern Ireland (DRDNI);
- Department for Transport (DfT);
- Eurostar UK Ltd;
- Northern Ireland Railways (NIR);
- Office of Rail Regulation (ORR); and
- Strategic Rail Authority (SRA).

We held a further meeting with representatives from DfT and the SRA to clarify the options to be considered in this regulatory impact assessment.

1.4. Structure of the Report

The report structure closely follows the standard structure for a regulatory impact assessment as set out in the Cabinet Office guidelines.[1] It diverges in some areas to reflect the fact that this is providing the evidence base for the RIA, and not the RIA itself (for example, the consultation is a separate process). Following the introduction, the report structure is as follows:

- Chapter 2 discusses the purpose and intended effect of the proposal;
- Chapter 3 provides supporting information that is used to prepare the evidence base for the RIA;
- Chapter 4 introduces the options we are considering to address the purpose of the proposal, including option 1 which is the base case to which other options are compared;

---

[1] Cabinet Office (January 2003) *Better Policy Making: A Guide to Regulatory Impact Assessment*.

- In Chapter 5 we examine the business sectors affected by the proposal;
- In Chapter 6 we discuss the implications of the proposal for equity and fairness;
- In Chapter 7 we analyse the benefits of the proposal and other options;
- In Chapter 8 we analyse the costs of each of the options;
- In Chapter 9 we discuss the impacts of the options on small firms;
- In Chapter 10 we discuss the implications of the options for competition; and
- In Chapter 11 we summarise our findings.

2. PURPOSE AND INTENDED EFFECT

2.1. Objectives

The European Commission are concerned that there have been substantial cutbacks in the provision of conventional international train services between a number of EC countries mainly due to their poor financial performance; and that there are risks posed to the future development of long-distance international services by the increasing competition from low-cost airlines.

The objective of the proposed Directive is to address these concerns by opening international passenger rail markets to competition. It is hoped that this will – combined with the extension of the high speed network - lead to operators developing new initiatives, driving down costs and offering more attractive services by 2010.

2.2. Background

European Commission transport policy, as set out in the 2001 White Paper, *European Transport Policy for 2010: Time to Decide* is heavily orientated towards development of the role of rail. "Revitalisation of the rail sector is at the heart of the Commission's sustainable mobility strategy." A core objective is to return rail mode share to its 1998 levels (6.2 per cent of passenger-kms, and 14 per cent of freight tonne-kms) by 2010.

Railway undertakings can at present establish international passenger services within the EU, provided that they are operated by an international grouping of companies in more than one Member State.

2.3. Risk Assessment

The Directive is intended to address the risks associated with monopoly provision of rail services: particularly, low service frequency and reduced route availability of international rail services in Europe. In addition, opening the market to competition could pose risks to the provision of existing domestic passenger rail services supported by public funds, hence the Commission's proposal to restrict competition where this was necessary to maintain the "economic equilibrium" of these public services.

3. SUPPORTING INFORMATION

3.1. Current International Rail Services in the United Kingdom

Geography limits the number of international rail services operated between the United Kingdom and other Member States of the European Union. There are only two rail links over which such services could be operated:

- Services using the Channel Tunnel between Britain and France. All such services at present are operated by Eurostar;[2]

- Services between Northern Ireland and the Republic of Ireland using the rail line between Belfast and Dublin, the only cross-border railway line that is still in operation. Such services are currently operated jointly by Northern Ireland Railways (NIR) and Iarnrod Eireann (IE).

3.1.1. Eurostar services

Eurostar services currently operate between Waterloo International in London, and Paris and Brussels, and use the first part of the new high speed line, the Channel Tunnel Rail Link (CTRL), which opened in 2003. There are also some services to Disneyland Paris, Avignon and the French Alps. From 2007 the CTRL will be open to St Pancras International station in London. At present there is only one intermediate stop within England, namely Ashford International. Domestic passengers are not carried by Eurostar in England. Once the second phase of CTRL (CTRL2) is open in 2007, there will be additional intermediate stations at Ebbsfleet and Stratford International.

3.1.2. Services between Belfast and Dublin

NIR and IE operate a service between Belfast Central and Dublin Connolly, under the "Enterprise" brand name. In Autumn 2004 there were eight trains a day in each direction, calling at intermediate stations (Portadown and Newry in Northern Ireland, and Dundalk, and Drogheda in the Republic[3]). The companies also operate occasional cross-border special trains (for example, in connection with sporting events).

