OFFICE *of the*
RAIL REGULATOR

REVIEW OF FREIGHT CHARGING POLICY
A CONSULTATION DOCUMENT

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Regulator's foreword

1. My draft Operational Plan for 2000–01 included a key objective of "utilising and developing the regulatory and commercial environment in a way which promotes and encourages rail freight". With regard to track access charges, I also highlighted the need to "consider the proposed new access contracts for freight train operators, including English Welsh & Scottish Railway (EWS), Direct Rail Services (DRS) and Freightliner".

2. The existing framework for the approval of these charges was established in 1995. Some aspects of this framework are now being addressed in the context of the periodic review of Railtrack's access charges for franchised passenger services and in the development of model clauses for access agreements. Although freight operators and users have made important contributions to these initiatives (e.g. in relation to efficiency and the structure of charges), it is important to ensure that all freight-specific issues are taken into consideration and that all freight users, operators and funders have an opportunity to comment on these issues.

3. I have therefore initiated a separate review of my freight charging policy. This will be a fundamental review, starting from first principles. Its outcome should provide greater transparency and predictability for freight operators and users, and help the industry as a whole to respond to the challenge of increasing rail freight's share of the overall freight market. I will also continue to work closely with the SSRA as it develops its freight strategy as part of its strategic plan.

TOM WINSOR
Rail Regulator

26 May 2000

1. Introduction

Background

1.1 In 1995 the then Regulator published his framework for the approval of track access charges for freight services. It contained the following specific criteria:

- charges should be greater than or equal to the avoidable costs incurred by Railtrack as a direct result of carrying that particular freight flow;
- charges should be less than or equal to the "standalone" cost which would be incurred by a notional efficient competitor;
- charges should not be higher or lower, after allowing for specific factors relevant to each case, than those for other operators or users to such an extent that they risk significantly distorting competition between rail freight operators or users; and
- the structure of charges should broadly reflect the value to users of access to the rail network, and should enable Railtrack to recover its total freight-specific costs plus any expected contribution to the shared common costs of its passenger and freight services.

1.2 There have been significant changes to the Rail industry since 1995. English Welsh and Scottish Railway (EWS) has negotiated a new "global" track access agreement replacing the previous flow based arrangements, gross tonne mileage has increased by more than 35% and a better understanding of cost causation has been developed. Further growth opportunities have also been identified and the Government is promoting the growth of freight on rail. New operators are considering entering the market and existing operators are seeking to negotiate new, possibly longer term, track access agreements.

1.3 In addition, the periodic review of Railtrack's access charges for franchised passenger services will have a major impact on the incentive framework for franchised passenger train services. It is therefore an appropriate time to review the regulatory framework for freight access charges. The outcome of this review could have a major impact on freight operators and on the market for rail freight. Given this, it is

important that there is fundamental review of the principles behind the Regulator's policy.

1.4 This document, and the responses which consultees make to it, will be an important part of the freight review. The Regulator has already consulted widely on some issues related to this consultation as part of his periodic review of Railtrack's passenger track and station access charges and his development of model clauses for track access agreements. He has published the executive summary of work undertaken for him by NERA to consider the effects of the level of variable charges on the rail freight market. He has also appointed consultants (NERA/Symonds) to advise him on the efficient cost of providing a standalone freight railway (a draft of this report will be circulated to the operators who have contributed information before finalisation and publication in June 2000). Finally, Railtrack has provided the Regulator with information on its freight-related avoidable costs (this information is currently being reviewed).

1.5 Railtrack stated in its 2000 NMS that it should be encouraged to expand its freight business through access charges which reward it for growth, that freight operating companies should optimise their use of the existing infrastructure and that new investment to move freight from road to rail would require Government support. It has indicated that the current arrangements provide it with little incentive to promote the growth of rail freight.

1.6 Operators have argued strongly that Railtrack is not responsive to the needs of freight operators (e.g. in response to the Regulator's consultation on the incentive framework in October 1999). One operator has argued that no financial mechanism will ever incentivise Railtrack to meet its needs and therefore the Regulator should rely on the obligations in its network licence.

1.7 Freight operators have generally argued that Railtrack's track access charges should be as low as possible to ensure that rail can compete with other transport modes. Access charges should therefore, in their view, be no higher than Railtrack's avoidable costs from freight operations. In addition, they argue that these avoidable costs should reflect Railtrack's potential for improved efficiency and that this potential should be measured against international best practice. They generally argue that the variable charge should be low to reflect their view of the marginal costs of freight operations.

1.8 Similarly, freight customers have expressed concern (e.g. via the Rail Freight Group) about the future level of access charges and how it could affect their use of rail in the future. They argue that the costs of rail freight are, in many cases, still not competitive with road and that higher access charges could make things even worse.

Purpose

1.9 This document aims to set out the key issues which need to be considered in developing the Regulator's policy with regard to track access charges for freight services. It covers the following issues:

- Chapter 2: the principles which the Regulator should consider to guide his policy with respect to freight charges;
- Chapter 3: the extent to which a more deterministic and transparent approach should be adopted;
- Chapter 4: Railtrack's freight-related costs and the implications for charges;
- Chapter 5: the appropriate regulatory framework for freight-related enhancements; and
- Chapter 6: the nature of freight access rights.

