



OFFICE *of the*
RAIL REGULATOR

**THE PERIODIC REVIEW OF RAILTRACK'S
ACCESS CHARGES:
PROVISIONAL CONCLUSIONS
ON THE INCENTIVE FRAMEWORK**

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Regulator's foreword

1. This document contains my provisional conclusions on the framework of incentives which I believe should be established as part of the periodic review of Railtrack's access charges. I believe that incentive regulation is and always has been preferable to enforcement action. If Railtrack is allowed to share in the benefits of the growth of the railway it will be far more inclined, on its own initiative, to expand its capacity and improve its performance. That is what the public and the industry want and expect of the company. This document is about equipping it to do so.
2. I want Railtrack to become more imaginative, more creative and more responsive to its customers' needs, giving the railway industry its own vision for growth and implementing worthwhile plans for sorely needed investment and improvement. Railtrack has the enviable position of being at the heart of an industry whose customers want more and more of its product. It can and should meet those demands with enthusiasm, skill and energy.
3. The lack of an adequate incentive structure for Railtrack has been criticised, and the decisions made in 1995, when the present financial regime was established, have not served the industry well. The periodic review provides me with the opportunity to put right this shortcoming of the past, and that is what I intend to do. However, no regulator should discard or disregard his right - indeed, in appropriate cases, his obligation - to consider and take enforcement action if commercial incentives fail for any reason. I will not do so. But I believe it is far better that there is greater clarity and transparency about the circumstances in which enforcement action may be taken and the basis on which any penalties will be established. The better the company understands these things in advance, the better able it will be to minimise or eliminate the circumstances in which they may materialise. And if the company is performing well, it will have no need to be concerned about penalties and enforcement.
4. Information about the company, its financial performance and the nature and condition of its assets is the oxygen of regulation. In November 1999 I announced my intention to modify Railtrack's network licence to provide much better systems for the provision of this information. Today's document takes that process to the next stage, with draft licence modifications relating to the provision of information and the appointment of independent reporters to verify this information.

5. It is right that Railtrack, its customers and funders understand in advance how enhancements to the network will be treated in its financial framework. This document explains the development of the enhancement framework. Once established, it will reduce the uncertainties which Railtrack has faced in the past, incentivise the company to improve and enlarge the network and so better serve the public interest. The new enhancement regime will be important in facilitating the franchise replacement programme, in which train operators are to be encouraged and may be required to invest considerable sums themselves in exchange for much longer contracts.
6. This document also considers the issue of parties other than Railtrack carrying out work on the network. The SSRA has encouraged those bidding for new franchises to come forward with different ways of financing and ensuring delivery of network enhancements. Ensuring that the limits on Railtrack's resources and capacity - whether of project management or financing - do not unnecessarily hinder the development of the network is important. It is also of course essential that neither the safety nor operational integrity of the railway is prejudiced, and no such risks will be contemplated. The railway industry should not be afraid of new ideas which could bring real and sound improvements earlier than the traditional methods.
7. These provisional conclusions take the periodic review of Railtrack's access charges another important step closer to the establishment of a far better system of financing and rewarding the railway. The shortcomings of the past will be swept away as soon as the existing framework will allow.

TOM WINSOR
Rail Regulator

14 April 2000

1. Introduction and summary

1.1 The October 1999 periodic review document set out the key aspects of the incentive framework which are covered by this review:

- incentives to use and develop the network, arising from the structure of charges and the form of control;
- longer term incentives to develop the network including the regulatory treatment of enhancements in the next control period and beyond;
- incentives to enhance the performance of the network which are provided by the contractual performance and possessions regimes supported by regulatory targets and incentives;
- incentives to maintain and improve the underlying long-term health of the network through appropriate monitoring of the serviceability and condition of Railtrack's assets; and
- incentives to improve efficiency derived from the fixed price nature of RPI-X incentive-based regulation and the interaction with the periodic review process.

1.2 The key elements of this framework have already been discussed in the preceding periodic review documents. The October 1999 document invited comments on the main options relating to the structure of charges and the incentives relating to performance and possessions. Further aspects of charges for electric traction and usage were discussed in technical consultation documents in September 1999 and November 1999 respectively. The December 1999 document contained the Regulator's provisional conclusions on changes to the Property Allowance Scheme or PAS (Chapter 10). It also invited comments on options for changing the basis for station access charges (Chapter 11), the definition and measurement of baseline outputs (Chapter 12) and the framework for enhancement expenditure (Chapter 13).

1.3 A list of respondents to these consultations is contained in Appendix A and those responses which are not marked confidential have now been placed in the Office of the Rail Regulator's (ORR) library and will be placed on its website.

1.4 The Regulator also held an industry seminar on specific elements of the structure of charges on 28 February 2000. The transcript of this seminar has been placed on the ORR's website and in the ORR library.

Purpose

1.5 The purpose of this document is to invite views on the Regulator's provisional conclusions on the main elements of the incentive framework:

- Part I describes the proposed structure of charges, including usage charges, electric traction charges, capacity charges, volume incentive and fixed charges;
- Part II discusses the proposed arrangements for incentivising and monitoring delivery of the periodic review settlement. This includes the performance and possessions regimes, the incentives for delivery of other baseline outputs, general guidelines on penalties, the enhancement framework and information reporting arrangements (including regulatory accounts and the role of reporters); and
- Part III sets out the proposed timetable for the remainder of the review and the way in which the final conclusions will be implemented.

1.6 This document therefore relates primarily to services provided to franchised passenger train operators and excludes several aspects of the incentive framework which will be developed over the next few months. For example, it excludes the treatment of the Incremental Output Statement (IOS) enhancements and West Coast Route Modernisation (WCRM) costs, as well as the development of the Regulator's charging policy for freight, stations and depots.

1.7 It should be noted, however, that some elements of the proposed incentive framework for franchised passenger operators (e.g. the structure of charges) may also have implications for the Regulator's approach to freight charging. The Regulator will be consulting on his criteria for the approval of Railtrack's access charges for freight services during May 2000. In developing this policy he commissioned NERA to look at the effect of charging structure on freight revenues (the executive summary of their report can be found on the ORR website). More recently, he appointed Symonds and NERA to undertake a review of the efficient cost of providing a stand-alone freight network. Railtrack has also been asked to provide information on its avoidable costs.

- 1.8 The questions for consultation are summarised in Appendix B. Consultation responses should be sent to:

Paul Plummer
Chief Economist
Office of the Rail Regulator
1 Waterhouse Square
138-142 Holborn
London
EC1N 2TQ

by 26 May 2000. Respondents should indicate clearly whether they wish all or part of their responses to remain confidential to the ORR. Otherwise they may be published, placed in the ORR library and its website and 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 its website and quoted from by the Regulator, summarising the submission excluding the confidential information.

Summary of Part I: Structure of charges

- 1.9 The structure of Railtrack's access charges has already been subject to considerable discussion involving the Regulator, Railtrack, operators and funders. The Regulator's provisional conclusion is that the existing structure is no longer appropriate since:

- the existing charges are below the incremental cost of providing additional services and therefore penalise Railtrack for promoting growth on its network; and
- the case-by-case negotiation of congestion costs and the share of net benefit (as part of the fixed charge for additional access rights) reduces the transparency and predictability of Railtrack's charges.

- 1.10 Given this, the Regulator's present view is that the following changes should be made to the structure of charges:

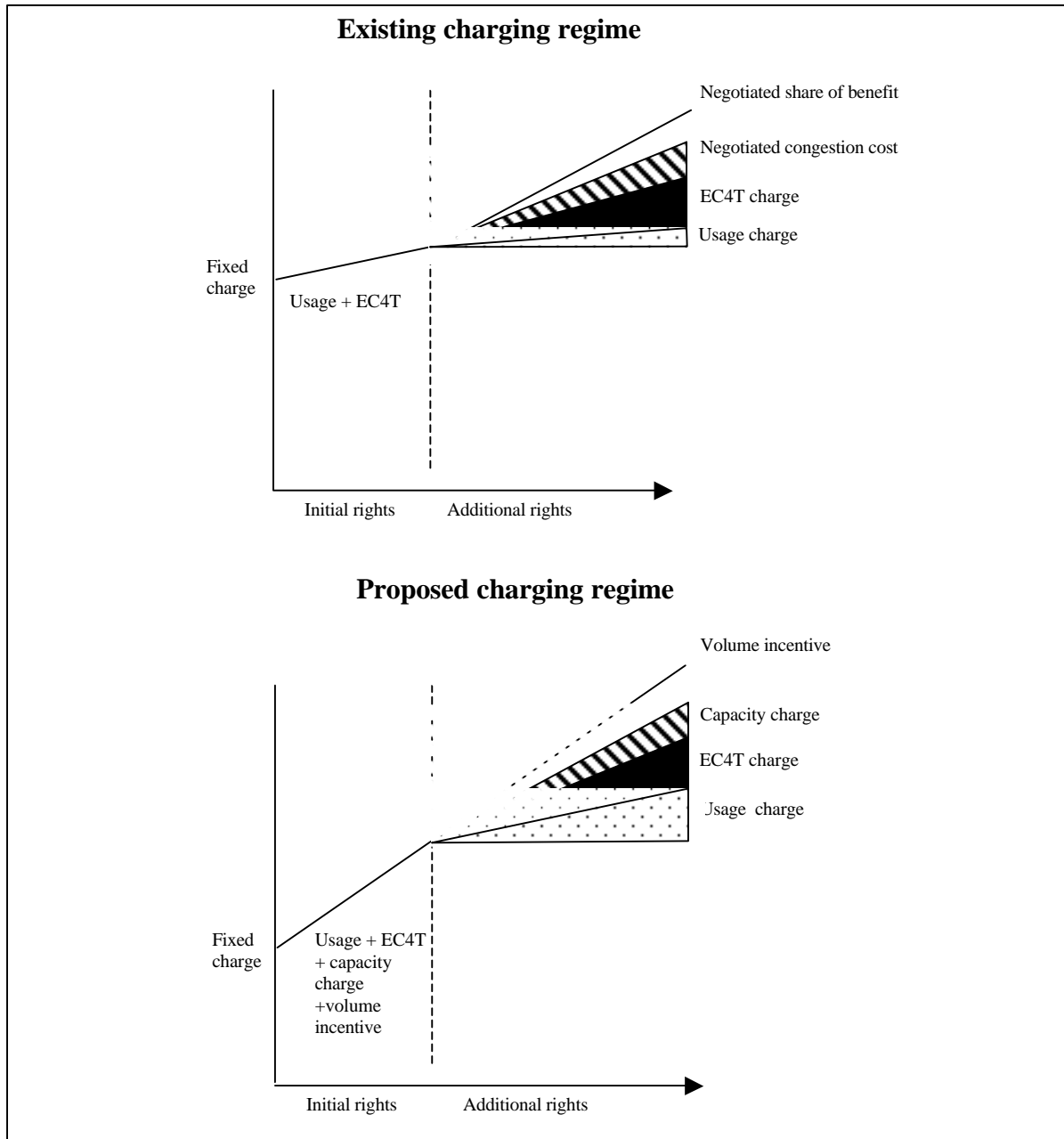
- **usage charges** should be increased to reflect the estimated incremental maintenance and renewal cost for wear and tear caused by additional trains;

- **electric traction charges** should be refined to increase their cost reflectivity, to promote metering of consumption, and to allow the Regulator to introduce the possibility of competitive supplies of electricity after April 2002;
- the current negotiation over the additional congestion costs associated with supplemental access agreements should be replaced with a tariff-based **capacity charge** which would be a simplified version of Railtrack's proposed capacity reservation fee;
- the negotiated share of net benefit would be replaced with a simple **volume incentive** which would give rise to a transitory increase (or decrease) in profits as a result of additional (or less) growth – this incentive should be expressed as a percentage of the relevant usage and capacity charge for the year in question; and
- the **fixed charge** should allocate Railtrack's residual revenue requirement between operators (i.e. after deducting expected income from other single till items and variable charges) in proportion to their access rights (or proxies for those rights).

1.11 The Regulator's final conclusions on the structure of charges would be reflected in all existing agreements as part of the periodic review process. The Regulator would also expect this to be reflected in any supplemental access agreements which are submitted to him for approval over the following period. The scope for negotiation over supplementals would therefore be confined primarily to the specification and costing of any enhancements.

1.12 Figure 1.1 below illustrates the relationship between the current structure of charges and the Regulator's provisional conclusions on the future structure of charges. The main change is to replace existing negotiated charges with predetermined tariffs which should make it easier for Railtrack and operators to plan their businesses and ease the process of negotiating enhancements. This would also provide greater consistency between the treatment of new and existing rights. In addition, with higher, more cost reflective usage charges, the overall variability of charges would be increased.

Figure 1.1: Existing and proposed charging structure



Summary of Part II: Incentivising and monitoring delivery

Operational performance

1.13 The Regulator has reviewed the incentives on Railtrack to improve and maintain operational performance (i.e. the amount of delay). This includes both the contractual incentive regime in Schedule 8 of the franchised passenger track access agreements and the regulatory enforcement of operational performance targets under Condition 7

of its network licence. The Regulator's provisional conclusions as a result of this review include a number of changes to the template Schedule 8 regimes:

- removal of the higher and lower thresholds so that the same marginal incentive rate applies at all levels of performance;
- setting the benchmark based on SSRA's proposed benchmarks for train operators (although this does not have any impact on marginal incentives);
- increasing the incentive rates to reflect changes in both the marginal revenue effect and the societal elements of the current rates;
- retention of the star model so that Railtrack is incentivised to manage network delay; and
- removal of certain non-core elements of the existing regime and simplification of the drafting to provide clearer incentives for Railtrack and train operators.