---

[2] Car shuttle services operated by Eurotunnel are not included within the scope of the proposed Directive.

[3] A Sunday service additionally stops at Lisburn and Lurgan.

3.2. Scope for Services Beyond London

The original plans for rail services through the Channel Tunnel included plans for through services beyond London, and specialised rolling stock to operate such services was constructed. However, these services were never operated.

Two reports on the economic case for provincial Eurostar services have been published.

In February 2000 Arthur D. Little prepared a report for DETR.[4] Arthur D. Little's Terms of Reference indicated that their review should consider a broad range of options for using the Regional Eurostar train sets to provide international services to the regions. These options included an assessment of proposals for Heathrow to Paris services. The review was to examine the financial viability of the options and their wider transport and social benefits. It would aim to identify the option which performed the best in financial terms, and the extent to which this gave rise to wider benefits. Particular attention was to be given to issues of business and marketing strategy.

Arthur D. Little reached four main conclusions in their report.

1. Regional Eurostar services would not be viable on financial grounds.
2. The service pattern which would lead to the least loss of money would be a daytime, year-round service on the West and East Coast Main Lines, introduced from 2007 when proposed line upgrades are complete.
3. Although there would be some social, environmental and other non-financial benefits from the introduction of a regional service, they would be too small to compensate for the financial losses incurred.
4. Leasing the regional Eurostar trainsets to a domestic operator and returning the train paths North of London would be a more attractive option.

Then in May 2000 NERA produced a report for the British Railways Board reviewing the BRB's 1989 plan for through rail services to Europe.[5] (There had been a legal requirement on the BRB to produce such a review.) A part of NERA's brief was to review the Arthur D. Little report. NERA too concluded that services would not be financially viable, and that non-financial benefits (which NERA thought would be small) would not outweigh financial losses.

---

4 Arthur D. Little Ltd *Review of Regional Eurostar Services: Summary Report* and *Appendices* DETR, London, February 2000.

5 NERA *Review of the British Railways Board's 1989 Plan for Through Rail Services to Europe*, May 2000. This report was published.

We understand that the SRA have commissioned a review of the A D Little work and the market for direct international Eurostar services. The review considered the most favourable options identified in the A D Little study and found that the potential demand for regional services had shrunk since the publication of the original report in 1999. The SRA work found that this was mainly attributable to the growth in budget airlines.

3.3. Proposals for CTRL Domestic Services

Once CTRL2 is open there are plans to operate domestic high-speed services along the CTRL into London. It is proposed that these will be let as part of a wider franchise, the Integrated Kent Franchise (IKF), using specialised rolling stock. Some of these domestic trains will join CTRL at Ashford, and some will join at Ebbsfleet. Domestic services will operate from 2009.

The SRA's Consultation Document, *Integrated Kent Franchise: Train Service Specification*, was published in February 2004. This document sets out a broad service plan, and indicates that premium fares might be charged on the CTRL service. It notes that the agreement between the Government and London and Continental Railways (LCR), who are responsible for building CTRL, provides for up to 8 train paths an hour on the CTRL into St Pancras station during peak periods for domestic services.

Table 3.1 shows the proposed domestic train service pattern using the CTRL into St Pancras. There are two routes:

- services from Broadstairs or Sittingbourne that would join CTRL at Ebbsfleet; and
- services from Folkestone and Ramsgate that would combine at Ashford and join the CTRL there.

Table 3.1
IKF Proposed Train Plan

Route	Service code	Frequency	Stop at…	
			Ebbsfleet?	**Ashford?**
St Pancras – Sittingbourne/Broadstairs	SP01	1 train per hour, all day	Yes	No
St Pancras – Broadstairs	SP05	2 trains in each 2 hr peak period	Yes	No
St Pancras - Broadstairs	SP06	1 train in each 2 hr peak period	Yes	No
St Pancras – Folkestone/Ramsgate	SP03F	1 train per hour, all day	Off-peak only	Yes
St Pancras – Folkestone/Ramsgate	SP03R	2 trains in each 2 hr peak period	No	Yes
St Pancras – Folkestone/Ramsgate	SP04F	1 train per hour, all day	Off-peak only	Yes
St Pancras – Folkestone/Ramsgate	SP04R	2 trains in each 2 hr peak period	No	Yes

Source: SRA IKF : Train Service Specification pp. 47, 48, 29-30.