1.10 Consultation responses should be sent to:

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1 Waterhouse Square
138-142 Holborn
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by 7 July 2000. Respondents should indicate clearly if they wish all or part of their responses to remain confidential to the ORR. Otherwise it is expected that they will be published in the ORR library and on its website and they may be quoted from by the Regulator. Where a response is made in confidence, it should be accompanied by

a statement which can be published, placed in the ORR library and on its website and quoted from by the Regulator, summarising the submission but excluding the confidential information. The Regulator may also publish the names of respondents in future documents or on the ORR's website, unless consultees clearly indicates that he wishes his name to be withheld.

Timetable and process

1.11 The Regulator has already consulted freight operators, users and funders on the appropriate timescale for the review. Although some operators clearly wish to negotiate new agreements as soon as possible, most respondents have emphasised the longer term importance of the review and the need to allow more time for wider consultation and consideration of the issues. In the light of these comments, the Regulator currently intends to publish his further views on the future framework in August 2000. Moreover, he intends to consider this timetable, and the timetable for completing the review, in the light of responses to this document.

1.12 As part of his periodic review of access charges for franchised passenger operators, the Regulator will need to forecast the level of Railtrack's income from freight access charges so that these can be deducted from Railtrack's overall revenue requirements (the single till approach). He expects to publish draft conclusions on this issue in July 2000 and final conclusions on the periodic review in September 2000. If the current review of the Regulator's policy with respect to freight access charges has not been completed by this time, he may decide to make an assumption about freight revenue in this periodic review (e.g. based on current freight charges). If the freight charging review then results in a different projection of Railtrack's freight income, this could be taken into account at the next periodic review.

1.13 With regard to future periodic reviews, the Regulator is considering whether the single till approach should be retained. He is also considering whether any future review of his policy with respect to freight charges should necessarily coincide with future periodic reviews of charges for franchised passenger services.

2. Regulatory principles

Introduction

2.1 This chapter first sets out the Regulator's duties with regard to rail freight and the implications of the proposed EC Directive on charging and capacity allocation. It then discusses the principles which may be relevant in his consideration of charges for access to the existing network.

The Regulator's duties with regard to freight

2.2 The Regulator's duties with regard to both passenger and freight services are laid out in section 4 of the Railways Act 1993. He considers that the most relevant duties are to:

- protect the interests of users of railways services;
- promote the use and development of the railway network to the greatest extent that he considers economically practical;
- promote efficiency and economy on the part of persons providing railway services;
- to take into account the need to protect all persons from dangers arising from the operation of railways, taking into account, in particular, any advice given to him in that behalf by the Health and Safety Executive;
- promote competition in the provision of railway services;
- impose on the operators of railway services the minimum restrictions which are consistent with the performance of his functions;
- enable persons providing railway services to plan the future of their businesses with a reasonable degree of assurance;
- act in a manner which he considers will not render it unduly difficult for Railtrack (and other network licence holders) to finance its activities; and

- have regard to the financial position of the Franchising Director.

2.3 In developing his policy for freight charges, the Regulator must ensure that the policy is, in his view, best calculated to discharge these duties. The Regulator has also set out, in his draft Operational Plan 2000–2001, the proposed aim and objectives of his office. One of these objectives is to utilise and develop the regulatory and commercial environment in a way which promotes and encourages rail freight.

The proposed Directive

2.4 The European Commission has published a proposal for a new Directive on charging and capacity allocation which affects both domestic and international rail services. An amended proposal was agreed at the European Council meeting in December 1999 and is currently being considered by the European Parliament.

2.5 Some of the key charging principles of the draft Directive agreed by the Council[1] are:

- charges should send the correct economic signals ensuring that operators make rational decisions;
- any distortion in competition should be minimised;
- infrastructure charges should not prevent the carriage of traffic which can at least cover its avoidable costs from utilising infrastructure capacity;
- charges should not be discriminatory; and
- charges should be set at the cost which is directly incurred as a result of operating the train service.

2.6 The proposals also include provision for mark-ups to allow full cost recovery by the infrastructure manager if set on an efficient, transparent and non-discriminatory basis. In particular this would allow, subject to certain conditions, mark-ups based upon any of the following:

[1] Included in the common position draft Directive on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification (to be published shortly in the Official Journal).

- individual market segments;
- individual negotiated contracts; and
- fixed and variable charges.

Principles

2.7 Against this background, the Regulator is considering the following principles to guide his policy with respect to access charges for freight services:

- **preventing monopoly abuse by Railtrack** – since Railtrack is a monopoly supplier, its customers are not able to take their business elsewhere. Without regulation, it would seek to charge higher prices than if it faced competition from other suppliers and may therefore carry fewer freight services because some would not be able to pay the higher charges. It should be noted, however, that competition from road will constrain Railtrack's market power in many cases. Depending on freight operators' willingness to pay, Railtrack might be able to recover more than the efficient cost of providing a freight-only railway;

- **allowing Railtrack to recover the avoidable cost of its aggregate freight operations** – some of these costs cannot be disaggregated to the level of individual freight operations and, if Railtrack were not able to recover these costs, it could mean that freight operations were being subsidised by passenger operations (the recovery of other costs is discussed in more detail in Chapter 4);

- **promoting competition between freight operators** – competition in rail freight services acts as a safeguard for customers and promotes efficiency and innovation within the market. Increased competition in the freight market should reduce prices to customers and increase operator efficiency, thereby increasing the market for rail freight. Making Railtrack's costs, and possibly some or all of its charges, more transparent could promote competition by reducing barriers to entry;

- **increasing transparency and predictability** – rail freight faces strong competition from alternative transport modes. If the rail freight market is to

develop, operators argue that they must be able to move quickly to secure new business. Seeking to ensure that access regulation is clear and transparent may make rail freight more competitive. Long term access agreements would also give increased certainty to operators and their customers;

- **avoiding distortions in the freight market** – this implies that Railtrack's charges should not prevent or discourage traffic which can at least cover its avoidable costs and that Railtrack should not discriminate between different operators who are competing in the same market segment; and

- **providing appropriate incentives for Railtrack to develop the freight market** – this could be achieved through a combination of clearer obligations and appropriate financial incentives.