1.14 The Regulator would expect the template regime to be adopted by most operators. In some cases, however, they may wish to retain or negotiate bespoke arrangements and the Regulator has clarified his view of the criteria which he would expect to use in assessing these arrangements.

1.15 In the light of the responses to the October 1999 periodic review document, the Regulator remains of the view that the contractual incentives discussed above should be supported by enforceable targets. He proposes to establish (non-enforceable) monitoring targets based on the expected level of performance and to define an enforceable target which permits a fixed percentage more delay minutes per train mile than the monitoring target. If Railtrack fails to meet this target in a single year it would be required to provide an explanation and a detailed recovery plan. Failure to meet the target in two consecutive years would be expected to result in financial penalties which would normally be established in advance as part of the periodic review.

Possessions

1.16 The Regulator has proposed a number of changes to the possessions regime to avoid unnecessary complexity and to achieve a more consistent approach to compensation regardless of the reason for the possession. His present view is that the free

possessions allowance should be removed and that the Schedule 4 rates should be used to determine the level of compensation for disruptive enhancements under Part G of the Track Access Conditions. The Schedule 4 rates will of course rise as a result of the proposed increases in the Schedule 8 incentive rates.

Sustained network outputs

- 1.17 Considerable progress has been made with Railtrack in defining the relevant measures of asset condition and serviceability. Railtrack has also made progress towards establishing a baseline position for 31 March 2001. Although there are differences in emphasis, there is a large measure of agreement between the Regulator, Railtrack, operators and funders on the appropriate measures and the way in which they should be monitored and incentivised.

General guidelines on penalties

- 1.18 Where the Regulator takes enforcement action under section 55 of the Railways Act 1993, he may impose a monetary penalty on the relevant operator. Although the Regulator hopes that it will not prove necessary for him to use these powers, he considers that the process should be as transparent as possible.
- 1.19 The Regulator therefore proposes to publish general guidelines on the factors to which he would expect to have regard when deciding whether to impose a monetary penalty and the amount of the penalty. Having regard to his section 4 duties, the Regulator's policy objective in setting these penalties would be to incentivise compliance with the relevant condition or requirement without introducing unnecessary risks for the relevant operator. Any further guidance on this policy would be designed to increase transparency by setting out the steps which the Regulator expects to follow when calculating the amount of the penalty. He proposes to develop the draft guidelines contained in this document in conjunction with the periodic review.

Enhancement framework

- 1.20 Since the December 1999 periodic review document, the Regulator has been developing the framework for enhancements in conjunction with Railtrack and the SSRA. The Regulator's current thinking in relation to his proposed policy statement on this issue is set out in this document. This describes in more detail the Regulator's proposed criteria for the approval of access charges relating to enhancements and the

way in which he expects to treat enhancement expenditure at future periodic reviews. In particular:

- in the light of responses to the previous document, the Regulator confirms his view that the allowed rate of return on enhancements should be the same as for the sustained network (unless Railtrack takes genuine demand risk) but that any asymmetric cost or delivery risks should be reflected in the expected capital cost;
- the Regulator's views in relation to the role of third party enhancement projects (and Special Purpose Vehicles or SPVs) is discussed in more detail, including the contractual arrangements necessary to ensure responsibility for safety is clear and to avoid unnecessary complexity or risk leaving assets unregulated.

1.21 Although some further work is required, the key principles are now well established and the Regulator would expect to see these reflected in any enhancement projects which are currently under consideration. The Regulator is considering whether the arrangements in relation to enhancement should be incorporated into a single licence condition or included in a number of other relevant licence conditions which he plans to introduce in conjunction with the periodic review.

Information reporting requirements

1.22 The Regulator considers that the current information reporting arrangements, which have evolved over a period of years, are inadequate. Following discussion with Railtrack, he has therefore developed proposed modifications to Railtrack's network licence and associated guidelines which would require it to:

- prepare more detailed regulatory accounts which are consistent with the basis on which the price controls are established;
- ensure that enhancement expenditure is logged up on a basis which is consistent with the enhancement framework discussed above;
- appoint reporters (chosen by the Regulator in consultation with Railtrack) to provide an independent assessment of the robustness of Railtrack's information submissions; and

- provide an annual return (together with monthly returns for some information) which reports data for the previous year and compares this with both historical data and assumptions underlying the periodic review (this would consolidate and add to existing information submissions and would allow the NMS to be more focussed on the future requirements of operators and funders).

Part III: Timetable and implementation

- 1.23 The Regulator proposes to extend the date for publication of his review notice in accordance with the provisions in Part 8 of Schedule 7 of each franchised passenger track access agreement. His present intention is to publish draft conclusions in July 2000 and to allow interested parties to make representations on these conclusions before he publishes his final review notice in early September 2000. This will also allow more time for the Regulator to assess new information in relation to the West Coast Route Modernisation (WCRM) and the cost of the enhancements included in the SSRA's Incremental Output Statement (IOS).

PART I:

STRUCTURE OF CHARGES

2. *Usage charges*

Introduction

- 2.1 Usage charges are intended to allow Railtrack to recover the maintenance and renewal costs of running additional trains over particular types of track. The October 1999 periodic review document described usage charges. It also consulted, at the level of principle, on the definition of usage costs and the way in which assumed efficiency gains should be taken into account in setting usage charges. In November 1999 the Regulator published a technical consultation on usage charges, following the results of a review by Booz Allen & Hamilton (BAH). At the same time, the Regulator published the BAH report on "Railway Infrastructure Cost Causation".
- 2.2 The November 1999 technical consultation document consulted on:
- whether usage costs should be calculated using a top down or bottom up approach;
 - the basis of charging (i.e. whether or not charges should continue to be based on vehicle miles by vehicle type);
 - whether charges should be different at different locations;
 - whether the renewals element of usage costs should be calculated on a life cycle basis or take into account lags and the profile of investment; and
 - whether a performance regime should be added to usage charges to incentivise better track and vehicle maintenance.
- 2.3 Respondents to this technical consultation are listed at Appendix A and the non-confidential responses are available on the ORR's website and from the ORR library. The Regulator also hosted a seminar on the structure of charges on 28 February 2000 which included a discussion of the matters. The transcript for this seminar is also available on the ORR's website and from the ORR library.
- 2.4 The remainder of this chapter sets out the Regulator's provisional conclusions on these matters.

Derivation and form of charges

The model used for estimating usage charges

- 2.5 The bottom up approach to estimating usage costs starts from detailed engineering relationships and adds up individual elements of cost caused by additional trains where they can be identified. Railtrack has then “calibrated” the resulting sum of individual cost elements to the total expected cost derived from its Asset Maintenance Plans. These plans calculate the total level of costs for different types of asset using statistical methods.
- 2.6 BAH's report to the Regulator recommended the use of an alternative top down approach. This starts from the total amount of maintenance and renewals costs in the expenditure plans for a particular asset type. The percentage of the cost which varies with the number of trains is then applied to the total costs to derive a total variable cost for each asset type. This cost is then allocated to individual vehicle types to provide a usage charge.
- 2.7 AEA Technology provided detailed engineering analysis as consultants to Railtrack. Both Railtrack's and BAH's approaches make use of these physical relationships estimating the cost caused by a particular train on a particular type of railway asset.
- 2.8 Railtrack contends that the bottom up approach is the only robust method for estimating usage costs. While recognising the importance of using detailed engineering analysis, most other respondents were generally in favour of the top down approach.
- 2.9 The Regulator's provisional conclusion is that usage charges should be set using a top down approach as recommended by BAH. This approach will be simple and transparent to implement, reduce complexity and assist operators in planning their businesses in so far as it will be relatively straightforward to derive usage charges for new or additional vehicle types. The Regulator also notes that Railtrack's revised estimates using the bottom up model are very close to the current top down estimates.
- 2.10 The Railtrack bottom up approach has more detailed engineering accuracy, but this is spurious given the need for the Railtrack model to be calibrated to the asset lives produced by the asset maintenance plans. Further some of the maintenance predictions from the AEA model have required calibration to Railtrack's expectation of actual levels of activity. In terms of generating actual charges, the detail of the

bottom up model is not therefore warranted. The Regulator believes that the model should continue to be developed over time. At a minimum, it is expected that it will continue to be an important input into the estimation of costs and hence charges, but it may also provide useful information for management to improve its understanding of cost drivers and help identify the potential for improved efficiency.

Inputs into the top down model

2.11 In using this approach the Regulator presently proposes to use the same total maintenance and renewal costs as are used for estimating Railtrack's total revenue requirement. These figures will be the best available estimate of the sustainable maintenance and renewal expenditure required. This will take account of efficiency improvements assumed as described below.

2.12 The top down estimation also requires a judgement to be made concerning the extent to which total costs vary as a result of increased traffic. Table 2.1 sets out the percentage variabilities by asset which BAH suggested in their November 1999 report. The Regulator intends to use these percentage variabilities, which are derived from the bottom up engineering work undertaken by Railtrack and AEA Technology.

Table 2.1: Variability by asset type

	% variability	% by asset category
Track		38
Maintenance	30	
Renewals		
Rail	95	
Sleepers	25	
Ballast	30	
S&C	80	
Structures	10	10
Signals		2
Maintenance	5	
Renewals	0	
Electrification		24
Maintenance		
AC	10	
DC	10	
Renewals		
AC	35	
DC	41	

Source: BAH

2.13 The approach will also use the outputs from the AEA Technology cost causation models in order to allocate total variable costs to individual vehicle types. BAH's November 1999 report used the then available outputs which were solely from the

London and North East (LNE) zone. The Regulator expects to update the allocation methodology to take account of further work Railtrack has done in rolling out the bottom up approach across further zones.

The form of the charge

- 2.14 Railtrack has proposed that usage charges are based on consist mile by different consist compositions (where a consist is the particular composition of a train). This change, Railtrack contends, would increase the cost reflectivity of usage charges. It would also substantially increase the complexity of usage charges. If significant additional complexity is to be introduced into the system, the Regulator believes that it is vital that there be a corresponding improvement in incentives and the ability of operators and Railtrack to respond to those incentives. Railtrack has not demonstrated that these requirements would be met and the Regulator therefore proposes to retain the current system of charges on the basis of vehicle miles by vehicle type.
- 2.15 Railtrack has also proposed that charges be levied on the basis of where on the network a train is running. Usage charges would vary by location (i.e. the usage charge for running a particular vehicle over one route would be different to that for running it over another route). Alternatively it would also be possible for usage charges to vary depending on asset type (for example, trains running over a particular type of rail, such as continuously welded rail, could be charged differently to those running over a different type such as jointed rail). However, this would distort Railtrack's incentives in relation to track quality or design. Railtrack is also unable to provide all the detailed information required to estimate costs at the level of individual routes or zones in time for this periodic review. The Regulator therefore believes that usage charges based on geography or asset type would not be appropriate at this periodic review.
- 2.16 Significant changes are required in the usage charges at this periodic review to make them more cost reflective. In order to assist operators in planning their business the Regulator believes that these changes should be confined to those which are clearly justifiable and manageable. It may however be appropriate to revisit these issues at the next periodic review looking at charges from 2006.

The treatment of assumed efficiency gains

- 2.17 In both the October 1999 and November 1999 periodic review documents the Regulator consulted on whether the efficiency gains assumed for the purposes of the

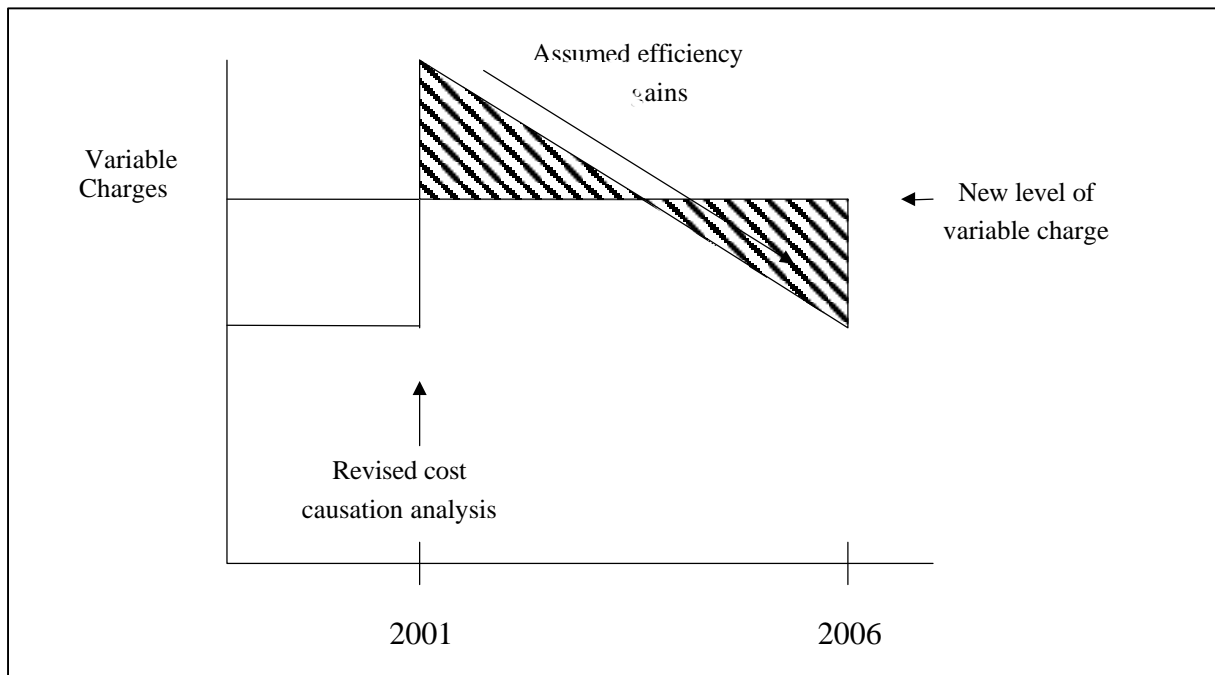
periodic review should be applied to usage charges from the start of the control period or as they are expected to arise.