3.4. Existing Provisions for Moderation of Competition

In Great Britain passenger train operations are offered some protection from on-track competition through ORR's Moderation of Competition (MoC) regime.

At present MoC rules do not apply to the CTRL; but we anticipate that some form of regulation of competition will apply once the EC 1st rail package is implemented in the UK (Directives 2001/12/EC, 2001/13/EC and 2001/14/EC).

Under ORR's current policy, the MoC decision criteria are wider than merely checking that the "economic equilibrium" of a particular public service flow is affected in order for it to decide to prevent competitive entry against that flow (which is the criterion specified in the EC's draft directive). The MoC criteria include the consideration of potential benefits to passengers of such entry.

The application of the Moderation of Competition criteria can result in different outcomes in different circumstances. This is illustrated by the only published decisions so far. In one of these - Hull Trains – access was agreed, and in the other – Grand Central - it was refused. Hence it may be difficult to predict the outcome in any particular case involving CTRL.

3.5. Potential Effects of On-Rail Competition

This brief section of the report considers what evidence there is in regard to the question of what the benefits of actual competition might be.

Benefits from competition for international services could take the form of fare reductions or service improvements. Service improvements could consist of increased frequencies or greater choice of through destinations.

However, evidence on impacts from published studies is limited. We are only aware of one study which has looked at actual competition. This is

NERA's own study of the impact of the examples of on-rail competition that there have been in Britain since privatisation on fares and service levels.[6]

Other work has considered possible impacts of on-track competition using simulation exercises, so results have been dependent on assumptions made, including assumptions made about access charges paid by entrants. We review two studies below. These are:

- Simulation modelling by ITS Leeds;[7] and

---

[6] Ian Jones "Railway franchising: is it sufficient? On-rail competition in the privatised passenger rail industry" in C. Robinson (ed) *Regulating Utilities: New Issues, New Solutions* IEA, 2001, pp.120-141.

- The study by Steer, Davies, Gleave for the European Commission.[8]

NERA's 2001 study examined how the on-rail competition that resulted from overlapping UK franchise territories[9] impacted on changes in service frequencies and fares by comparing these point-to-point flows with the outcomes across the rail network as a whole.

The results show that the average increase in the service frequency on the competitive flows was nearly fifty per cent higher than the average network-wide increase in frequency. The biggest differences occurred on those competitive services based on London (both InterCity and commuter).

The analysis of the impact on fares was restricted by data on changes in average fares for the selected flows not being published. However, a comparison of the changes in average unregulated ordinary fares was undertaken. This suggested that the fares across the sample of competed flows rose less, on average by a third less, than did average revenue per passenger kilometre across the entire network. This result excludes certain types of dedicated tickets, which it is suggested would be more heavily discounted than those included, and as such it is argued that the result will probably underestimate the true difference between what happened to fares on competitive services and what happened to fares on those services where there was no competition.

While the NERA study does suggest that there have been gains in both frequency and fares from on-rail competition, in the absence of the necessary information, the authors did not consider impacts on overall welfare.

However, using an alternative, simulation approach, a study by ITS Leeds (1999) did consider overall welfare impacts, in terms of impacts on both consumer surplus and producer surplus. The ITS study concluded that while consumer surplus might be increased by on-rail competition, the overall impact on total welfare could be negative.[10]

Simulation work by ITS models demand, costs and welfare levels for an actual rail line that they believed to be attractive to competition. Using data on service patterns and fare structure in May 1995 as the base case, four separate scenarios for the introduction of competition were considered:

---

7 J Preston, G Whelan and M Wardman "An analysis of the potential for on-track competition in the British passenger rail industry" *Journal of Transport Economics and Policy*, January 1999.

8 Steer Davies and Gleave EU Passenger Rail Liberalisation: an Extended Impact Assessment, for the European Commission, January 2004.

9 There were 19 such routes.

10 This conclusion is, of course, sensitive to the weighting given to consumer and producer surpluses – the study assumes an equal weighting but policymakers may feel a greater weighting on consumer surpluses is appropriate, in which case, the total impact on welfare may not be negative.

- Cream skimming – where the entrant operates only the most profitable services;
- Head-on competition – where the entrant matches the service frequency of the incumbent but competes by discounting fares;
- Price war – a natural development of the previous head-on competition; and
- Product differentiation – quality competition in which a slow but cheap service running on a parallel route is modelled.