2.8 There are, however, some potential conflicts between these principles which need to be taken into account in developing the Regulator's policy. For example, making costs and charges more transparent or the need to avoid distortions in the freight market may make it more difficult for it to recover its aggregate freight-related costs.

Conclusions and next steps

2.9 The major part of the remainder of this document discusses the implications of these potentially conflicting principles in more detail. In particular, it addresses the following questions:

- Chapter 3: Should charges continue to be based on negotiation within ceilings and floors or should a more deterministic approach be adopted. Should Railtrack's costs and charges be made more transparent?

- Chapter 4: Should freight operators pay any more than Railtrack's avoidable costs from freight? What are Railtrack's avoidable costs from freight and how do they vary with use? Should freight operators gain from Railtrack's improving efficiency over time? If so, how can these efficiency gains be passed on to operators?

- Chapter 5: What framework is required for freight related enhancements?

2.10 Comments are invited from all interested parties on the principles outlined in this chapter.

3. Negotiation and transparency

Introduction

3.1 The current approach to freight charging, which was established in 1995, is based on individual negotiations between Railtrack and each of its customers (subject to an avoidable cost floor and a standalone cost ceiling). In addition, Railtrack has only been obliged to provide its customers (or freight users) with limited information about its cost floor/ceiling or about the charges negotiated with other operators. This approach was adopted on the basis that Railtrack would then be able to negotiate a share in the high value associated with certain types of freight flow (subject to the ceiling).

3.2 Whilst this approach may have been appropriate in the circumstances which prevailed at the time, in the context of the current review it is necessary for the Regulator to reconsider whether this approach remains appropriate in the present circumstances. In particular, industry consolidation and the move to operator (rather than flow) based track access agreements means that the Regulator may now be able to consider alternative approaches which would not have been feasible or appropriate in 1995.

A more deterministic approach

3.3 An alternative to individual negotiations within constraints would be for the Regulator to take a more deterministic approach to establishing the appropriate level of charges for each operator. This could be achieved through the publication of more detailed criteria which establish a transparent methodology for deriving fixed and variable charges in different circumstances. These criteria could indicate the approach which the Regulator would expect to use to assess charges in agreements or amendments to agreements submitted for his approval (under section 18 or 22 of the Railways Act 1993) and how he would expect to set charges in agreements submitted for his determination (under section 17 of the Act).

3.4 These criteria could specify the methodology and assumptions which the Regulator would expect the parties to use to establish the appropriate level of variable charges. In the first instance, this could be based on avoidable costs. Given this, any additional properly recoverable costs would need to be recovered through the fixed charge. The parties could be permitted to reallocate the expected revenues between the fixed and

variable charges to reflect their preferred allocation of risk. In this case, however, the Regulator would want to understand the reasons for the proposed reallocation and the implications for incentives.

3.5 Clearly, it would not be desirable for the Regulator to specify the same fixed charge for all operators (subject only to reallocation as described above) since this would penalise small operators. Equally, setting the fixed charge based on the expected level of service would be equivalent to an additional variable charge and (in the absence of support payments) this could prevent or discourage some traffic which could cover its avoidable cost. An alternative approach would therefore be to allocate any additional costs based on willingness to pay, either through negotiation (as at present) or using a pre-determined formula (e.g. based on the projected revenues of the operator in question).

3.6 The main advantages of this more deterministic approach would be greater certainty for freight operators and their customers and greater transparency about the freight operators' cost structure (which may reduce the risk of monopoly abuse). It could also facilitate new entry into the rail freight market. As indicated above, however, the main difficulty relates to the recovery of any costs in excess of the avoidable costs of the service in question. The identification of these costs is discussed in more detail in Chapter 4.

Transparency

3.7 The more deterministic approach described above would clearly require greater transparency about Railtrack's cost structure. However, even if the Regulator concludes that the current approach should be maintained, there may be a case for increased transparency with regard to Railtrack's freight-related costs. He would also need to consider whether the established charges should be published.

3.8 As indicated in Chapter 1, the Regulator has already published his consultant's assessment of usage costs, including those associated with freight services, and Railtrack has provided its own assessment of these costs. He also intends to publish his consultants' report on the standalone costs of freight access.

3.9 In addition, the Regulator is considering:

- extending Railtrack's accounting requirements to require separate accounts for its freight business;
- requiring identification of all freight-only assets and their condition in the proposed asset register;
- requiring Railtrack to publish further details in relation to its calculations of the avoidable costs of freight access and to have them independently reviewed by his reporters;
- requiring Railtrack to provide its calculations for operator specific avoidable costs to the operator (or potential operator) in question on request; and
- requiring operators to supply Railtrack with accurate consist data.

3.10 In considering these requirements, the Regulator needs to balance the benefits and the cost incurred by Railtrack, which would ultimately be passed on to freight operators. For example, the cost of auditing the calculation of freight avoidable costs would itself be a freight-specific cost.