2.18 The Regulator's provisional conclusion is that the usage charge should not decline in real terms over the control period, but should be based on the level of efficiency which Railtrack is expected to achieve on average over the next control period. This approach will:

- ensure that, over the period as a whole, usage charges associated with additional use are consistent with Railtrack's incremental maintenance and renewal costs so that it does not have an incentive to discourage growth; and
- provide suitable price signals to operators by ensuring that usage charges do not increase and then decrease over the course of the control period.

2.19 This is illustrated in Figure 2.1. Unexpected growth may mean Railtrack does not recover its actual (rather than efficient) level of costs early in the control period, but it would recoup this towards the end of the control period (in other words, the two shaded areas would broadly cancel each other out).

Figure 2.1: Usage charges and costs



Implications of the proposals

2.20 In the November 1999 technical consultation the results of the Railtrack and BAH models for estimating usage charges were shown for a number of vehicle types. Table 2.2 shows Railtrack's estimates for average passenger vehicle usage costs, based on the LNE zone study, from last November. It also shows the average of the revised estimates which Railtrack recently provided to the Regulator. These revised estimates take into account further analysis which Railtrack has undertaken since last November. This updated information has resulted in the LNE zone estimates for average track usage costs falling by around 10%. The inclusion of two further zones (Southern and North West) brings the overall average charge down by 20%.

Table 2.2: Railtrack revised usage cost estimates

	Pence per vehicle mile
Existing	4.65
Railtrack's November 1999 estimate	15.84
Railtrack's March 2000 estimate	12.45
Railtrack's March 2000 estimate with efficiency adjustment	10.95

Source: Railtrack and ORR calculations

2.21 The Regulator has used the top down model provided by BAH to estimate usage charges based on the expenditure scenarios set out in his December 1999 provisional conclusions. These have been based on the actual vehicle miles for 1998/99 and the base expenditure figures for that year. These are shown in Table 2.3.

Table 2.3: Average passenger usage cost estimates using BAH model

	Pence per vehicle mile
Scenario 1	10.77
Scenario 1 with efficiency adjustment	9.48
Scenario 2	10.89
Scenario 2 with efficiency adjustment	9.58
Scenario 3	12.49
Scenario 3 with efficiency adjustment	10.98

Source: BAH and ORR calculations

2.22 The efficiency adjustment used in each of these tables shows the average usage costs at the level of efficiency it is assumed will be reached at the mid point in the control period. For the purposes of these illustrative calculations efficiency gains of 5% *per annum* are assumed, consistent with the Regulator's December 1999 periodic review document.

2.23 As explained in the December 1999 periodic review document, further work is required to refine the expenditure estimates. In particular, Scenario 3 includes estimates for the costs of the West Coast route modernisation. The Regulator will be

reaching a provisional view on the appropriate level of these costs in May/June 2000. However, even if these costs are provided for in the overall revenue requirement, the Regulator's present view is that this level of expenditure is unlikely to be representative of the steady-state position. It is therefore unlikely that it will be appropriate for these costs to be taken into account when setting usage charges.

A regime to incentivise quality of track and vehicles

- 2.24 BAH also recommended that the Regulator introduce a regime to reflect asset quality in the usage charge. This would take into account the effect that vehicle wheels have on track and vice versa. Looking at international experience BAH noted that vertically integrated railways can often substantially reduce total system costs by taking actions to reduce the costs imposed on track by vehicles and vice versa (by considering these issues in their track and vehicle maintenance regimes). The system of usage charges does not currently take account of these effects.
- 2.25 BAH suggested that a system of measuring the forces imposed on track by wheels and vice versa be instituted and that rebates or surcharges be applied to the unit usage charges where these forces fall in various bands around a baseline. This would incentivise improved track and vehicle maintenance and allow operators and Railtrack to consider whole system costs in their maintenance programmes.
- 2.26 The Regulator believes that such a regime would improve the incentives on both operators and Railtrack. The respondents to the November 1999 technical consultation document supported the idea in principle. The Regulator therefore believes that it is important that there is a realistic option to introduce such a regime as soon as possible, which is likely to be at the next periodic review.
- 2.27 However, consultees were concerned about the costs of introducing such a regime. It would require the purchase and installation by Railtrack of suitable measuring equipment. Data would need to be collected in order to establish suitable baselines and further investigation is required in order to establish the magnitude of the effect on costs. The Regulator does not wish to introduce such a regime prematurely before a reasonable understanding can be achieved of the cost drivers and the effects on maintenance costs of these forces.
- 2.28 The Regulator therefore expects to instigate a programme of work next year involving Railtrack and operators in order to ensure that this option could be introduced in 2006.

Interested parties will be consulted, but the Regulator expects the following work streams will be required:

- investigation into the most suitable measurement devices and their installation;
- the collection of a robust set of data on the forces being exerted by track and vehicles and vice versa;
- an investigation into the effect of any changes in the level of maintenance on the costs incurred by other railway firms;
- an investigation into the effects seen in similar circumstances abroad; and
- an investigation into the suitable engineering relationships in order to estimate the costs involved.

2.29 Sufficient data should be available from this work programme to assess whether the benefits of introducing such a regime are likely to outweigh the costs.

2.30 For the next control period the Regulator believes that it is important that the state of assets in the railway industry improves or at least remains the same. Any initiatives which will ensure this (for example, by reducing the incidence of wheel flats) will be welcomed all other things being equal. *Inter alia*, the Regulator would expect that any such initiatives would be non-discriminatory and not anti-competitive. The Regulator will also need to monitor the state of Railtrack's assets and this issue is discussed further in Chapter 9.

Conclusions and next steps

2.31 Implementing the top down approach requires some additional work to refine the inputs to the model. The Regulator expects to write to operators and Railtrack shortly in order to initiate this process and to explain the technical detail of the top down approach. Following a refinement of the inputs the Regulator will provide draft usage charges based on estimates of expenditure and vehicle miles in 2001. He will consult on these charges in his draft periodic review conclusions this summer.

2.32 The Regulator will also expect Railtrack to roll out the bottom up model to further zones. The outputs from the AEA model will then be used to refine the top down approach where appropriate.

2.33 Consultees' views are invited on the Regulator's proposals for setting usage charges. In particular, consultees are invited to comment on:

- the Regulator's provisional conclusions that usage charges should be derived using a top down model and that charges should continue to be based on national averages by vehicle type; and
- the setting of usage charges based on the assumed level of efficiency over the price control period as a whole.

3. Electric traction charges

Introduction

- 3.1 Where operators use traction electricity they currently purchase this from Railtrack, which purchases its aggregate requirements from competing electricity suppliers. The charges for traction electricity are designed to be broadly cost reflective and to ensure that Railtrack is incentivised to procure electricity efficiently for the railway industry.
- 3.2 The Regulator published a technical consultation paper in September 1999 which considered the arrangements for these charges in the next control period. The responses to this document were summarised in the December 1999 periodic review document on Railtrack's revenue requirements.
- 3.3 This chapter sets out the Regulator's provisional conclusions on the traction electricity charging regime. In particular, it addresses the following issues:
- the basis on which tariffs will be set and the volume of consumption estimated;
 - the geographical disaggregation of wash-up payments; and
 - the proposals to allow operators to choose to purchase traction electricity direct from a competing supplier and the Regulator's views on metering.

The basis for setting charges and estimating consumption

- 3.4 The basis on which charges for traction current are set was explained in the September 1999 technical consultation. Railtrack charges on the basis of a number of tariffs which depend on season, time of day and geographical area. In order to incentivise Railtrack to procure efficiently, these tariffs are indexed against the Moderately Large Users Price Index (MLUI) produced by the Department of Trade and Industry.
- 3.5 As most rolling stock does not have metering to measure the amount of electricity consumed, the volume for which Railtrack charges is estimated. These estimates are derived from modelling of the consumption of different types of rolling stock. The difference between modelled consumption and the actual quantity of electricity used

by the network is spread across operators through the wash-up process discussed below.

- 3.6 The consumption rates used in order to estimate the volume of electricity consumed by different types of rolling stock are derived from modelling work, using the simulation model TRATIM. Individual consumption rates are either based on actual TRATIM runs, or extrapolated using a set of estimation rules. Railtrack has reviewed the existing consumption rates to remove anomalies and inconsistencies in the current set of rates. Operators running electrified stock have been consulted on their individual rates. In January 2000 Railtrack provided these operators with a more detailed explanation of the work they have undertaken in this area and responded to queries raised by particular operators.
- 3.7 Most respondents were in favour of the Regulator's proposals to remove anomalies. Monitoring of the accuracy of these calculations was identified as an issue. There was also much support for the application of the calibration factor to TOC total consumption. Most respondents supported the continuing use of the MLUI. Railtrack has suggested that use of this index might lead to a bias in the adjustment of tariffs over time. While this bias has been evident in the current control period, it is possible that this has been due to one-off factors.
- 3.8 The Regulator's provisional conclusions on Railtrack's charges are that these tariffs should continue to be indexed through the use of the MLUI. At present a more suitable index does not exist. These tariffs should be rebased at the start of the next control period to ensure that the unit costs Railtrack incurs are in line with its charges. The Regulator expects this issue to be revisited at the next periodic review, when the New Electricity Trading Arrangements (NETA) will have been operational for a period of time.
- 3.9 The Regulator also proposes to approve the use of the revised consumption rates that Railtrack has developed. These provide more consistency between consist types. The Regulator expects to consult affected operators on these rates again before reaching final conclusions on the periodic review as a whole. The proposed rates will reflect any further modelling work undertaken by Railtrack in response to the technical consultation.
- 3.10 The technical consultation also proposed adjustments to traction electricity charges where operators use regenerative braking. These braking systems return energy to the network when trains brake. They therefore improve energy efficiency. The

Regulator's provisional conclusion is that a discount should be applied to rolling stock using regenerative braking in order to incentivise the use of these systems. Railtrack has estimated that the savings available depend on whether an AC or DC system is being used. The Regulator's current view is that provision should be made in the relevant contracts for discounts to be introduced based on observed savings.

- 3.11 In some cases, enhancements to the network may be required in order to allow use of regenerative braking. In such cases the Regulator expects Railtrack to take the necessary actions to enable operators to switch to this facility. These enhancements can be negotiated through the normal processes for all enhancements and, where they are a reasonable requirement of train operators, Railtrack will be expected to deal with them in a suitable manner.

Geographical disaggregation of the wash-up

- 3.12 At the end of each financial year there is a wash-up calculation where the differences between actual and estimated consumption are charged or refunded to train operators. The September 1999 technical consultation explained this process. The consumption rates should be set such that the expected amount of the wash-up is zero. At the previous periodic review the modelled consumption rates appeared to overestimate the total consumption when compared to recent actual consumption. A calibration factor was therefore applied to individual consumption rates.
- 3.13 For the next control period, the calibration factor should be set such that on the basis of recent data the expected level of wash-up payments is zero. The Regulator also believes that the most transparent way to apply the calibration factor is through an explicit adjustment to the individual consist charges, rather than through directly adjusting the consumption rates.
- 3.14 The September 1999 document also consulted on geographically splitting the wash up payments. The Regulator believes that this will provide more direct incentives to operators to optimise their use of electricity. Most respondents supported this proposal, though it was stressed that any anomalies would have greater significance. While much support was received for the proposed geographical areas a number of issues were raised on the precise definition of these areas.
- 3.15 The Regulator has reviewed the ten areas proposed by Railtrack in light of the comments by consultees. At present, owing to the physical supply network, the areas proposed are the most feasible. It would not be appropriate at this stage to further

isolate supply. The Regulator expects to keep the specific areas under review in the light of experience and this issue could be reconsidered at subsequent reviews.

- 3.16 Geographically disaggregating the wash-up leads to the possibility that the calibration factor could be different for different wash up areas. Without any information on how the geographically disaggregated wash up will work, the Regulator does not believe it appropriate to apply different calibration rates for the purposes of this periodic review. However, he expects to consider whether calibration rates should be differentiated between wash-up zones at the next periodic review.

Competition and metering

Competition in traction electricity supply

- 3.17 As explained in the September 1999 technical consultation, train operators have no option but to obtain their traction electricity through Railtrack. Following the introduction of competition into the electricity supply industry, other users of electricity can normally choose their own supplier. The Regulator believes that the railway industry should have the same options as any other.
- 3.18 Most respondents supported this proposal but some questioned whether individual operators would be able to negotiate on as favourable terms as Railtrack. Given the wider experience of competition in electricity supply the Regulator would not expect this to be a problem and, in any case, operators could retain the option of purchasing electricity through Railtrack.
- 3.19 There are significant legal and practical issues to be considered in introducing the option for train operators to procure their own electricity either individually or jointly. The Regulator therefore believes that these options require significant further development and consultation. However, it would not be appropriate or necessary to delay providing operators with this option until 2006.
- 3.20 The Regulator therefore proposes to introduce through the current periodic review an option for him to introduce the possibility of competitive traction electricity supply not earlier than April 2002. This option will only be used by the Regulator following a further review and consultation on the issues involved. The scope of the review would be limited to this specific issue.