The study suggests that both cream skimming and competing on price will provide profitable opportunities for new entrants, and generate benefits for the users. However, the incumbent's profitability is reduced significantly, hence the typical reduction in total welfare. The only model scenario variant that did not generate an overall welfare loss involved a cream skimmer entering such that existing services are operated but with a 20 per cent reduction in fares.

A similar modelling exercise was undertaken in Steer Davis Gleave's report to the European Commission on the opening up of European international rail passenger services. The study, which was not based on the UK,[11] modelled the impact of five different liberalisation scenarios on:

- Service levels;
- The level of fares;
- Passenger kilometres; and
- Railway operator viability

The impact of the scenarios was examined against a reference case for 2020, under the assumption that the scenario would be enacted in 2010.

The SDG modelling indicated that there are limited potential gains from competition available on some route corridors. But the study highlighted the limitations of direct competition for passenger rail services along the same route. If fares of competing services are not inter-available, passengers may experience a fall in the frequency of services for which their ticket is valid, and hence disbenefits. Almost all journeys in Great Britain have inter-available tickets because this is usually a requirement of the franchise agreement. However, this would not necessarily apply to new international services.

An important issue with regard to assessing the potential impacts of competition is the extent to which new competitive services are expected to generate new traffic, rather than

---

11 Germany, Spain, Sweden and Hungary were chosen for the in-depth case studies.

just to divert passengers from existing services. This is certainly a factor that influences ORR decisions in MoC cases, and proposals that are likely to lead to generation of new rail traffic are, all else equal, likely to be viewed more favourably than those that will mainly abstract traffic from existing services. Another relevant consideration is that of whether an entrant will pay access charges on the same basis as the existing operator – if the entrant would only pay for access on a marginal cost basis rather than on a fully-allocated cost basis, this would improve the financial case for the entrant, but it would mean that the incumbent would be at a competitive disadvantage and that the state would ultimately pay towards support for access under the financial support mechanism.

4. OPTIONS

4.1. Option 1 – Do Minimum Case

The base case, with which all other options are to be compared, is a do-minimum.

Several changes will occur over the period in which the proposal would be implemented and its impacts assessed.[12] In particular, the CTRL will be completed in 2007, offering reduced journey times between some Kent stations and London. As a result, there will be changes to domestic services, in particular some domestic services with specialised high speed rolling stock are expected to use the CTRL as part of the Integrated Kent Franchise from 2009.

We assume that some form of Moderation of Competition rules will be applied to services along the completed CTRL, even though they do not apply at present, following the UK's implementation of a previous 'first' EC rail package (Directives 2001/12/EC, 2001/13/EC and 2001/14/EC).

In Ireland the base case is the present situation where international consortia could operate international services but they would not have rights of cabotage (in contrast to IE/NIR, who currently do offer cabotage possibilities on their Belfast-Dublin "Enterprise" services).

4.2. Option 2 - Full Implementation of the EC Proposal.

This option consists of implementation of the proposed Directive, but with application of MoC on CTRL as in our base case (as the Directive permits this to continue). In Ireland, new cabotage rights would exist for new entrants providing international services. The Department of Regional Development in Northern Ireland and the Department of Transport in the Irish Republic apply a MoC policy along GB lines for both international and domestic services.[13]

4.3. Option 3 - The EC Proposal but Without Restriction on Cabotage

This option involves implementation of the proposed Directive but without the provision in the draft Directive that cabotage can be prohibited if it is strictly necessary to maintain the economic equilibrium of the service defined in a public service contract. This option

---

12 In a regulatory impact assessment, impacts should be assessed up to ten years subsequent to the implementation of the regulation.

13 Note that the Directive allows protection against public service contracts procured in accordance with EC law. (We note that Eurostar is not procured under a 'public service contract', as there is no obligation to provide particular services)

therefore provides no protection for existing services on routes served by international trains.

4.4. Summary of Options

Table 4.1 summarises the options that we have considered in this study.