Conclusions and next steps

3.11 Comments are invited on whether a more deterministic approach to freight charging would be preferable to the current approach. If so, how should this be applied? Comments are also invited on whether costs and charges should, in any case, be made more transparent.

4. Freight-related costs

Avoidable and standalone costs

Defining the concepts

4.1 The Regulatory policy established in 1995 set a price floor based on the avoidable cost of the service in question. The assessment of avoidable costs is, however, complicated by the fact that some costs are avoidable at individual flow level, others at individual operator level and some only at the level of total freight services. Further complications arise from the existence of a mixed freight and passenger network.

4.2 Currently freight costs can be broadly categorised into:

- flow-specific avoidable costs which are those costs Railtrack could shed if the operator ceased running the flow. These include maintenance and renewal costs ensuing from increased usage, electric traction costs and congestion costs;

- operator-specific avoidable costs which are those costs Railtrack could shed if the operator ceased running all services. These include the total of that operator's flow specific avoidable costs as well as additional costs common to more than one flow (such as administrative costs);

- aggregate freight-specific avoidable costs which are those costs Railtrack could shed if all freight operators ceased running services over the network. These include the total of all operator specific avoidable costs as well as additional costs which are common to all freight operators such as some HQ costs; and

- costs which are common to both freight and passenger operators (i.e. they cannot be avoided without shedding both freight and passenger operations).

4.3 Under the current arrangements, operator level agreements must include charges which at least cover their operator specific costs (the first two bullets above). This includes usage costs and electric traction costs, and in future, this could also include

congestion costs and provide incentives for improved operational performance. These are discussed separately in the following sections.

4.4 Railtrack is currently expected to recover any other freight-specific costs (the third bullet point above) from freight operators in general. However, individual freight operators are only expected to contribute to these costs and other common costs (the fourth bullet point above) where this can be achieved without pricing freight flows off the network. In addition, the regulatory policy adopted in 1995 caps charges at the standalone cost which would be incurred by a notional efficient competitor. This constrains the ability of Railtrack to recover more than the avoidable costs from individual freight flows so that the freight operator involved is no worse off than if an efficient freight-only network existed.

Cost estimation

4.5 The Regulator has also asked NERA/Symonds to assess the standalone costs of a freight-only network. In his view, the relevant standalone costs are those which would be incurred to operate and maintain a network in long run steady state condition if:

- the current rail network had been constructed as a freight-only network using only the existing routes (e.g. the network might have a single control centre rather than the small local signal boxes); and

- that network had been designed, provided and operated efficiently taking account of the current volume and nature of freight services and also the operating conditions applying in Great Britain (e.g. there might have been fewer routes between two points).

4.6 NERA/Symonds have developed a detailed model to take into account the flow and volume information provided by operators and the cost and network information provided by Railtrack. They will also take into account other work being undertaken for the Regulator to assess the potential for efficiency improvement and international best practice. Under the current policy, the cost of land is not included in the standalone cost. The Regulator expects to publish the results of NERA/Symonds study in June 2000.

4.7 Railtrack provided the Regulator with its most recent definition and draft estimate of its total freight-specific costs on 15 May 2000. The definition is summarised in

Appendix A and the Regulator would welcome comments. He intends to review these costs with those estimated by NERA/Symonds in their study of the costs of providing a standalone freight-only network.

Key issues

4.8 Together the avoidable and standalone costs of freight define the minimum and maximum costs that can be attributed to Railtrack's freight operations under the current charging policy. The key questions relating to these freight-related costs are:

- What are the genuine avoidable costs for individual freight operators?
- Given that the sum of all the operator specific avoidable costs will be lower than the total freight-specific costs, how should Railtrack recover the difference?
- Should charges for specific flows/operators include a contribution to those costs common to both freight and passenger operators where this does not preclude the freight flows in questions?
- What efficiency assumptions should underlie an assessment of freight costs?

4.9 The remainder of this chapter addresses the following issues relating to the calculation of freight avoidable costs:

- usage charges;
- electric traction charges;
- capacity charges;
- recovery of common costs;
- the expected level of efficiency adjustment; and
- the performance regime.

4.10 These issues have already been addressed in previous consultation documents as part of the periodic review of access charges for franchised passenger services. However, it is important to address these issues separately in relation to freight.

Usage charges

4.11 Currently most freight operators pay a single variable charge for operation of any vehicle, at any time, anywhere on the network for which they have rights and are able to bid into the timetable.

4.12 In November 1999, the Regulator published a technical consultation document on Railtrack's usage costs. That document covered Railtrack's bottom-up assessment of its costs (carried out for Railtrack by AEA Technology) and the alternative top-down approach adopted by Booz Allen and Hamilton (BAH) as advisers to the Regulator. The estimated usage charges for a range of different freight vehicles were presented in an appendix. Operators have since been sent a detailed explanation of the top-down model derived by BAH and updated estimates of costs for illustrative vehicle types.

4.13 Several freight industry organisations and operators responded to the November 1999 consultation. The major thrust of their responses was:

- general support for "accurate" costs to be used as the basis for charges;
- concern about the affordability of any increase in usage charges;
- concern over the definition of the marginal cost of usage, in particular whether freight operators should only pay the usage costs of an efficient freight-only network; and
- a general desire for long-term stability and simplicity in pricing.