Metering

- 3.21 The introduction of competitive supply will not necessarily require metering to be introduced on affected rolling stock. Metering would, however, remove the need for consumption to be estimated. Charging on the basis of metered volumes would directly incentivise operators to use electricity efficiently. It would also enable Railtrack to be incentivised to economise on losses.
- 3.22 The Regulator therefore strongly supports the introduction of metering. Several train operators are already in the process of fitting meters to their new rolling stock. A number of operators have expressed strong support for the idea of introducing meters on rolling stock (e.g. at the Regulator's seminar on the structure of charges on 28 February 2000).
- 3.23 The Regulator's provisional conclusion is that rolling stock fitted with meters should be excluded from the wash-up. That is, the apportionment of the wash-up payments should not take account of any metered rolling stock. Traction electricity charges for metered rolling stock would be based on the meter readings, rather than using estimated consumption rates.

Conclusion and next steps

- 3.24 Consultees are invited to comment on the Regulator's provisional conclusions concerning the arrangements for traction electricity charges. In particular comments are invited on:
- the proposed rebasing of tariffs and revision of consumption rates;
 - the proposed geographical disaggregation of the wash-up;
 - the introduction of a provision to enable the Regulator to introduce the option of competitive supply during the next control period; and
 - the proposal to exclude metered rolling stock from the wash-up.

4. *Capacity charges*

Introduction

- 4.1 The introduction of a new service may increase the expected level of Railtrack's payments under the performance regime. This is because additional services reduce Railtrack's ability to recover from an incident and increase the probability of delays. At present Railtrack recovers these performance regime costs through the fixed charge for existing services. Where train operators negotiate supplemental track access agreements with Railtrack for additional services, the negotiated charges include the additional expected congestion costs arising from the new service.
- 4.2 Railtrack has proposed that the existing negotiated charges are replaced with a pre-determined tariff. This would be designed to recover the expected increase in congestion costs arising from increased use of the network.
- 4.3 The Regulator proposes to introduce a simplified version of Railtrack's proposed capacity reservation fee. This capacity charge would be fixed for the next control period, subject only to adjustment in the event of a major change in maximum capacity (in which case the fixed charge is also likely to change). He considers that the main advantages of this approach are that:
- it would be easier for Railtrack and operators to plan their activities;
 - it would ease the negotiation process and reduce the scope for Railtrack to exploit its monopoly position;
 - it would ensure that the same incentives apply to the use of both new and existing rights; and
 - it would improve the transparency of Railtrack's charges and assist funders in making policy decisions about service levels.
- 4.4 The remainder of this chapter outlines the Regulator's provisional conclusions on the appropriate form of this charge and the work required to develop detailed proposals.

Methodology for calculating congestion costs

- 4.5 Railtrack has developed a methodology which estimates the expected impact on costs of an additional service (based on actual information on the past behaviour of these costs). This is a statistical process which estimates the exponential relationship between the level of capacity utilisation and expected delay for individual route sections. The relationship which Railtrack has used is:

$$D = A \exp(bC)$$

where:

D is delay per train;

A is a constant term;

C is the capacity utilisation on the route; and

b is the estimated co-efficient for the route in question.

- 4.6 Railtrack has estimated this equation and derived route specific coefficients for 24 different sections of the network. Railtrack claims that this relationship provides the best fit with the data available. The Regulator has noted that this equation implies that there would be some delays even if no trains were being run. He will need to consider whether this anomaly is justified by the benefits of using this simple relationship or whether a different relationship should be used.
- 4.7 The Regulator will review this methodology and is in the process of appointing consultants to assist him in this process. The methodology which he approves will need to reflect the key drivers of congestion costs and provide the operators with cost reflective prices to ensure that incentives to use and develop the network are improved.

The dimensions of the charge and simplification of Railtrack's proposal

- 4.8 At the ORR seminar on the structure of charges on 28 February 2000 Railtrack proposed that the charge be levied in the following dimensions:
- 1000 geographical areas;
 - 2 directions of service; and

- 13 time bands across the week in which services are run.
- 4.9 These dimensions provide 26,000 individual tariffs. Railtrack also proposed that “flex multipliers” should be added to this. If an operator were prepared to offer additional flex in the specification of his access rights, the tariffs levied would be a percentage of the base tariffs which decrease the more flex was offered. As explained in the October 1999 periodic review document, the other main cost driver which Railtrack has identified is the relative speed of a service compared to other services already operating on the same line. Where a service operates significantly faster or slower than the average on a line, it reduces the flexibility available to recover from an incident. Railtrack has proposed case by case calculations when a proposed service is significantly different from the current speed mix on the line on which the new service proposes to operate.
- 4.10 Significant concerns were expressed at the seminar on 28 February 2000 concerning the complexity of these proposals. The Regulator believes that the degree of complexity can be reduced.
- 4.11 The Regulator will need to approve any methodology for calculating individual charges. He expects this to provide a simpler set of tariffs to reflect those cost drivers for which it is appropriate to incentivise operators through explicit price signals. He believes that using bespoke calculations in some circumstances will negate many of the benefits of moving to a pre-determined charge. The Regulator will therefore expect any tariff to cover all service possibilities on the existing network. The charge should be sufficiently cost reflective to send meaningful price signals to Railtrack and operators to move towards a better use of the network. At an aggregate level, it should ensure that Railtrack is compensated for additional congestion costs whilst preventing windfall gains which are not attributable to improved efficiency.
- 4.12 The Regulator has asked Railtrack to develop simplified proposals. In particular, he proposed that a *de minimis* threshold should be set. When the estimated costs for a particular section of route for all time bands are below this threshold, all charges on that section would be set to zero. On the basis of its analysis Railtrack has suggested that setting the threshold at 5 pence per train mile would mean that there would be no charge for 20% of the 1000 geographic sections. In assessing the appropriate level for any *de minimis* threshold, the Regulator will consider the effects on cost reflectivity and ensure that useful incentives continue to be provided through the charge to operators. He will also want to consider the statistical significance of the estimates for lightly used routes.

- 4.13 The Regulator also suggested that there may be an opportunity to simplify the tariff by combining contiguous geographic locations which have very similar levels of congestion costs. The Regulator believes that there may be significant opportunities to combine different sections of the network in this way for the purposes of estimating congestion costs. Railtrack has been asked to investigate the scope for this type of simplification.
- 4.14 In reviewing the methodology, the Regulator will also investigate the proposed number of time bands. He will consider whether a smaller number will be appropriately cost reflective.
- 4.15 Finally, the Regulator is considering the scope for banding to reduce the number of different actual prices in the overall matrix of tariffs. He considers that Railtrack's current approach implies a spurious level of accuracy in the assessment of congestion costs. Banding would mean that a single price would be adopted for groups of services with similar estimated costs. Whilst this would not actually reduce the dimensions of the tariff matrix, it would make it easier for operators to understand the relationship between the different variables in planning their services. This would make the planning of individual train services easier and the prices more predictable and transparent. The Regulator does not expect cost reflectivity at an aggregate level to be compromised by this proposal.

Coverage and recalculation of charges

- 4.16 Railtrack has also proposed that the capacity charge is levied on the basis of timetabled services rather than actual services. It argues that capacity, and thereby the flexibility to deal with an incident, is used up when slots are booked into the timetable. Further, it states that flex is not a meaningful concept in terms of services actually run. The Regulator believes that at an operational level the day-to-day reaction to incidents does not depend on timetabled services but rather what is actually running on any particular day. Moreover, for passenger services there is no significant difference between timetabled services and services run. The Regulator therefore believes that the proposed capacity charge should be levied on services actually run.
- 4.17 The Regulator will consider further the extent to which it is practical to charge on the basis of the flex offered by operators. He intends to ask Railtrack to provide proposals for how this would interact with the process for developing the timetable. Railtrack will also be asked to demonstrate how operator behaviour would be expected to

change in response to a charge based on flex. Railtrack's proposals so far have concentrated on demonstrating the cost reflectivity of such a charge, rather than how its implementation would, at a practical level, enable operators to react in their planning processes. The Regulator's current view is that there are significant practical problems associated with the implementation of charges which reflect the flex offered by operators. The Regulator will consider whether such a charge would be able significantly to improve the current incentives for the process of developing the timetable.

- 4.18 The Regulator's provisional conclusion is that capacity charges should not generally alter within the control period. Railtrack has proposed that the charges are re-calculated each year. This proposal would mean that the incentive on Railtrack to improve efficiency would be reduced. Further, the lack of certainty would make it harder for operators to plan services or react suitably to the incentive provided by the charge.
- 4.19 However, the Regulator believes that the charge should be re-calculated where the capacity of the network is significantly changed. Where significant new capacity becomes available, the Regulator will expect the capacity charges for the affected geographical section or sections of the network to be reduced. The Regulator's current view is that these changes should come into effect when the capacity actually changes and should reflect the expected change in costs. Where capacity is permanently reduced for reasons out of Railtrack's control, the Regulator considers that it may be appropriate for the capacity charge for the affected route sections to be recalculated.
- 4.20 The Regulator's present view is that Railtrack should be bound to charge the predetermined rate for additional paths which it sells on its existing network (as well as the other variable charges discussed in this document, where appropriate). It would not therefore be open to Railtrack, during the control period, to state that the tariff is inapplicable in certain circumstances when negotiating additional rights. Railtrack would, of course, only have to sell additional rights at these prices where additional capacity is safely and operationally available on the network. There is a question, however, about whether or not the train operators should also be bound by this charge, or whether they should be able to negotiate different charges where this is mutually beneficial.
- 4.21 The Regulator does not believe that the introduction of a pre-determined charge obviates the need to undertake case by case modelling (for example, using the MERIT timetable modelling tool). In many cases, it is still likely to be important to assess the

impact of additional services on a case-by-case basis for purposes other than charging. Railtrack will be expected to continue to provide this modelling on request and without charge.

Implementation issues

- 4.22 As stated in the December 1999 periodic review document, the Regulator's view is that the capacity charge should not come into force at the start of the control period. The draft final conclusions in July 2000 will set the overall revenue which is expected to be raised by the charge, how the charge should be calculated and when it should come into force. Operators will also be consulted on draft charges before they come into force. Actual charges will be set out in the final conclusions, but will not apply at the start of the control period.
- 4.23 It is the Regulator's current view that such a charge should be introduced to be in force for services running in the Summer 2002 timetable. That is, it will come into force in May 2002.
- 4.24 When Railtrack starts levying the charge, the fixed charge will need to be adjusted to ensure that Railtrack's expected revenue follows a smooth profile. On the introduction of the charge, the Regulator will therefore expect each franchised operator's annual fixed charge to be reduced by a predetermined amount based on its expected annual capacity charge payments.

Conclusions and next steps

- 4.25 The Regulator intends to publish a technical consultation in May/June 2000 on the calculation of congestion costs and the derivation of individual capacity charges. This will consult on the detailed implementation of the principles set out in this chapter to ensure that the charge is not overly complex, provides suitable cost reflective price signals and incentives for efficiency to be improved over time.
- 4.26 The Regulator is in the process of appointing consultants to assist him in his review of the methodology developed by Railtrack. These consultants will be asked to report to the Regulator on the most suitable way of developing a set of charges which fulfil the criteria set out above. This review will take place over the next few weeks and will be an input into the Regulator's technical consultation on these issues in May/June 2000.

4.27 The Regulator invites consultees' views on his provisional conclusions relating to the introduction of a capacity charge. In particular, consultees are invited to comment on:

- whether the proposed tariff based system will improve the incentives on operators and Railtrack compared with the current system of fixed charges, which are negotiated for supplemental services;
- the principles on which the Regulator expects to set the dimensions of the charge;
- the proposal that the charges will only be recalculated before the next periodic review where there has been a significant change in the capacity of the network; and
- the Regulator's proposals for implementing the charge.

5. *Volume incentive*

Introduction

5.1 The October 1999 periodic review document pointed out that if the variable charges in track access agreements are based on the incremental cost from increased use, this should mean that Railtrack is broadly indifferent to the utilisation of the network. This is the basis on which the variable charges discussed in the preceding chapters have been designed. These charges alone would not therefore provide a positive incentive for Railtrack to increase the utilisation of its network or to promote greater use of the railways.

5.2 This chapter therefore sets out the Regulator's provisional conclusions with regard to:

- the need for an explicit volume incentive on top of the other variable charges referred to above;
- the proposed form and level of this volume incentive;
- the overall impact on the proposed structure of charges; and
- the implications for Railtrack's cost of capital.

The need for an explicit volume incentive

5.3 The October 1999 periodic review document outlined the advantages and potential difficulties associated with a volume incentive based on some measure of train miles, passenger miles or farebox.

5.4 Railtrack has expressed a preference for an incentive based on passenger miles or farebox on the basis that this captures the effect that its actions can have on the final service to passengers. However, there was considerable scepticism from other respondents about whether such a broadly focused incentive could have a material impact on Railtrack's incentives without imposing excessive risks on the company. There was also a concern that such an incentive could reduce the incentive for operators to invest in improved performance or revenue protection since part of the benefit would accrue to Railtrack. The SSRA has said that it would not be willing to allow operators to pass-through the out-turn volume incentive payments under their

franchise agreements in a way which could neutralise any effect on operator incentives. Given these concerns and the likely absence of pass-through arrangements, the Regulator has concluded that it would be inappropriate to introduce a volume incentive based on passenger miles or farebox revenue at this stage.