Table 4.1
Summary of Options

	Brief Description
Option 1	Base case: the status quo but with MoC for CTRL services
Option 2	Full implementation of the proposed Directive
Option 3	Implementation of the proposed Directive, but with no protection for IKF or Enterprise services

5. BUSINESS SECTORS AFFECTED

The business sectors affected by this proposal are much more restricted than those affected by the other proposals in the 3rd Package. The UK companies/organisations to be affected are:

- Eurostar UK Ltd and their parent company London and Continental Railways;
- Operators (yet to be determined) of the Integrated Kent Franchise (who may face increased competition);
- Eurotunnel, who could face an increased demand for use of the Channel Tunnel;
- Northern Ireland Railways;
- Any UK company which might be considering operating international services on mainland Europe.

In addition, public funders of rail services in the UK, that is DfT in Great Britain, and DFRD in Northern Ireland, might face increased public support requirements.

6. BENEFITS

6.1. Option 1 – Do Minimum

Option 1 is the base case, do-minimum. Benefits are measured relative to the base case.

6.2. Option 2 – Full Implementation of the EC Proposal

Option 2 is the European Commission's proposal. This represents a further liberalisation of a market that is already partially liberalised. Liberalisation can bring benefits because competition (and sometimes just the threat of competition) can bring benefits of reduced prices and/or improved service quality.

But we believe that the material questions here are not just that of how competition would reduce fares and increase service quality, but how significant is the further proposed liberalisation in the markets relevant to the UK, and how likely is it that the changes will induce market entry.

6.2.1. The Effect of Implementing the Proposal in the UK

Implementing the Directive would liberalise the market for international rail passenger services in two ways:

- Entrants would not need to belong to, or form, international consortia;
- The revenue prospects for entry could be enhanced because international operators could carry domestic passengers if they chose to.[14]

Stakeholders' view of the former relaxation is that the existing requirement to form an international grouping is not a serious barrier because organisations can set up subsidiaries in Member States other than the ones in which they are located. This view was expressed to us by DfT, and by Eurostar.

The importance of the second relaxation will depend on the features of particular routes and their potential domestic traffic flows. Where potential domestic flows are high, then ability to provide cabotage might lead to quite a large increase in potential revenue. Where potential flows are small, then cabotage might have only a marginal impact on revenue. And operators will need to take into account any costs that providing cabotage services might involve.

[14] It is not clear that this is a genuine change in Great Britain however. Currently our understanding is that Eurostar would be required to apply for a domestic operating licence should they wish to carry passengers only on the domestic legs of their journeys within the UK; they are permitted to make such an application but choose not to.

In addition, the impact of these two forms of liberalisation will depend on how attractive is market entry on particular routes. This in turn is likely to depend on the profitability of existing operators on those routes. If existing operators' services are unprofitable, and are supported by public funds, then entry may appear unattractive – a crucial issue is that of whether cabotage possibilities may 'tip the balance' between unprofitable and potentially profitable entry opportunities.

We now consider this for the two international rail crossings.

6.2.1.1. Channel Tunnel routes

In our discussions with them, Eurostar emphasised that there are significant barriers to entry, which apply to all services through the Channel Tunnel, which means all international services between Great Britain and Continental Europe. These barriers are:

- Services must pay high access charges to use the Channel Tunnel.[15]
- The services require very specialised and expensive rolling stock, which meet the stringent fire safety conditions required to operate through the Channel Tunnel, and which are also able to operate on lines with different types of power supply equipment. Such equipment would have to be newly built unless it were to be leased from an existing member of Eurostar.[16]

First we consider potential services to compete directly with the existing Eurostar service, for international passengers through the Channel Tunnel, on CTRL and then London. Given that Eurostar is not financially viable without government support and the cost of entry is so high, we can envisage no circumstances, within the timeframe that we are considering, where another commercial operator would enter into competition with Eurostar on this route. It would be possible for another operator to offer international services from London through the Channel Tunnel but only if it were receiving public financial support to do so; and the Directive would not change any state's decision of whether to support such a service; nor would the Directive affect whether an operator were able to enter the market or the application of MoC rules. The rapid growth of low cost/low fare airlines will also have constrained the potential for a new rail operator to compete for passengers, especially leisure passengers, in the medium-distance markets (where air's competitive advantage over rail is greater) that might be developed beyond Brussels and Paris (eg to Amsterdam or Cologne).

---

15 The Tunnel access charge regime could change, but NERA would expect that any operator of the Tunnel would always want to take advantage of the scarcity value of paths through the Tunnel in order to maximise their operating revenue.

16 In our meeting with them, Eurostar noted that some existing European high speed train sets, such as the German ICE sets, may be approaching the required fire safety levels.