4.14 Usage charges are intended to reflect the additional maintenance and renewal costs caused by wear and tear from running an additional vehicle or train across the network. To ensure that Railtrack has no disincentive to carry individual trains it is important that it can recoup these costs. Given the desire to provide Railtrack with appropriate incentives to develop freight services whilst protecting rail freight from substantial increases in the variable charges and retaining a simple charging structure,

there is a range of options for the structure of the usage element of charges for freight services. They could be:

- vehicle-specific: however this could introduce significant additional complexity for operators;

- averaged over the vehicle fleet operated by a specific operator (the average could be weighted based on expected levels of operation) although the implications for the operator's incentives would need to be considered;

- averaged over the vehicle fleet operated by all freight operators: this would remove the link between the charges paid by a specific operator and the vehicles which it was operating and therefore would be unlikely to give that operator appropriate signals about the costs which it was imposing on Railtrack; or

- based upon a limited number of groups of similar vehicle types.

4.15 Appendix B contains tables presenting the usage charge that would apply for groups of similar vehicle types, using BAH's approach to estimation of the charge and linking them to the Regulator's provisional conclusions on Railtrack's revenue requirements for the next control period.

Charges for electric traction

4.16 The Regulator consulted on charges for electric traction in September 1999 and set out his provisional conclusions in April 2000. Refinements include providing a rebate for operators who install regenerative braking equipment, excluding those with consumption meters from the wash-up, and allowing competitive supply (at some point in the future).

4.17 Freight operators responses to the 1999 consultation document were:

- that freight should be exempted from the wash-up (which is the process by which the difference between estimated and actual consumption of electricity is reconciled and passed on to train operators); and

- that Railtrack's procurement process should be more transparent.

4.18 In practice, freight operators are currently excluded from the wash-up (given the negotiated approach to charging), giving freight operators greater certainty as to their track access costs. The consultation responses suggest that freight operators value this certainty. Railtrack and some passenger operators believed that freight should be included in the wash-up.

4.19 To some degree, Railtrack's efficiency in electricity procurement is protected by the current linking of prices to the Moderately Large Users Index (MLUI). Railtrack will be incentivised to make its procurement more transparent if it faces competition from other suppliers as proposed. The Regulator has indicated that he intends to provide for a reopener in franchised passenger track access agreements so that he can give operators the option of purchasing their electric traction requirements from competing suppliers. This option could also be made available to freight operators.

4.20 Electric traction charges for passenger operators depend upon times of day, geographic area and season. Options for freight charges are:

- price by geographic area, time of day and season which would be complex but more accurate;
- price by a weighted average of these factors based on historic patterns, covering all freight operators;
- price by a weighted average of these factors based on historic patterns of consumption for each freight operator producing an operator-specific charge; or
- price by a weighted average of the these factors updated on an annual basis.

4.21 An important issue here is how consumption rates are estimated which may currently be limited by the information available to Railtrack from operators. Railtrack is reviewing the electric traction consumption rates for each of the freight operators based on traffic patterns, consumption rates and procurement rates for the 1999/2000 year. The results of this review should be available in June 2000 and will be shared with all operators. An alternative to these options would be to charge on the basis of actual metered consumption.

Capacity Charges

4.22 When new services are introduced into the timetable, there can be effects on operational performance (depending on the level of congestion on the network). Since these effects may be on the performance of other operators' trains and Railtrack is liable to pay those operators liquidated damages for poor performance, Railtrack's incremental costs from the new service includes these performance payments. The Regulator currently proposes to introduce a simplified version of Railtrack's proposed capacity reservation fee for passenger services from the summer 2002 timetable and will be consulting on the technical issues in June 2000.

4.23 These costs are avoidable and should therefore be included in fully cost-reflective charges. However, it should be noted that they would not necessarily be incurred by an efficient operator of a standalone freight network (e.g. because of the lower utilisation). Relevant issues in considering the extension of a capacity charge to freight operators include the:

- demand for rail freight services: as noted earlier, NERA's work for the Regulator has shown that increased variable charges could have a significant effect on rail freight growth;

- operators' need for certainty: a complex capacity charging regime reflecting geographical and time of day differences and their complex access rights might thwart certainty; and

- ability of freight operators to react to the price signals: this will depend on the nature of the goods being shipped and alternative route or time availability.

Recovering common costs

4.24 Some freight operators have argued strongly that they should pay only Railtrack's avoidable costs adjusted for efficiency. This would:

- protect Railtrack's freight customers – whilst passenger operators would be subsidising freight services on the network;

- ensure competition between operators – because no operator would pay more than this figure;

- prevent distortion in the final market – since the charge would reflect the wear and tear costs of differently loaded vehicles across the network; and

- result in the lowest possible variable access charges, which according to all studies (including that of NERA for the Regulator in 1999) should help to promote the growth of rail freight.

4.25 However, it would not allow Railtrack to recover its aggregate freight-specific avoidable costs nor a contribution to its common costs, would not necessarily give certainty, depending on the arrangements, and it would not provide Railtrack with an incentive to encourage rail freight growth.

Expected efficiency savings

4.26 The December 1999 periodic review document set out the Regulator's provisional conclusions that Railtrack could achieve improvements in efficiency of 3-5% per annum over the period to 2006 as a whole. Charges paid by franchised passenger operators will reflect his final conclusions in this area. The December 1999 periodic review document also set out the Regulator's provisional conclusions as to how the efficiency adjustment will be applied to charges to franchised passenger operators. To prevent variable charges rising and then falling as the efficiency adjustment takes effect year on year, the Regulator has provisionally concluded that these charges should be adjusted in the first year (based on expected efficiency savings over the period as a whole) and should remain constant in real terms for the remainder of the control period.