- 5.5 Railtrack argues that a volume incentive based on train miles would be a third best option since it would not capture the effect of Railtrack's performance on passengers. However, other respondents regarded this approach as less problematic since the incentive would be more focused on Railtrack output and would be less likely to reduce TOC incentives. SSRA has also indicated that it would support such an approach. Finally, it has been suggested that this would be equivalent to including an element of profit in usage and capacity charges.
- 5.6 Railtrack proposes that the short term volume incentive (which links revenues in each control period directly to volume) should be matched by an automatic adjustment to the RAB at the next review (proportionate to the growth in the chosen volume measure). This reflects Railtrack's view that the volume incentive should be expected to fund significant enhancement expenditure. The Regulator indicated in October 1999 that such an adjustment to the RAB was unlikely to be acceptable. Most respondents (including the SSRA who would have to fund the increase in the RAB) have supported this view.
- 5.7 The Regulator believes that a volume incentive should not be seen as a means of funding significant enhancements. Instead, it should be seen as a means of incentivising Railtrack to be more responsive to the needs of its customers in delivering the outputs which they require. In particular, it would provide a positive incentive for the company to negotiate and deliver enhancements of its network (possibly even if these are actually delivered through third party enhancement schemes) and to be proactive in identifying opportunities for increased utilisation of the existing network which could be achieved at little or no cost (e.g. through improved timetabling or some reallocation of existing rights).
- 5.8 As explained in the October 1999 periodic review document, a short-term volume incentive should mimic the operation of a competitive market. In such a market companies face dynamic incentives through the possibility of transitory profits (or losses) before these are competed away. Such a volume incentive would also complement the increased incentives for improved performance which are described in Chapter 7 of this document. The combination of these two proposals would provide an improved incentive for Railtrack both to run trains and to run them on time.

- 5.9 In the light of these considerations, the Regulator proposes to introduce an explicit volume incentive which would give rise to a small transitory increase (or decrease) in profits as a result of increased (or decreased) train miles, compared with what was assumed at the periodic review.

Form of volume incentive

- 5.10 The Regulator has considered a number of alternative ways of implementing this proposal. His present preference is to introduce an explicit volume incentive payment (possibly as a component of the fixed charge) in which the level of the payment for each year is expressed as a percentage of the usage and capacity charges for the year in question. An alternative approach would be to include an element of profit in usage and capacity charges.
- 5.11 When assessing Railtrack's overall revenue requirements at the *current* periodic review, the Regulator would allow for the expected income from this incentive over the period 2001-06. This would take account of enhancements which are included within the scope of the periodic review (but not other enhancements which are negotiated after the review). The additional expected revenues from this incentive would therefore be offset by a reduction in the expected base level of fixed charges so that the net present value of the expected revenues over the period as a whole would remain unchanged.
- 5.12 The Regulator considers that it is important to ensure that the periodic review process does not distort Railtrack's incentives in this area. For example, if actual volume growth were fully taken into account at the next review, unanticipated growth in the first year of each period would give five times the benefit of unanticipated growth in the fifth year. The Regulator's present view is that Railtrack should benefit (or lose) from unanticipated growth (or decline) in volume for a period of five to ten years regardless of timing. This principle would therefore need to be taken into account through a rolling adjustment to Railtrack's revenue requirements at the next periodic review.
- 5.13 The main advantages with this approach to setting the volume incentive (i.e. based on existing usage and capacity charges) are that it would be relatively simple to implement and the level of the incentive for particular services would depend automatically on:
- the length of the train, through the usage charge component;

- the congestion of the network, since the capacity charge is designed to be higher on congested parts of the network; and
- the commercial and social value of different services, since these values are reflected in the Schedule 8 payment rates which feed through to the capacity charge.

5.14 However, it is still necessary for the Regulator to consider the appropriate percentage to apply to usage and capacity charges (and whether the same percentage should be applied to each charge). It is not possible to reach a firm view on this question until the level of these charges has been finalised. However, the Regulator is considering the criteria for setting this average incentive rate.

5.15 In principle, the level of the incentive could be based on the value to users and funders of the additional train miles. For example, Railtrack has contemplated a rate of up to 1 pence per passenger mile which could be equivalent to over 100% of usage and capacity charges.

5.16 An alternative approach would be to assess the rate which would incentivise Railtrack to be more responsive to its customers' needs (in the ways described above) on the assumption that any significant increase in costs would be paid for by operators as an enhancement. For example, a volume incentive equal to 25% of usage and capacity charges would result in additional profits of just under £0.7 million for a 1% unanticipated growth in *average* volume in a single year. If the benefit is retained for ten years, the net present value of this benefit (at the cost of capital referred to in the December 1999 periodic review document) would be around £5 million. Stronger growth or cumulative growth would have a proportionately increased impact. In addition, there would be considerable variations in the usage and capacity charges for different services and, where these charges are significantly higher than *average*, Railtrack would have a correspondingly larger incentive to promote growth (e.g. where there is greater congestion and/or a relatively high societal weighting).

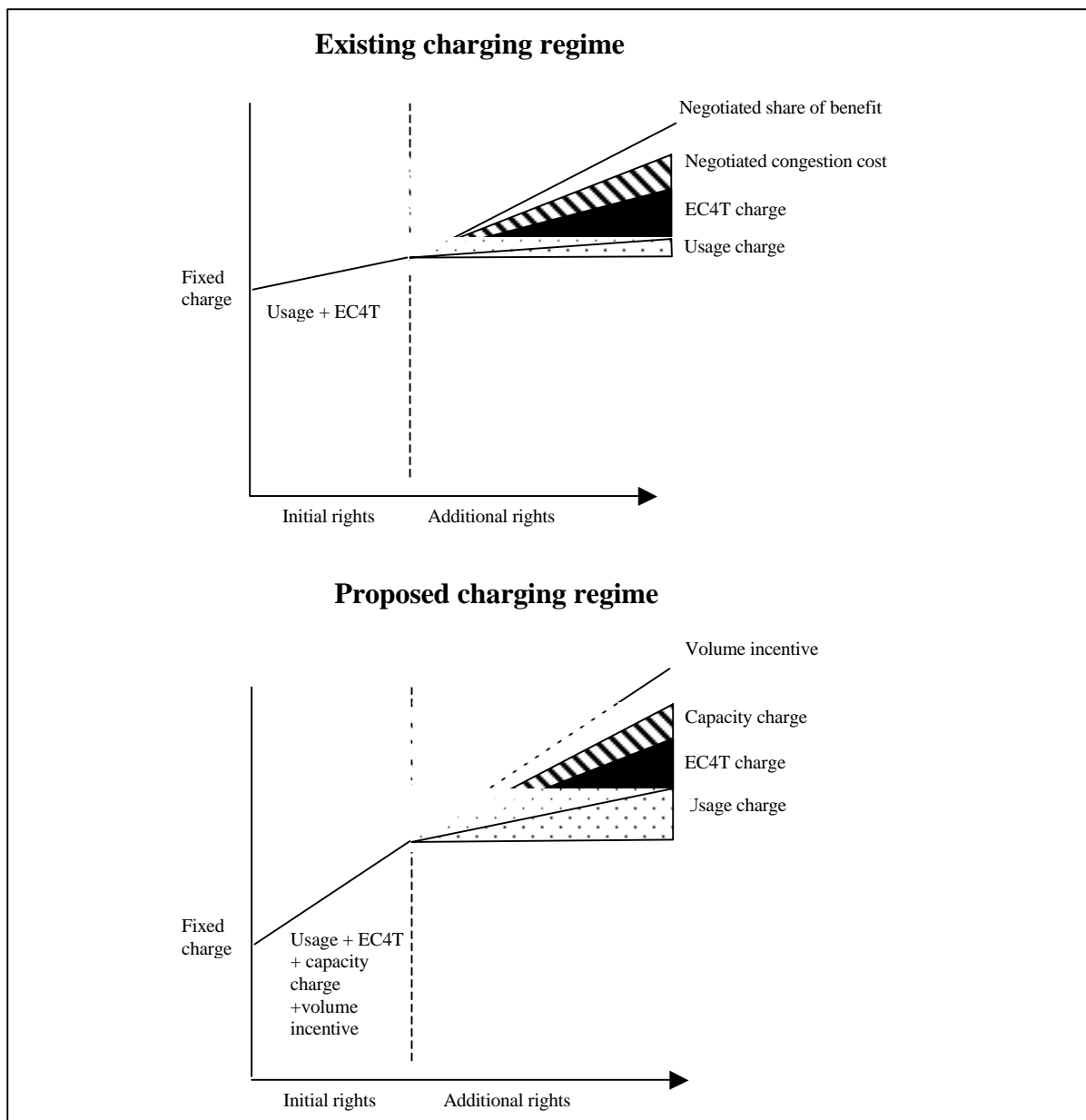
5.17 In considering the appropriate level of the volume incentive, it is also relevant to take account of the proposed approach to setting usage and capacity charges based on the assumed future level of efficiency. If Railtrack is able to increase its efficiency by more than assumed in setting these charges (or to do so more quickly), this would provide a further incentive for it to promote growth.

Implications for structure of charges

- 5.18 It is important that the Regulator's proposals for the introduction of an explicit volume incentive are seen in the context of the overall package of charges. Figure 5.1 below compares the current structure of charges with the proposed structure. This shows that for increases in services the new structure of charges would be very similar to the existing structure. This is because the current approach to negotiated charges envisages that the fixed charge would include a negotiated allowance for expected congestion costs (equivalent to the capacity charge) and a share of any net benefits from the project (which is replaced by the volume incentive).
- 5.19 Figure 5.1 also shows that, under the current structure of charges, a reduction in services would only result in a small reduction in charges: the operator would only save the usage and electric traction charges. Under the new structure of charges, however, they would also save on the capacity charge and the volume incentive.
- 5.20 The main change is therefore to replace existing negotiated charges with predetermined tariffs which should make it easier for Railtrack and operators to plan their businesses and ease the process of negotiating enhancements (e.g. there would be less risk of monopoly abuse). It would also provide greater consistency between the treatment of new and existing rights. In addition, due to the increased level of cost reflective usage charges, the overall variability of charges would be increased.
- 5.21 Some respondents have expressed concerns that the increased variability of charges would price some socially beneficial services off the network. The Regulator has asked Railtrack to provide a detailed analysis of the potential impact of his provisional conclusions on operator incentives. His present view, however, is that:
- the overall structure of charges would correspond closely to the incremental cost including a reasonable return arising from increased use of the network and would therefore send broadly cost reflective pricing signals to operators;
 - the risk that operators would have an incentive to reduce existing services would be mitigated by the SSRA proposals to link pass-through of the periodic review conclusions to the maintenance of current service levels (from the operators' point of view, the variable charges associated with existing services would therefore remain fixed); and

- if necessary, funders would be able to apply focused subsidies to promote new services which are considered to be socially worthwhile but non-commercial (this could be achieved through direct grants or through an agreement from the SSRA to include the cost of an enhancement in the RAB without reflecting this in access charges to the operator(s) in question).

Figure 5.1: Existing and proposed charging structure



Impact on Railtrack's cost of capital

- 5.22 The Regulator recognises that Railtrack has limited control over passenger numbers or farebox and that a volume incentive based on these measures could increase the non-diversifiable risk faced by investors (i.e. risk which cannot be avoided by holding a large, diverse portfolio of assets). This may therefore need to be reflected in a higher assumed cost of capital. In principle, it would be possible to mitigate this effect by linking the incentive to growth in excess of the rate of growth in GDP (since this would effectively remove the non-diversifiable element of risk). In practice, however, there may be some residual impact on the cost of capital which would need to be reflected in higher charges.
- 5.23 By contrast, the volume of train miles associated with the baseline network is more within Railtrack's control. Although growth in train miles from further negotiated enhancements is likely to be more sensitive to economic conditions, these enhancements fall outside the scope of the review and therefore provide the opportunity for transitory upside with little downside. Given this, the Regulator's present view is that the introduction of the proposed volume incentive does not introduce significant additional non-diversifiable risk. He is not therefore minded to increase the assumed cost of capital.

Conclusions and next steps

- 5.24 Given the proposed form of volume incentive, the precise parameters cannot be finalised until the usage and capacity charges have been finalised. However, comments are invited on the appropriate form of the volume incentive and the criteria for establishing its level.

6. Fixed charge

Introduction

- 6.1 The fixed charge is designed to recover Railtrack's residual revenue requirement, after deducting the single till items (property, freight and open access income) and expected variable charges (usage, capacity, and electric traction charges and the volume incentive). This chapter sets out the Regulator's provisional conclusions on the methodology for allocating this residual revenue requirement between operators.
- 6.2 The fixed charge is designed to recover Railtrack's fixed and common costs of providing access to its network net of single till income. The Regulator's provisional conclusion is that these costs should be allocated to franchised passenger operators at the closest practicable level to that at which they arise. The Regulator also considers that, in principle, the metric used to allocate these costs should be based on the rights which train operators have to run services under their track access agreements.
- 6.3 As explained in the October 1999 periodic review document, these costs do not vary with the commercial decisions taken by train operators or Railtrack. The way in which they are allocated does not, therefore, have a strong effect on the incentives of rail industry operators. Even so, the Regulator highlighted the need to ensure that the proposed allocation is practical, transparent and fair.
- 6.4 The remainder of this chapter describes on-going work to allocate the fixed charge and explains the Regulator's provisional conclusions on:
- the treatment of enhancements which have been made under supplemental access agreements; and
 - the way in which remaining Railtrack costs at the strategic route, zone and national levels should be allocated to the fixed charges of individual train operators.

The treatment of enhancements and coverage of the fixed charge

- 6.5 The fixed charge calculated for the next control period will cover all services which operators have rights to run at the time of the periodic review conclusions. It will also cover any enhancements which are included within the scope of the periodic review

(e.g. IOS enhancements and safety improvements). This will mean that the charges for the vast majority of existing supplemental access agreements will be included in this fixed charge. Any supplemental access agreements negotiated between the final review notice and the start of the next control period will be expected to be negotiated, and the charges approved by the Regulator, as at present. In the next control period the fixed charges would only need to be modified if there is an enhancement (or a reduction) in capacity (see Chapter 11).