Second, an international operator (such as Eurostar) could choose to offer services to domestic passengers from intermediate stations between the Channel Tunnel and London (ie Ashford and Ebbsfleet). Such services would be subject to moderation of competition rules, and therefore it is not clear that they would be permitted. There are also various commercial reasons why an operator might choose not to launch such a service: it would increase journey times for international passengers; it would take up valuable capacity for international journeys; and the time taken to pass through security would make the journey times unattractive for domestic passengers.[17] These considerations, combined with the high costs associated with using the Channel Tunnel, lead us to conclude that the Directive would be most unlikely to result in services of such a kind.

Third, an international operator could offer services beyond London. As we discussed in section 3.2, however, all studies of possible provisional Eurostar services have concluded that such routes would be grossly unprofitable to operate. The EC's proposal would not change that, and therefore we do not anticipate any additional service provision beyond London as a possible impact.

6.2.1.2. Services between Northern Ireland and the Republic

Under the current EC regulation there have not been any serious approaches from companies wishing to offer a service between Northern Ireland and the Republic that would compete with Enterprise, the existing service that is jointly operated by NIR and IE, the state owned incumbent operators. Some train paths may be available should another operator seek to enter the market though there may be some difficulty with timetabling because of capacity constraints at Dublin Connolly. However, we should note that because the track gauge in the island of Ireland is different to that in Great Britain, any new operator would have to acquire broad gauge stock (or convert standard gauge stock) in order to enter the Irish market.

The existing service runs from Belfast to Dublin and serves some intermediate stations. Therefore, the allowance of cabotage under this option would not materially affect the current situation in Northern Ireland. NIR and IE currently receive public funding which suggests that it may not be profitable for another operator to offer a similar service to that of Enterprise. If entry did occur it would probably lead to an increased requirement for subsidy at NIR, and so could be refused on economic grounds.

6.2.2. Other possible impacts outside the UK

If this option is implemented it would make it easier for UK operators to start up services between other Member States, because the Directive permits cabotage for the first time, and this is often vital to the financial viability of services. UK operators might be well placed to enter such markets because of their experience operating services on a commercial basis in

17 Based on discussions with Eurostar.

Great Britain. Operators would only launch such services if they anticipated that the financial rewards would outweigh the associated costs.

It is not clear that such effects would be substantial: there might still be significant barriers to launching new services, such as obtaining the necessary safety certificates, and applications may be refused on economic grounds because many incumbent services will be subject to state support.

If new services are launched in continental Europe there would be some benefits for UK citizens travelling on such services, but the number doing so is likely to be limited.

The Directive might increase Member States' and railway undertakings' acceptance of liberalisation in rail markets, with potential benefits for freight markets and for domestic passengers.

6.3. Option 3 – The EC Proposal but Without Restriction on Cabotage

Under this option the major concern is that of the possible impacts of cabotage on Integrated Kent Franchise (IKF) revenue, and hence on the public financial support needed. This is an important question for the SRA (and in the future for the DfT) who will need to fund financial support for the IKF franchise.

In considering the impact of cabotage we need to be careful to identify the implications of this variant of the proposed Directive. IKF revenue could be at risk from two forms of cabotage:

- Cabotage by the existing international operator Eurostar ('Eurostar cabotage'). This possibility would be affected as, subject to obtaining a domestic operating licence (a requirement not affected by the proposed Directive), it would have the right - unconstrained by MoC rules - to provide cabotage services.

- Cabotage by a new international entrant ('new entrant cabotage'). The net revenue prospects of a new entrant could be enhanced by cabotage opportunities.

(The financial prospects of an IKF operator could also be affected by an 'open access' domestic competitor, but this possibility is not relevant in assessing the impact of a Directive affecting international services.)

NERA has considered the impact of cabotage.[18] We considered first 'Eurostar cabotage', and then 'new entrant cabotage'.

---

[18] To do this, NERA used confidential data on expected IKF flows and revenues supplied by the SRA's consultants.

'Eurostar cabotage'

If Eurostar were to decide to carry domestic passengers on its services, international passengers on Eurostar trains would face increased overall journey times. Cabotage would also reduce revenue of the Integrated Kent Franchise – and therefore increase the subsidy requirement. There would be benefits to domestic passengers travelling from Ashford and Ebbsfleet associated with greater frequency of service if tickets were inter-available and, if the operators were to compete on price (though this might restrict inter-availability of tickets), lower fares. There would be net financial benefits to Eurostar, because the company would only start to offer cabotage if it expected its net revenue to increase.