4.27 Freight operators have presented information to the Regulator on the improvements in efficiency which they believe Railtrack could achieve, based primarily on experience from overseas. The Regulator has commissioned NERA to review the appropriateness and accuracy of these international comparisons. This will complement the work already completed for the Regulator by Europe Economics and Booz Allen & Hamilton. It will also inform the NERA/Symonds work on the efficient cost of providing a standalone freight network.

4.28 This raises fundamental questions about whether freight charges should be based on:

- the efficiency savings which Railtrack can be expected to achieve over the relevant timescale; or

- the costs of an efficient (notional or actual) comparator.

4.29 The Regulator would expect freight operators to benefit from Railtrack's improvements in efficiency, in that the charges must at least cover Railtrack's avoidable costs and, as these come down, charges should come down. However, he recognises that the parties may prefer to assume these savings in the variable charge immediately, in return for a higher fixed charge. Currently, since the fixed charges negotiated between operators and Railtrack tend to increase annually, this may offset the efficiency adjustment which is applied to the variable charge.

4.30 The Regulator would expect to revisit his efficiency assumptions at each periodic review. He would also expect to review these issues as part of any review of freight charging policy which does not coincide with the periodic review. Where an operator wishes to enter into relatively short term access agreements (i.e. up to five years), he would generally expect the underlying efficiency assumptions to be consistent with the assumptions made at the most recent review. Similar issues would apply to new information in relation to the appropriate structure of charges.

4.31 For longer term agreements, however, he would expect further efficiency savings to be based on a longer term assessment of the scope for general productivity improvements and the adoption of best practice. He would also need to consider whether there should be provision for the charges to be reopened to take account of any reviews of freight charging policy. It may be that operators should have the option of including such a reopener.

Operational performance

4.32 For an individual operator on the network, operational performance is affected by:

- Railtrack's delivery of service;
- the operator's own equipment and staff; and
- other operators' performance.

4.33 Operational performance regimes have been designed to incentivise Railtrack and all operators to improve their performance. This section discusses the current

arrangements in freight track access agreements, the appropriate regulatory objectives for these regimes, and the options for change.

Current regimes

4.34 The current operational performance regimes for freight operators contain two separate elements, one incentivising Railtrack to reduce the delays for which it is responsible and the other incentivising the freight operator to reduce its delays. The regimes are based on benchmarks of delay minutes per period for each party. When the minutes of delay for which each is responsible exceeds the relevant benchmark it must pay the other party and vice-versa. The payment rates are negotiated. In some agreements the Railtrack payment rate is periodically re-calibrated and in others payment adjustments are made at the end of a financial year.

4.35 There are currently five different freight operational performance regimes (one each for EWS, EWS Rail Express Services, EWS Royal Mail services, Freightliner, and DRS). Each regime caps Railtrack and operator liability or otherwise reduces the direct relationship between incentive payments and actual delays with at least one of the following provisions:

- caps on the amount of delay an operator or Railtrack is liable for; or
- caps on the performance-related payment each party is liable for; or
- payments limited to only severe disruptions or cancellations.

Regulatory objectives for operational performance

4.36 Operational performance regimes are designed to incentivise reduced delays. However, it has been suggested that there are additional issues which need to be taken into account in the case of freight. The Regulator is therefore considering the following questions.

- Given that, on a standalone freight network, there would be no need to compensate passenger operators for the value of delays, should freight operators be required to do so when operating on the mixed traffic railway?

- How far are freight operators able to support their liabilities under the star model?

4.37 The Regulator is considering new performance regimes which would reflect the actual delays caused but where the effects are smoothed to protect operators from extreme incidents or periods. This could be achieved in a variety of ways including capping payments based on a rolling average of performance. However, he would need to be satisfied that:

- new agreements do not transfer additional risk from operators to Railtrack;
- payments reflect actual performance in any period; and
- payment rates do not vary over the life of the agreement (although if very long term access agreements were submitted the Regulator may wish to revisit this assumption).

4.38 The Regulator is also considering the alternatives to this approach (e.g. insurance against high operational performance liabilities).

Conclusions and next steps

4.39 Comments are invited on the definition of a standalone freight network, the identification of Railtrack's avoidable costs, the appropriate structure of charges (including the options for performance regimes) and the approach for reflecting expected efficiency improvements.

5. *Freight-specific enhancements*

Introduction

5.1 The railway network in the UK is currently at or near to capacity on many routes. Whilst Railtrack argues that there is sufficient capacity to accommodate freight operators' aspirations in the short term (for five years) on most routes, freight operators have noted that on specific routes, at specific times of day, it is already proving impossible for Railtrack to accommodate their timetable bids. Freight operators have argued that the principles for freight charging should exclude the recovery of the costs of enhancements for which a separate regime needs to be developed in conjunction with the SSRA (and the Regulator) as the potential funder of freight enhancements.

5.2 In December 1999 and April 2000 the Regulator set out his current views on the appropriate regulatory framework for enhancement expenditure. This would apply equally to passenger and freight-related enhancements. He has also discussed the issue of enhancements in relation to the development of model clauses for access agreements and has asked freight operators to comment on the applicability of this work for freight access agreements.