- 6.6 As discussed in the December 1999 periodic review document, there are two major enhancement projects which are outside the scope of the single till for the purposes of the current review (West Coast Mainline Passenger Upgrade 2 and Thameslink 2000). In addition, there are a number of supplemental agreements where an operator has negotiated a smaller enhancement to the network. If the rights negotiated under these latter agreements were included within the residual revenue requirement, the cost of these enhancements would be spread across all franchised train operators rather than the operator who negotiated the enhancement. Effectively the operator in question would get the residual value of the investment for free. Subject to a possible *de minimis* threshold, the Regulator considers that the enhancement element of the charge in such supplementals should continue to be paid by the relevant operator as part of its fixed charge. The revenue from this will be netted off the national or zonal revenue requirement for Railtrack.

Allocation of the fixed charge

- 6.7 Following the Regulator's October 1999 periodic review document, Railtrack has begun to allocate individual costs to strategic routes, zones and a national "residual". Once each cost has been allocated in this way, the single till items and the expected level of variable charges will be deducted.
- 6.8 The Regulator considers that where these items can be totally associated with an individual strategic route or zone, they should be subtracted from the total revenue requirement derived for that route or zone. This is in keeping with the general principle that fixed costs should be calculated at the lowest level possible. All single till items, which it is not practical to attribute to a particular route or zone, will be subtracted from the national residual revenue requirement.
- 6.9 In principle, the Regulator believes that these costs should be allocated on the basis of the maximum train miles associated with each individual operator's rights under its track access agreement. This would have the advantages that:

- it would retain a broad linkage between the capacity that train operators are actually purchasing from Railtrack and their fixed charges;
- it would reflect the need for Railtrack to incur some costs to ensure that operators can exercise all their rights, even when services are not actually run under all those rights;
- it would provide incentives on operators (or funders) not to hoard rights, which are not being used, between control periods; and
- it would, in principle, facilitate the transfer of rights from one operator to another.

6.10 The Regulator therefore proposes that the zonal and national residual revenue requirements (RRR) are allocated in this way. As a practical matter, however, it is not possible to allocate the RRR associated with strategic route or traction type in this way. This is because the rights cannot be translated into train miles at this level. The Regulator therefore proposes to use the actual train miles run by each operator as a proxy for their rights for allocating these RRRs. Table 6.1 shows the measures which the Regulator proposes to use in allocating the different levels of costs to fixed charges.

Table 6.1: Allocation of the fixed charges

Charging category	Allocating metric
Permanent Way RRR by strategic route & zone	Actual train miles by strategic route and zone
Signalling RRR by strategic route & zone	Actual train miles by strategic route and zone
Electrification RRR by strategic route & zone	Actual electrified train miles by strategic route and zone
Zonal RRR	Maximum train miles by zone in access rights
National RRR	Maximum train miles in access rights

6.11 The Regulator also proposes that the measures used to allocate the fixed charge should be averaged across several months. His present view is that an average of the train miles for the financial year 1999/2000 should be used to allocate the RRRs. This would avoid any distortions from seasonal effects or on account of operators running special or one-off services.

Conclusions and next steps

- 6.12 The Regulator will be monitoring the work Railtrack is undertaking to allocate the fixed charge according to the principles set out in this chapter. The Regulator will also consider the suitable *de minimis* threshold, if any, for including supplemental rights involving enhancement expenditure in the general fixed charge. The Regulator will set out his views on this issue in July.
- 6.13 The Regulator is working with Railtrack to understand the practicality of his proposals and the potential impact on different services.
- 6.14 The Regulator invites consultees' comments on the proposed treatment of enhancements in the context of the fixed charge. Consultees' views are also invited on the Regulator's provisional conclusions on the method by which the fixed charge should be allocated.

PART II:

**INCENTIVISING AND
MONITORING DELIVERY**

7. Operational performance

Introduction

7.1 This chapter considers the incentives on Railtrack and train operators to improve and maintain operational performance (i.e. the amount of delay). It covers the contractual incentive regimes in Schedule 8 of the franchised passenger track access agreements and the regulatory enforcement of operational performance targets for Railtrack under Condition 7 of its network licence. The Regulator emphasises that these incentives are important in improving performance, but that safety considerations must always be paramount.

7.2 These issues were discussed in some detail in Part II of the October 1999 periodic review document. Almost all respondents agreed that the existing framework failed adequately to incentivise Railtrack and operators to meet the reasonable requirements of operators and funders.

7.3 The following issues are considered in turn:

- proposed improvements to the template Schedule 8 performance regimes;
- proposed criteria for approval of performance regimes, including negotiated bespoke arrangements;
- delay attribution procedures; and
- the circumstances in which the Regulator would expect to take enforcement action and the basis on which any monetary penalties would be established.

Template Schedule 8 regime

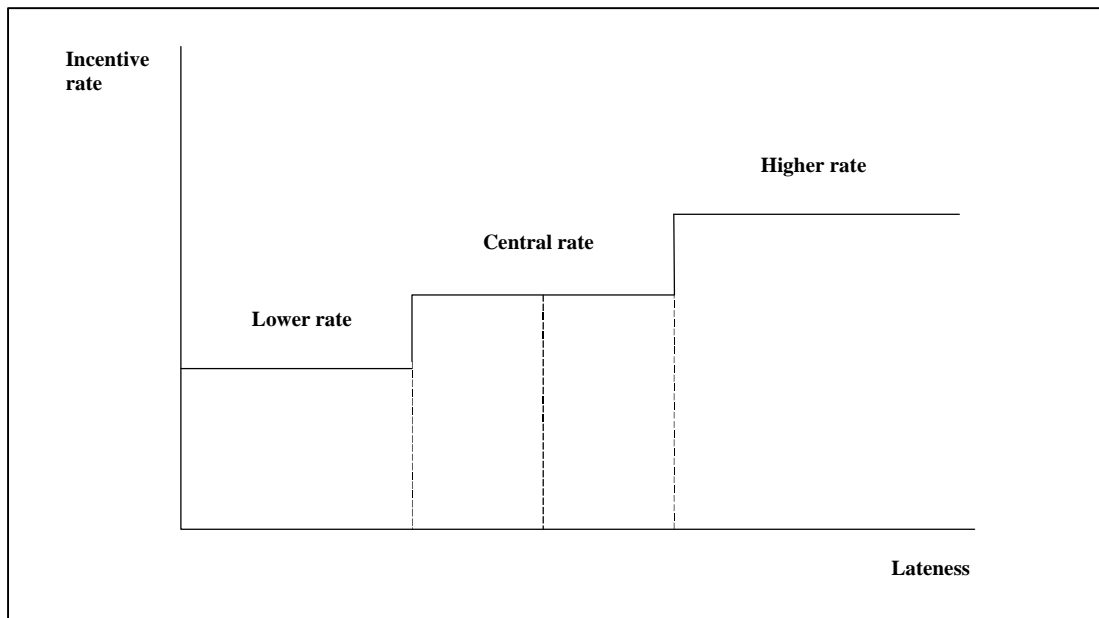
Existing arrangements

7.4 Of the 25 franchised passenger operators, 19 presently operate with template Schedule 8 regimes in their track access agreements. These template regimes are structured around a benchmark level of performance. For most services this benchmark was set in 1995 based on historic levels of performance. The template regimes also contain two thresholds which define high performance and low performance. Again these

thresholds were set in 1995 such that performance over each 28 day period was expected to be above the high performance threshold 20% of the time and below the low performance threshold 20% of the time.

- 7.5 Railtrack's current central incentive rates, which apply between the two thresholds, are based primarily on the marginal effect on operators' revenue in 1995 of improved performance. In some cases, there is an additional payment for the societal benefit of performance which is not captured through the farebox. This latter payment reflects payments by and to the Franchising Director under Schedule 7 of the franchise agreements. This mechanism was designed to ensure that Railtrack was exposed to both the passenger and societal valuation of performance.
- 7.6 The rates of payment are higher for performance below the low performance threshold and lower for performance above the high performance threshold. This was designed to provide a stronger incentive where performance is relatively low. The structure is illustrated in the Figure 7.1 below. The remainder of this section discusses the responses to the previous consultation and the Regulator's provisional conclusions on the requisite changes to the existing template Schedule 8 regime.

Figure 7.1: Incentive rates and thresholds



Removal of higher and lower thresholds

- 7.7 Most respondents to the October 1999 periodic review document suggested that the lower payment rate for good performance was inappropriate and some also suggested

that it would be preferable to remove the higher payment rate as well. The Regulator's view is that it is no longer appropriate to provide for stepped rates. He considers that a single incentive rate is preferable for the following reasons:

- it provides a clear and simple incentive for continuous improvement in performance;
- it means that the method of setting benchmarks does not affect the marginal incentive to improve performance (since the incentive rate is the same whether or not performance is better or worse than the benchmark);
- it avoids the danger that the incentive for Railtrack to improve performance might be reduced in circumstances where the overall level of performance faced by passengers is deteriorating (e.g. because Railtrack improves its performance into the lower rate band but overall performance remains poor due to poor performance by train operators); and
- it reduces the dependence on enforceable targets to secure improvements in performance if the benchmarks are set wrongly.

Setting the benchmarks

7.8 The SSRA proposes to set common benchmarks for each operator through the franchise replacement process. These benchmarks are expressed in terms of the percentage of trains arriving less than 10 minutes late in the case of long-distance, high-speed services and less than 5 minutes late for all others. The level of the benchmarks has been set at 100% for long-distance high speed services and 93.75% (or 15/16) for all others. The Regulator proposes to reflect these benchmarks in the Schedule 8 regime and has asked KPMG to advise on the implied levels, given the work already undertaken for SSRA by AEA Technology.

7.9 Since the Regulator proposes to adopt a single incentive rate for Railtrack, the choice of benchmark will not affect the marginal incentive for improved performance, as noted above. If Railtrack's actual performance is expected to differ from the benchmark this will be taken into account when assessing Railtrack's overall revenue requirement. The expected revenue effects are therefore being assessed by KPMG.

7.10 The proposed approach avoids the need for any change to the benchmarks in Schedule 8 following franchise replacement (see below for consideration of the impact on the

star model). Similarly, there would be no need for any change in the Schedule 8 benchmark if the SSRA were to change its benchmarks.

7.11 The way in which the benchmark is dealt with at the next review has important implications for Railtrack's incentive to invest in performance improvements. The Regulator considers that there are three alternative options which would ensure that Railtrack has the appropriate incentives to make these investments:

- **option 1:** change the benchmark so that this is equal to expected performance. In this case, it would be appropriate for economically efficient performance improving investments made by Railtrack to be included in the RAB. If they were not included, there would be little incentive for Railtrack to invest unless the payback period was very short; or
- **option 2:** leave the benchmark unchanged and take account of differences between the benchmark and expected performance in the overall revenue requirements. As with option 1, it would then be necessary to include economically efficient investments in the RAB; or
- **option 3:** leave the benchmark unchanged (at least for a period) and not take account of any difference between expected performance and the benchmark (at least for a period). Railtrack would then continue to benefit from any investments through additional revenues under the performance incentive regime. Alternatively, it would continue to suffer from lack of such investment.

7.12 Under options 1 and 2, Railtrack would be required to record investments which are aimed at improved performance so that these can be included in the RAB. This information would still be required under option 3 to ensure that the investments are not both included in the RAB and rewarded through the performance regime. The requirement for Railtrack to produce this information on an annual basis will therefore be reflected in the Regulator's proposed licence condition and associated guidelines on logging up (see Chapter 12).

7.13 Railtrack's incentive to invest over the next control period would be broadly the same under each of these options. The Regulator therefore considers that it is not necessary for him to indicate at this stage his preferred approach in relation to the next review. This approach also minimises the risk that Railtrack might have an incentive to

modify its behaviour to influence the information referred to in the previous paragraph.

Increased incentive rates

- 7.14 Most respondents to the October 1999 periodic review document concluded that the incentive rates no longer reflect the valuations of passengers and society. As indicated in the section 56 notice issued on 19 August 1999, some parties have argued that the incentive rates need to increase by up to 100% to reflect the full value of improved performance.
- 7.15 The Regulator has already indicated that he intends to introduce stronger incentives for improved performance through an increase in the incentive rates. The new incentive rates will reflect changes in both the marginal revenue effect and the societal element.
- 7.16 With regard to the marginal revenue effect, the Regulator has asked KPMG to assess the appropriate value for each service group. This will take account of improved understanding of passenger reactions to delay which has emerged from work for the Passenger Demand Forecasting Council.
- 7.17 With regard to the societal element, the SSRA has indicated that it considers that the overall incentive on operators should be approximately doubled to reflect growing congestion on the roads and changing societal valuation of performance. To achieve this, it has proposed that the new societal rate for each service group in Schedule 7 of the franchise agreement should be equal to its existing societal rate plus its existing Schedule 8 central rate for Railtrack. The Regulator intends to reflect these new societal valuations in the new Schedule 8 incentive rates for Railtrack so that the incentives on Railtrack are back-to-back with those applying to the TOCs. This would approximately double Railtrack's incentive rates.

TOC on TOC delays

- 7.18 The Regulator proposes to retain the existing star model since this has provided effective incentives for Railtrack to manage network delay. The Regulator has not received any responses to his periodic review documents which suggest that there is any need for fundamental change.

- 7.19 Under this model, operators compensate Railtrack (at least in part) for the payments it makes to other operators as a result of their performance. The current payment rates are based on *ex ante* assumptions about the interactions between operators. In most cases, the payment rates were set in 1995 and the Regulator has therefore asked KPMG to recalibrate the star model payment rates such that there is no effect on Railtrack's expected revenues. This will take account of historic evidence on the interaction between operators, the expected impact of growth and the proposed increase in incentive rates.
- 7.20 Some changes to the franchise map may result from franchise replacement. This may produce a change in the interactions between operators and hence payment rates under the star model may need to change. This will be assessed on a case-by-case basis at the time of franchise replacement. Although this may change Railtrack's risk exposure, it is not likely to have any material effect on its expected revenues.