Some of the revenue loss to the integrated Kent franchisee would be transferred to Eurostar,[19] but Eurostar might lose revenue from some international passengers who switched to other modes or did not travel at all because of the increases in journey time and any crowding effects associated with picking up the domestic passengers. Eurostar would also incur some additional costs from handling the domestic passengers. Eurostar also advised NERA that they would incur additional regulatory costs if they were to offer domestic services. The subsidy requirement for the IKF would increase, though DfT financial support for L&CR could fall.

NERA considered the sums that would be involved, using forecasts of revenue from domestic passengers travelling between Ashford and London, and between Ebbsfleet and London, on high speed IKF domestic services.

Our initial estimates were based on a comparison of expected hourly service frequencies for domestic CTRL services, along with current Eurostar service frequencies (assuming that all Eurostar services were to stop at both Ebbsfleet and Ashford). These frequencies are shown in Table 4.2.

---

19 The extent of this transfer would depend on whether Eurostar offered lower fares, and whether the IKF operator reacted by lowering its fares.

Table 4.2
Projected Service Frequency on CTRL

	IKF Services (services an hour)	Eurostar (services an hour)	Anticipated Eurostar share of frequency (per cent)
Ebbsfleet:			
AM peak	3.5	3	46%
Off-peak	4	1.2	23%
PM peak	3.5	2	36%
Ashford:			
AM peak	2	3	60%
Off-peak	2	1.2	37%
PM peak	2	2	50%

Source: Projected IKF service frequency on CTRL provided by the SRA. Eurostar frequencies are based on NERA's interpretation of the current Eurostar timetable for all international services from London, and assuming that all were to stop at both Ebbsfleet and Ashford.

Table 4.2 also shows Eurostar shares of frequency. However, we should note that:

- There would be a time penalty for domestic passengers using international services because of the need to pass through security before boarding and through passport control on arrival unless there were facilities to segregate international passengers from domestic passengers on Eurostar trains and on the platforms serving them at Ashford, Ebbsfleet, Stratford and St Pancras. Unless such separate facilities were to be constructed, passengers using these services would need to allow around an extra 20 minutes for their journey. This would represent 80 per cent and 50 per cent increases in journey time from Ebbsfleet and Ashford respectively for passengers compared to the services proposed within IKF.

- Eurostar would be concerned about using up capacity for international passengers to carry domestic passengers who would generate much lower revenue, so that they would be less likely to stop peak hour services at domestic stations even though it is at peak times that demand by domestic passengers would be greatest.

- The SRA have pointed out that Eurostar might adopt other marketing strategies to increase their market share, though NERA has not been able to identify other strategies that we believe would have a material impact on the outcome.

At inter-available fare levels NERA has concluded that few passengers would choose to make domestic journeys on Eurostar, primarily because of the time penalty involved with accessing international trains. If Eurostar were to compete aggressively on price we would expect that they could entice a small proportion of passengers to travel on dedicated tickets. The revenue from such passengers would represent a very small proportionate increase in the total revenue that Eurostar earns, particularly given that average yield (revenue) from a domestic passenger would be low in comparison with average yield from an international passenger given average distances travelled (and average fares per km of the two types of passenger). Against this Eurostar would have to offset any revenue loss from international passengers as a result of longer journey times or reduced capacity, the increased operating costs from stopping trains at more stations, and increased costs of dealing with two different types of passengers, who might need to be segregated on trains as well as at stations. NERA is certainly sceptical that offering domestic cabotage would present a commercially attractive option for Eurostar.

'New entrant cabotage'.

As we have discussed already (see section 6.2.1.1) we do not think that the business case is strong enough to induce an additional operator to enter the London to continental European destinations rail market. In addition, the opportunity for cabotage would not contribute to revenue sufficiently to make a service financially viable even with a service frequency of 24 a day.

But Eurostar has the advantage that it already offers a relatively high frequency service along the route. We would expect that a new operator (if one were to enter) would build up its offering from a low frequency service in order to limit its initial investment. Running only one or two trains a day in each direction combined with the additional time requirement for boarding international services would make this an unappealing prospect for Kent commuters even if dedicated service tickets were heavily discounted. In this scenario, we would not expect the operator to offer domestic journeys before service frequency were increased to a level that passengers would find acceptable. In this case we would expect that rates of revenue extraction would be much lower than in the case of 'Eurostar cabotage'.