5.3 The key issues in relation to enhancement for freight operators are:

- What assumptions should be made about freight operators' future capacity requirements when passenger-related enhancements are carried out? and
- When and how much should a freight operator be required to pay for an enhancement to the network?

Passenger-only enhancements

5.4 Freight operators do not currently have long term access agreements. However, given the length of time required for planning and implementing network enhancement projects, an assumption must be made about the future needs of rail freight over the route in question. In general the Regulator believes that freight operators' rights under any existing agreements should be protected in any enhancement project.

Payment for enhancements

5.5 Freight operators may also wish to enhance the network to meet their need for new capacity. This may be freight-only enhancement or an enhancement undertaken at the same time as a passenger enhancement (e.g. to capture the economies of scope). In either case, the Regulator would expect Railtrack (and/or any third party contractor) to receive compensation for the development according to the principles of the regulatory framework for enhancement expenditure. The cost of this enhancement would need to be transparent.

5.6 If freight operators are sponsoring a network enhancement to meet their growth requirements, then they would either need to finance the cost of this enhancement themselves or seek government support for such developments. The SSRA has indicated that it is considering such grants based on the environmental benefits of transferring freight from road to rail.

5.7 If a freight enhancement was secured on the back of a passenger enhancement, it may be possible for this to be financed through the franchised passenger operator. It would, however, be important to ensure that the costs of any additional freight capacity were transparent and that any dedicated freight capacity was identified clearly at the outset.

Conclusions and next steps

5.8 Comments are invited on the appropriate framework for freight-related enhancements and the treatment of freight rights in other enhancements.

6. *Definition of access rights*

Definition of access rights

6.1 The Regulator is in the process of establishing, through his work on model clauses for track access agreements, standard formats for the definition of operators' access rights. He has acknowledged that the requirements of freight operators may be different from those of passenger operators given the different nature of their businesses. Currently freight operators' access rights take a number of forms and some operators have many types of rights in their access agreements. These include:

- firm rights (for which Railtrack is required to provide timetable slots if operators enter a bid) with detailed specifications on departure and arrival time but giving Railtrack some "flex" in scheduling;

- firm rights for an additional number of paths per day or week but without detailed specifications;

- contingent rights for which Railtrack will provide space in the timetable, if possible, once all bids under firm rights are provided for; and

- spot bid rights, which allow operators to bid into the white space in any timetable once it has been developed.

6.2 Freight operators have argued that they require this diversity of rights to enable them to meet the needs of their customers and to operate on international routes. In some cases, however, the freight access agreements contain use it or lose it provisions – such that if an operator does not bid for use of the right over a specified period the right is lost. In addition, all freight operators' rights are subject to Rules of the Route and Rules of the Plan and they receive no compensation for disruptive possessions taken by Railtrack to maintain and renew the network.

6.3 The Regulator's decisions on model clauses for track access agreements and on his framework for the approval of freight access charges will need to be consistent with each other. In particular, the Regulator will wish to consider the public interest benefits of:

- freight operators retaining rights for which they have no need (which is particularly possible if freight operators sign long-term access agreements); and

- highly specified freight rights (e.g. where Railtrack has limited opportunity to "flex" rights in the timetabling process).

6.4 In addition, if the Regulator were to conclude that increased regulatory determination of freight access charges was appropriate then he may wish to link this to the quantum of firm rights held by an operator.

Conclusions and next steps

6.5 Comments are invited on the appropriate specification of access rights and the potential link to access charges.

Appendix A: Railtrack's assessment of freight-specific costs

Overview

1. Railtrack has prepared estimates of its freight-specific costs from freight operations. Its definition of these costs consists of four main elements:

   - freight-specific costs on the mixed use network;
   - costs of freight-only lines;
   - operational performance costs of freight; and
   - other freight-specific costs.

2. Signalling costs have been estimated although this relates entirely to the operational costs of signal boxes rather than maintenance costs. Many of these signal boxes are located on the junction between a freight-only line and a mainline and as such are categorised as part of the mixed use network.

3. Railtrack has identified certain items which would be freight-specific but for which no estimate of cost has been made due to either a lack of reliable information or immateriality of the cost. It is important to consider now whether these are genuine freight costs given that estimates may be possible in future.

Freight-only lines

4. The costs of freight-only lines consists of:

   - long-run maintenance and renewal costs; and
   - operational costs of signal boxes located on freight-only lines.

5. Railtrack recognise not all costs are avoidable if a line closes. However, it is believed such non-avoidable costs are immaterial. Consequently no estimate has been made for

these costs. Those assets solely required for the occasional passenger use of a freight-only line are also considered to be immaterial and no allowance has been made.

6. The first issue in assessing the costs associated with freight-only lines is the definition of a freight-only line. Only those lines which would be closed down if freight services ceased are included.

7. Railtrack's approach is that freight-only lines consist of:

- freight-only sections which are segments of branch lines used only by freight traffic; and
- freight-only sections that are used for passenger diversionary traffic on an exceptional basis only.

8. Freight-only lines do not include:

- freight-only sections used for passenger diversionary traffic or empty coach stocking on a regular basis;
- branches used for infrastructure haulage purposes;
- mothballed lines; and
- goods/slow lines that run parallel to passenger lines.

9. It is recognised that the long-term maintenance and renewal costs of freight-only lines are less than for passenger lines due to the lower standards required. Railtrack has therefore adjusted the freight-only costs to reflect this.