Non core elements

- 7.21 In the October 1999 periodic review document, the Regulator highlighted the existence of a range of incentives referred to as the "non-core" elements of the regime. The non-core elements are the provisions for missed intermediate stations, failure to stop at monitoring points, amended timetable procedure, ancillary movements to depots and severely disrupted days.
- 7.22 Most respondents suggested that these non-core elements were unnecessary, they confused the economic incentives and introduced procedural problems. The Regulator agrees that these provisions should be removed from the template regime. However, any operator who views these specific incentives as important to its business may wish to negotiate their inclusion with Railtrack on a bespoke basis.

Passengers' Charter

- 7.23 The current template Schedule 8 passes through to Railtrack the costs of Passengers' Charter compensation to season ticket holders (in proportion to their responsibility for delay). In the October 1999 periodic review document the Regulator suggested that, because these provisions had led to appreciable exchanges of money, they should be retained since the TOCs would otherwise be exposed to significant risk arising from delays caused by Railtrack.

- 7.24 Some respondents to the October 1999 periodic review document noted that the Passenger's Charter elements of the regime do not reflect the TOCs' current obligations to their passengers. This is because of the time lags in payments from Railtrack, and changes to TOC obligations since 1995. In addition, the SSRA is seeking to increase charter obligations in the franchise replacement process. The Regulator therefore proposes to replace the existing provision in the template Schedule 8.
- 7.25 Given SSRA expectations, the provisions which he expects to provide for are:
- compensation of up to 50% of the price of any ticket where a train is delayed by more than 30 minutes;
 - compensation of up to 100% of the price of any ticket where a train is delayed by more than one hour; and
 - compensation for holders of monthly (or longer duration) season tickets of a 5% discount on ticket renewal if the moving annual average of punctuality or reliability falls below the trigger and 10% if both fall below the trigger.
- 7.26 Triggers are currently TOC specific, but through the franchise replacement process the SSRA is seeking to move to a standard 91.75% figure across the network. The Regulator therefore proposes to provide for the expected payments in determining Railtrack's revenue requirements. He has asked KPMG to advise him on the expected payments.

Simplification of the drafting

- 7.27 Several responses to the October 1999 periodic review document referred to the complexity of the Schedule 8 regimes and the need for clearer drafting. The proposed changes, in particular the movement towards a single payment rate and the removal of the non-core elements of Schedule 8, will make drafting of the regime much simpler. However, the Regulator also considers that other aspects of the drafting could be improved.
- 7.28 The Regulator has employed Slaughter and May as his external legal advisers and they have been asked to revise the drafting of the template Schedule 8. The Regulator expects to consult on these revised model clauses in June/July. As with all model clauses, this is the basis from which to start. The most substantial differences from the

model clause may be expected to come when operators and Railtrack negotiate customised performance regimes. The Regulator will expect customised regimes to exhibit a high degree of clarity (and therefore legal certainty) in their drafting, and where possible to use the same terminology as in the template regime.

Criteria for approval of performance regimes

7.29 Five of the 25 franchised passenger operators on the mainland network have “bespoke” or customised Schedule 8 regimes in their track access agreements. These five are the four long-distance, high-speed operators (Midland Main Line, Great Western Trains, Great North Eastern Railway and Virgin West Coast) and the London Tilbury & Southend line.

7.30 The bespoke regimes were negotiated with Railtrack before privatisation and include such provisions as:

- train rather than service group based payment;
- ultimate destination rather than en-route monitoring point based payment;
- annual re-calibration; and
- payment triggers (such that no payments are made until Railtrack-attributed delays falls below a defined level).

7.31 The rationale for the customisation of performance regimes was that different operators would take different views of their own ability to manage delays, Railtrack's ability to manage delays and the necessary incentives and risks to both parties.

Recalibration

7.32 The Regulator does not view it as appropriate to calibrate the regimes on the basis of the existing, negotiated bespoke arrangements since this would result in the risk allocation agreed between the specific operator and Railtrack being passed to other operators through the star model. KPMG have therefore been asked to calibrate template regimes for all operators on the following basis:

- the variation in passenger perceptions of performance should be reflected in the marginal revenue effect;
- the long-distance, high-speed services should be treated individually (i.e. performance will be assessed for each train rather than as an average across a service group);
- the benchmarks for all services should reflect the public performance measure of punctuality (i.e. 100% of trains arriving within ten minutes for long-distance high-speed services and 93.75% within five minutes for all other services);
- all services should be included; and
- monitoring points and service groups should be TOC-specific and not changed unless clearly out of line with current operations.

7.33 The newly calibrated regimes will provide a backstop reflecting passenger and societal valuations and ensuring that the operation of the star model does not affect Railtrack's expected revenues or costs. In some cases, however, operators and Railtrack may wish to negotiate different arrangements.

Criteria

7.34 In the October 1999 periodic review consultation document on the incentive framework, the Regulator consulted on whether his predecessors' 1995 criteria for approval of performance regimes are still appropriate.

7.35 The general response to the consultation supported the existing criteria, although it was suggested that there was overlap between different criteria. Some respondents also considered that the criteria should refer explicitly to the importance of encouraging industry co-operation and the need to deal with rising requirements of users and to encourage growth. The Regulator also considers that it would be appropriate for the criteria to make more specific reference to the needs of passengers and freight.

7.36 Some respondents also suggested that the process for approval of track access agreements may not leave operators and Railtrack with sufficient leeway within which to negotiate the allocation of risk between them. The Regulator considers that

there is, in fact, considerable flexibility for the parties to negotiate mutually beneficial arrangements and that the existence of a backstop template regime should facilitate this process.

7.37 In the light of these responses, the Regulator is minded to adopt the following criteria in relation to the approval of performance regimes:

- the “rules” governing operation of the network must ensure that safety considerations are paramount;
- achieving an appropriate balance of risk and reward between Railtrack and train operators and incentivising improvements in performance;
- avoiding undue discrimination between operators;
- promoting co-operation between Railtrack and operators to improve capacity utilisation and operational performance;
- avoiding unduly constraining negotiations on performance regimes with other train operators; and
- ensuring that individual regimes operate in the interests of passengers and freight users and are consistent with the Regulator’s section 4 duties.

7.38 If asked to approve bespoke performance regimes following the periodic review, the Regulator would also need to be satisfied that they do not:

- change the value of Railtrack’s expected cash-flows;
- make it difficult for the operator to meet its financial commitments to the SSRA; or
- require unnecessary additional delay attribution systems.

Delay attribution and management of disruption

The delay attribution guide

- 7.39 Under Track Access Condition B, Railtrack is currently required to ensure accurate delay attribution. To this end, it has developed the "TRUST Attribution Guide". The guide is periodically updated, as understanding of the causes of delay changes or as more operators or contractors come onto the network.
- 7.40 Given that these attributions are key in driving payments under contracts between operators, Railtrack, and the SSRA, the Regulator proposes that the guide be made a specific requirement of Track Access Condition B such that it would be owned by both operators and Railtrack. Currently Railtrack uses the guide to attribute delay responsibility to its infrastructure maintenance contractors as well as between itself and operators. The Regulator would expect that to continue where appropriate.

Procedure for attributing delay

- 7.41 In 1995 there was considerable concern that the process of delay attribution would not be successful. Overall however the Regulator believes that it has served its purpose – Railtrack has been incentivised to reduce the number of unattributed delays and operators have developed processes to monitor delay. Generally the understanding of performance management throughout the industry has greatly improved.
- 7.42 Currently Railtrack makes an initial attribution of delay, on the basis of the information available to its staff at the time. Operators may then propose changes, on the basis of information provided by their staff, as soon as possible. Where there are disputes, they can be resolved through discussion at different managerial levels. Very few disputed attributions have been taken as far as the Access Disputes Resolution Committee and there have been relatively few off-line settlements (those which have not been resolved within 42 days). However, in some cases disputed attributions have soured relationships between Railtrack and its customers, and the costs of the process (both in terms of the attribution process itself and of resolving any disputes) are significant.
- 7.43 The proposed higher rates in the operational performance regimes mean that all parties would have a greater incentive to minimise the delay attributed to them. The Regulator's current view therefore is that some changes to responsibilities for delay attribution are needed to minimise the likelihood of disputes.

- 7.44 The National Performance Task Force met in March 2000 to discuss the issues. The Regulator understands that there was general agreement that there should be a professional head of delay attribution within Railtrack to whom all attribution staff should be accountable, and who would be responsible for delay attribution, its accuracy and the professionalism of the staff involved in the process. In addition there was general agreement that an industry attribution advisory board should be established to advise the professional head. In effect this will give operators a more immediate relationship with the delay attribution process at Railtrack than through the audit and challenge arrangements established in the track access conditions.
- 7.45 The Regulator views this as a pragmatic approach (given the size of the task) and has asked Railtrack to explain the detail of its proposals and how they would be given effect in terms of contractual or licensing arrangements.

Accuracy of delay attribution

- 7.46 The performance data accuracy code (PDAC) was a temporary measure introduced in 1995 to define standards for completeness and accuracy of data capture. Railtrack reported its progress on PDAC in March 1999.
- 7.47 In general the Regulator believes that it is important to ensure that the meaning of “accurately record” in Part B of the Track Access Conditions is clear, and therefore that some form of data accuracy code is required. His current view is that it is most appropriate to revise Part B to include standards for completeness and accuracy. To assist in this process he has asked Railtrack to provide information about:
- the current completeness of its data capture (including categorisation of monitoring points in Table A of PDAC);
 - its programme to increase the extent of automatic reporting on the network. Railtrack does not intend to introduce automatic reporting where flows are small and since the Regulator is generally of the opinion that an accurate recording should be achieved wherever reasonably possible he has asked for more information about Railtrack's assessment of the cost-benefit trade off;
 - its programme to calculate all berthing offsets to the nearest integer second and timetable for implementation; and

- the current level of precision in recording delays. Railtrack has not achieved integer second precision. Consultees were almost unanimous in their view that this precision is not required and the Regulator does not currently propose to require Railtrack to provide such precision since he considers the other issues of accuracy to be more material.

7.48 There have been two major national audits of the performance monitoring system in the last four years. Track Access Condition B does make such audits possible, but does not provide a specific programme of auditing, nor does it specifically provide for third parties (e.g. SSRA or infrastructure maintenance contractors) to audit. Hence the Regulator proposes that his reporters (see Chapter 12) should audit the whole system periodically. He also considers that Railtrack's professional head should be required to provide quarterly performance indicators and reports on training and competency of his staff to the industry advisory board.

Managing disruption

7.49 In the October 1999 periodic review document, the Regulator consulted on the key issues in managing disruption on the network. Some of these issues in relation to train regulation were covered by Professor Uff in his report on the Southall Rail Accident Inquiry and this is being addressed by the relevant industry body.

7.50 A requirement of condition H5 of the Track Access Conditions is that Railtrack and operators develop contingency plans, in relation to particular types of disruptive event. The Regulator understands that these plans are being developed and he views this as an important process in the multilateral contractual framework. He is considering whether the condition should be extended to create stronger obligations in respect of the formation of contingency plans and to make explicit reference to the need to consider contingency plans across zones or to include recovery plans. Given the subsidy arrangements for some services, funders have expressed an interest in being involved with the development of contingency plans and the Regulator is considering how this could be achieved.

Targets and enforcement

Background

7.51 Central to Condition 7 of Railtrack's network licence is a general duty requiring it to carry out its licensed activities to achieve the *purpose* of the Condition to the greatest

extent reasonably practicable having regard to all relevant circumstances including the ability of the licence holder to finance its licensed activities. The *purpose* is to secure:

- the maintenance of the network;
- the renewal and replacement of the network; and
- the improvement, enhancement and development of the network.

in each case in accordance with best practice and in a timely, economic and efficient manner so as to satisfy the reasonable requirements of train operators and funders. Condition 7 also requires Railtrack to publish a Network Management Statement (NMS) which shows how it proposes to comply with the general duty.

7.52 The plans, commitments and targets set out in the NMS are generally enforceable to the extent that they are consistent with the reasonable requirements of train operators and funders. If enacted, clause 200(1) of the Transport Bill will also enable the Regulator to impose penalties on Railtrack in relation to past breaches.

7.53 Railtrack has suggested that Condition 7 may need to be modified to provide greater transparency and predictability about the status of targets in the NMS. The Regulator is not convinced that this is necessary. However, the Regulator has acknowledged that it may be desirable for him to set out the circumstances in which he would normally expect to take enforcement action under Condition 7 and the factors to which he would expect to have regard in deciding whether to impose a penalty and in determining the amount of penalty. He believes that there are two main benefits from such transparency:

- it enables Railtrack to manage its business to meet the reasonable requirements of train operators and funders in the most efficient manner possible, particularly where long-term planning or investment is required to meet these requirements; and
- it minimises any perceived impact on regulatory risk which could otherwise increase Railtrack's cost of finance.

7.54 Having regard to his section 4 duties, the Regulator's policy objective in setting monetary penalties is to incentivise compliance with the relevant condition or requirement without introducing unnecessary risks for the relevant operator.

Chapter 10 contains general guidelines in relation to the Regulator's policy on penalties. The remainder of this chapter discusses the specific issues relating to the enforcement of Railtrack's operational performance targets (as a measure of network quality) for the next control period:

- aggregate monitoring targets based on the expected level of performance;
- aggregate enforceable targets based on the minimum level of performance below which financial penalties could be expected to be imposed; and
- disaggregated performance targets to protect against exceptionally poor performance on individual routes.