Conclusions on existence of cabotage rights on CTRL

On the basis of the data available to us, NERA does not believe that the removal of the government's ability to restrict competition in order to protect franchise revenues would in practice have additional impact on the CTRL route. This is because we doubt that Eurostar would find it profitable to offer cabotage services, and because we would not expect there to be any new international operator on the route. There are, however, always unquantifiable and unforeseeable factors, for example:

- A significant reduction in CT access charges
- Higher than expected IKF revenues

NERA's view is that is these are unlikely to alter this conclusion. SRA, however, take a more cautious view.

Impact of cabotage in Ireland

If a new international operator on the island of Ireland would have rights of cabotage, this would increase the potential revenue they could earn from offering a service on the route between Belfast and Dublin. However, we have been unable to obtain any information on the current financial position of Enterprise services between Belfast and Dublin, so we have not been in a position to make any assessment of the revenue that might be at risk from competition.

Impact of cabotage in continental Europe

UK operators could start up services between Member States, and this would be easier under option 3 than under option 2 because the hurdle of ensuring that public services are not adversely economically affected would be removed.

7. COSTS

7.1. Option 1 – Do-Minimum

Option 1 is the base case, do-minimum. Costs are measured relative to the base case.

7.2. Option 2 - The EC Proposal

As discussed in Section 6, we expect this option to have no material impact on the UK rail market. We do not expect Eurostar to lose revenue to a new competitor because we do not anticipate there being any rail competition to Eurostar's existing services. Nor do we expect there to be any abstraction of revenues from the integrated Kent franchise by new international operators because we do not expect there to be any. Nor would IKF franchise revenue be lost to Eurostar because of this proposal. It is primarily a commercial decision for Eurostar as to whether to stop at intermediate stations in the UK, taking account of regulatory constraints which would not be affected by the Directive.

7.3. Option 3 - The EC Proposal but without restriction on cabotage

As under option 2, there would be no costs to the UK from accepting this proposal. However, there would be greater risk of abstraction of revenue from IKF revenues because the government control of competition would be reduced compared to option 2. In this respect, adoption of option 2 rather than option 3 provides a form of insurance benefit to the UK government in that it can protect domestic services from threats to their finances from potential competition from international services.

8. THE IMPACT ON SMALL FIRMS

We do not believe that there will be direct impacts on small firms. Operation of international rail services could only be contemplated by larger organisations.

9. COMPETITION ASSESSMENT

Liberalisation is only likely to increase prospects for competition, not to reduce them. But we have argued that, in the UK, the potential for increased competition is limited by the particular circumstances of the international routes affected.

Elsewhere, however, it may be a different matter. The many land borders and cross-border rail routes in Continental Europe mean that prospects for competition may be enhanced. Moreover, the ability to offer cabotage might increase profitability for entry on specific routes, especially where an international route serves several cities located either side of an international border, so that cabotage flows might be quite dense. (And where rolling stock needs might not be nearly so specific as they are for Channel Tunnel services or even for Irish broad gauge services.)

We have already noted that UK firms might be quite well placed to enter such markets because of their experience in operating passenger rail services in Great Britain and in other countries.

We believe that adoption of this Directive would also contribute to the general climate of acceptance of liberalisation and competition in the rail sector.

10. SUMMARY

We have found, due to the particular circumstances of international routes to the UK, and the existing regime within the UK, that this Directive is unlikely to result in new services in the UK.

Even if the restriction on cabotage that affected the economic equilibrium of services were removed from the proposal (option 3), we still think that new entry as a result of the Directive alone is unlikely. Without such a safeguard for public services, however, the risks associated with new entry would be greater because revenue abstraction from existing public services could not be prevented. In addition, we should note that the SRA have expressed the view that NERA has under-estimated the threat to UK domestic franchises from cabotage.

This Directive might result in some less tangible impacts. There would be increased opportunities for UK firms to launch new services in continental Europe (particularly in option 3 where the restriction on cabotage within the context of international services is removed); the Directive may contribute to increased acceptance to rail market liberalisation more generally; and the limited number of UK citizens that travel on international services in continental Europe each year might also benefit.