Freight-specific costs on the mixed use network

10. The definition of this is almost entirely made up of usage costs. Additionally, where assets can be identified as solely for the use of freight on the mixed use network then these are identified as freight-specific costs. This consists entirely of signal boxes where:

- they are identified as solely used for the purposes of freight; and

- the shift costs identified where signal boxes have extended hours solely for the purposes of freight.

11. As mentioned before only the operational costs are estimated.

12. Railtrack is currently unable to produce reliable estimates for the costs of switches and crossings required solely for freight on the mixed use sections of the network. These costs are considered to be material freight-specific costs but have not been included in the total estimate.

Other freight-specific costs

13. These costs include:

- electricity for traction costs;
- management staff costs (HQ and zone);
- capital costs incurred since the first control period which are associated with freight-only enhancements;
- production staff costs (including operations planning, performance monitoring and reporting, freight vehicle acceptance);
- freight feasibility costs;
- ongoing legal costs;
- consultancies;
- freight use of the rolling stock library;
- media services; and
- conference and meeting costs.

14. This is not a complete list of other costs but includes all costs for which estimates exceed £100,000 per annum.

Operational performance costs of freight

15. This final item is the net performance payments Railtrack incurs due to freight.

Next Steps

16. The Regulator has asked Railtrack to provide operators with the following information:

- Railtrack's freight-specific costs, in total and broken down by function (as required under the current policy);
- a list of all lines assessed by Railtrack as freight-only lines; and
- a list of the signal boxes associated with freight.

Appendix B: Usage costs for freight vehicles

1. The Booz Allen & Hamilton (BAH) top down model derives usage costs by applying percentage variabilities by asset type to maintenance and renewal expenditure. This process and the variabilities of costs by asset type is described in their November 1999 report. The Regulator is consulting on these variabilities by asset type in the April 2000 periodic review document. Railtrack's total costs over the next control period are still to be finalised. This will impact on the total variable costs and thus the level of usage costs. Hence usage costs are presented for three different scenarios which were set out in the December 1999 periodic review document. These scenarios are:

   - scenario 1: base case revenue requirement;
   - scenario 2: base case revenue requirement with a 10% increase in maintenance and renewals activity; and
   - scenario 3: this scenario is illustrative of the effect of the reassessment of costs associated with the West Coast Main Line.

2. The Regulator is presently refining the inputs to the top down model particularly with regard to freight. The views of Railtrack and operators are being sought and the Regulator will conclude on the appropriate inputs in July.

3. The usage costs are shown both with and without efficiency adjustments. This efficiency adjustment is consistent with the Regulator's provisional conclusions on revenue requirements as laid out in the December 1999 periodic review document. These are:

   - the efficiency adjustment is 5% per annum; and
   - this adjustment is applied in whole from the start of the control period so that over the entire control period the effect on Railtrack's revenue would be approximately the same as if the adjustment had occurred on an annual basis.

3. Further details of usage charges are given within Chapter 2 of the April 2000 periodic review document.

Table A1: Current estimates of usage costs (£ / gross tonne mile) for freight vehicles under Scenario 1 consistent with the December 1999 document on Railtrack's revenue requirements

Vehicle Type	No Efficiency Adjustment		5% Efficiency Adjustment	
	Loaded	Empty	Loaded	Empty
Minerals Hopper	2.73	1.71	2.40	1.50
Ore Hopper	2.53	1.46	2.23	1.29
Aggregates	2.40	1.31	2.12	1.15
Intermodal	2.23	1.57	1.96	1.38
Petroleum	2.72	1.54	2.39	1.35
Steel	2.40	1.44	2.11	1.27
Freightliner Wagons	2.65		2.33	
Average Wagons	2.35		2.06	
Locomotives	2.50		2.20	
Average Freight	2.36		2.08	

Table A2: Current estimates of usage costs (£ / gross tonne mile) for freight vehicles under Scenario 2 consistent with the December 1999 document on Railtrack's revenue requirements

Vehicle Type	No Efficiency Adjustment		5% Efficiency Adjustment	
	Loaded	Empty	Loaded	Empty
Minerals Hopper	2.76	1.73	2.43	1.52
Ore Hopper	2.56	1.48	2.25	1.30
Aggregates	2.43	1.32	2.14	1.16
Intermodal	2.26	1.59	1.98	1.40
Petroleum	2.75	1.55	2.42	1.37
Steel	2.42	1.46	2.13	1.28
Freightliner Wagons	2.68		2.36	
Average Wagons	2.37		2.09	
Locomotives	2.53		2.22	
Average Freight	2.39		2.10	

Table A3: Current estimates of usage costs (£ / gross tonne mile) for freight vehicles under Scenario 3 consistent with the December 1999 document on Railtrack's revenue requirements

Vehicle Type	No Efficiency Adjustment		5% Efficiency Adjustment	
	Loaded	Empty	Loaded	Empty
Minerals Hopper	3.16	1.98	2.78	1.74
Ore Hopper	2.93	1.70	2.58	1.49
Aggregates	2.79	1.52	2.45	1.33
Intermodal	2.59	1.82	2.28	1.60
Petroleum	3.15	1.78	2.77	1.57
Steel	2.78	1.67	2.44	1.47
Freightliner Wagons	3.07		2.70	
Average Wagons	2.72		2.39	
Locomotives	2.90		2.55	
Average Freight	2.74		2.41	