None of these targets would be comparable with the enforceable performance targets established for the current period.

Aggregate monitoring targets

- 7.55 As part of the final conclusions on the periodic review, the Regulator intends to establish monitoring targets for operational performance over the next control period. This would be expressed in terms of Railtrack-caused minutes delay per passenger train mile for each year. The target level of performance for any particular year would not therefore depend on actual performance in the previous year. The target would be set with regard to the expected improvement in performance which is implicit in the periodic review settlement: that is, the improvement which is implied by the assumptions on growth, investment, efficiency and enhancement which underpin the expected revenues and the proposed contractual incentives. It would not necessarily correspond to the new benchmark in Schedule 8 of the track access agreements (at least initially).
- 7.56 In order to inform the Regulator's decision on the appropriate level of the monitoring target, Railtrack was asked to base its 2000 NMS on a performance improvement of 2.5% per annum and to identify the incremental cost of improving performance by 5% and 7.5% per annum.
- 7.57 Railtrack would be required to report its historic and expected performance by period against the monitoring target and this information could be reviewed by the Regulator's reporters (see Chapter 12). The Regulator is also considering whether there would be merit in requiring Railtrack to produce a normalised measure of

performance which adjusts for exceptional factors (which would be equivalent to weather adjusted demand in the energy sector).

7.58 Given the proposed improvements in the contractual incentive regime, the Regulator would not currently expect to carry out further assessments of the reasonableness of Railtrack's expected performance until the next periodic review. In addition, he would not regard the monitoring target per se as constituting a (enforceable) reasonable requirement for the purposes of Condition 7 of Railtrack's network licence. In effect, subject to further considerations discussed below, these requirements would be defined by the relationship between the contractual incentives and the cost to Railtrack of improved performance. Given these incentives, Railtrack would set out in its NMS the way in which it planned to satisfy the reasonable requirements of operators and funders.

Aggregate enforceable targets

7.59 The October 1999 periodic review document consulted on the need to establish enforceable performance targets for the next control period in order to reinforce the contractual incentives (discussed earlier in this chapter). Although there were some differences in emphasis, most respondents supported the need for both contractual incentives and enforceable targets. Railtrack supported the Regulator's preference for incentives and accepted his view that minimum enforceable targets should underpin these incentives.

7.60 The Regulator considers that the definition of enforceable targets and the basis for potential penalties should be considered in relation to the purpose of securing compliance with the duty in Condition 7 of Railtrack's network licence. Given the proposed improvements in the performance regime, the objective of introducing these enforceable targets would therefore be twofold:

- to ensure that performance does not fall below levels which represent the minimum requirements of customers and funders; and
- to protect against severe deterioration in the serviceability and condition of the underlying assets such that urgent remedial action may be required (in conjunction with other indicators discussed in Chapter 9).

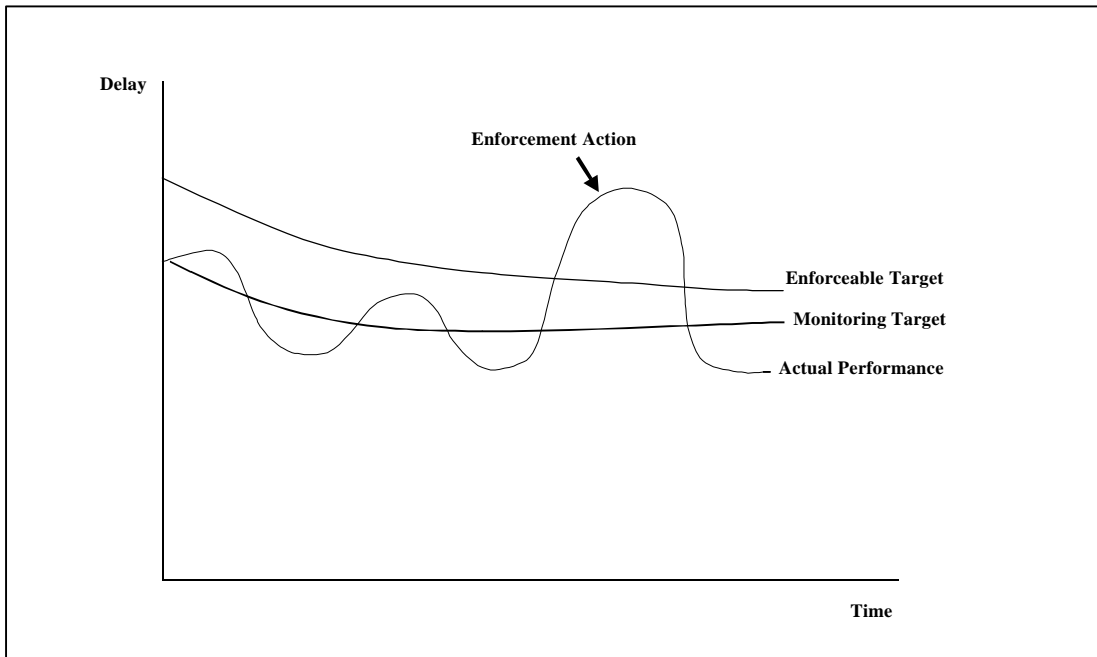
7.61 In each case, it would be necessary for the Regulator to take account of the volatility in performance caused by exceptional factors. This volatility could be dealt with in three ways:

- by adjusting the annual performance figures to remove the impact of exceptional factors. The Regulator's present view is that it would be preferable to avoid the discretion/uncertainty associated with this approach, since Railtrack should be encouraged to manage the impact of these exceptional factors; or
- by using a moving average measure of performance so that the impact of exceptional factors is smoothed out and Railtrack has an opportunity to catch-up under-performance in the following year. Railtrack has suggested a three year moving average, but the Regulator considers that this could result in excessive delays before action is taken; or
- by setting the target sufficiently far below the expected level of performance so that the target is not likely to be triggered by normal volatility. However, the Regulator is concerned that setting a minimum target in that way would significantly reduce the value of the target.

7.62 The Regulator is minded to establish an enforceable performance target which is defined in relation to the monitoring target described above. It would therefore be expressed in terms of Railtrack-caused minutes delay per passenger train mile for each year (i.e. without reference to actual performance in the previous year). His present view is that this target should permit a fixed percentage more train mile delay minutes than the monitoring target. The relationship between the relevant targets and actual performance is illustrated in Figure 7.2 below.

7.63 If the Regulator is satisfied that Railtrack is contravening, or is likely to contravene, its enforceable performance target for any year, he would expect to take action requiring it to provide an explanation and to prepare a detailed recovery plan. He would also expect to ask his reporters to assess the reasons for the failure and to review Railtrack's recovery plans. He would not, however, expect to impose monetary penalties at this stage in the process.

Figure 7.2: Monitoring and enforceable targets



- 7.64 Once the Regulator has reviewed Railtrack's plans and considered the view of his reporters, he would need to decide whether any further action is required. If he is satisfied that the contravention is due to exceptional factors or that the company is taking adequate steps to secure compliance with the target for that year, he would not generally expect to take further action.
- 7.65 If the Regulator is not satisfied with Railtrack's plans or if the company subsequently fails to meet the target for that year, he would expect to take further action to secure compliance with the target by the end of the following year. In order to incentivise compliance, he would expect to impose a monetary penalty which would be notified to Railtrack as part of the periodic review. The appropriate level of this penalty will need to be assessed in the light of the Regulator's review of the cost of meeting different levels of performance. The Regulator's provisional view, however, is that the penalty could be of a similar magnitude to Railtrack's new Schedule 8 incentive rates.
- 7.66 The effect of this is that there would not generally be any financial penalty for a failure to meet the target in a single year (other than the contractual incentives and the potential impact on the perceptions of the financial markets). However, if it fails to meet the target in two consecutive years, the overall incentive relating to performance below the target would be doubled. Given the proposed increase in these contractual incentive rates, the Regulator considers that this would generally provide a

sufficiently strong incentive for a reasonably efficient company at least to meet the target. There might, however, be circumstances where a larger penalty would be required (for example, if there were evidence that Railtrack had not planned its performance programme in an efficient manner).

- 7.67 There might also be circumstances where more far reaching enforcement action may be required: for example, if the Regulator is satisfied that the failure is a symptom of wider stewardship problems which are likely to cause significant longer term problems. However, this would be an extraordinary case. The factors to which the Regulator would expect to have regard in setting the level of any penalty in such a case are discussed in the context of the general guidelines on penalties in Chapter 10.

Disaggregated performance targets

- 7.68 The Regulator recognises that licence based enforcement is most likely to be useful in relation to national targets or long term issues relating to the serviceability and condition of assets. In general, he considers that the contractual incentive regime provides the most appropriate route for incentivising individual TOC or route performance and for taking account of the heterogeneity of its customers' requirements. However, some TOCs have expressed concerns that bespoke performance regimes could create an incentive for Railtrack to discriminate unduly between operators. Poor performance on an individual route could also be indicative of poor stewardship.
- 7.69 The Regulator's present view is that he may need to take action if the rate of change in performance for an individual route or zone is very substantially worse than average (particularly if there is a substantial deterioration in performance). As with the aggregate targets, the first step would be for the Regulator to require Railtrack to explain the reasons for the failure and to prepare a recovery plan. If, however, he is not satisfied with that plan, he may need to consider further enforcement action. As with the aggregate targets discussed above, the Regulator's present view is that a penalty which is of a similar magnitude to Railtrack's new Schedule 8 incentive rates is likely to be sufficient in most cases to incentivise compliance. However, since the problem would be confined to a part of the network, the overall level of penalty is likely to be correspondingly smaller.

Conclusions and next steps

7.70 In response to the Regulator's consultation on model clauses for track access agreements, the train operators have argued for specific non-monetary performance remedies and enforceable local output obligations. The Regulator will wish to ensure that his final conclusions on the periodic review and model clauses are consistent with each other.

7.71 Consultees are invited to comment on the Regulator's provisional conclusions for changes to the operational performance regime, including both the proposed improvements to contractual incentives and the guidelines relating to regulatory enforcement of targets. In particular, comments are invited on the following questions.

- Are the proposed changes to the template regime likely to result in significant performance improvements?
- Do the Regulator's proposals provide sufficient flexibility to ensure commercial needs can be met?
- Do the proposed arrangements for audit of Railtrack's delay attribution procedures and accuracy provide sufficient protection for operators and funders?
- How should monitoring targets be established and what is the appropriate monitoring target for the next control period?
- How should enforceable targets be defined (e.g. what percentage of monitoring targets) and should the comparison be done over more than one year?
- What action should follow from a failure to meet enforceable targets (e.g. preparation of a recovery plan and potential monetary penalty to incentivise compliance)?
- Is there any merit in setting disaggregated targets?

8. *Possessions regime*

Introduction

8.1 In order to maintain, renew and enhance the network, Railtrack needs to take possession of the network. Typically this disrupts operations. To ensure that Railtrack plans its work efficiently, its costs in taking possessions should reflect the costs of the possessions to the operators. In addition, the Regulator's current view is that:

- unnecessary complexity should be avoided; and
- the approach to compensation for the disruption should be the same, regardless of the reason for the work.

8.2 Currently, however, the arrangements for compensating operators for the effects of possessions for maintenance and renewal work are different from those for enhancement related possessions. This chapter therefore addresses the two issues in turn.

Maintenance and renewal

8.3 Railtrack compensates franchised operators for disruptive possessions for maintenance and renewal under Schedule 4 of track access agreements. The payment rates are based on the rates in the operational performance regime and depend on the length of notice given by Railtrack. Railtrack makes no payments if it takes possession of the network during the free allowances which are specific to each operator or where the possession will not disrupt service.

8.4 Responses to the Regulator's October 1999 periodic review document were almost unanimous in agreeing that the concept of the free allowance has worked against efficient possession planning and has not provided Railtrack with the appropriate incentives. The Regulator therefore proposes to remove the free possessions allowance from Schedule 4.

8.5 The Regulator is currently of the opinion that the link to the payment rates in the Schedule 8 performance regime should continue. As explained in Chapter 7, the new Schedule 8 rates will be higher (approximately double) and this should alleviate some operators' concerns that the current compensation rates do not reflect their costs.

- 8.6 An alternative approach would be to base the compensation on the case-specific costs of providing replacement services. However these costs vary considerably depending on where and how the service is replaced and this approach could therefore introduce considerable complexity and uncertainty. The Regulator will be investigating these costs further before reaching final conclusions on these issues.
- 8.7 There was broad support for an annual possessions planning strategy in the responses to the Regulator's October 1999 periodic review document. Railtrack has (for the first time) this year initiated an industry wide engineering conference as part of the development of the Rules of the Plan before the timetabling conference. This seems to be a useful step forward in making the process more transparent. In his November 1999 document on Railtrack's stewardship of the network, the Regulator asked Railtrack to coordinate an industry debate on these issues, and he is now considering Railtrack's response on this.
- 8.8 The Regulator's current view is that Railtrack should compensate operators for possessions with a proportion of the Railtrack payment rate in the relevant Schedule 8. The proportion could increase the later the possession is booked as follows:
- those booked before the timetabling conference (T-46) - 25%;
 - those booked between T-46 and T-26 - 50%;
 - those booked between T-26 and T-12 - 75%; and
 - those booked after T-12 - 100%.
- 8.9 An alternative, which the Regulator is considering, would be to adopt a flat compensation rate of 50% up to the T-26 date. In addition, the Regulator is considering bringing in full compensation at T-18, since this would ensure that the timetable can be properly produced at T-12.
- 8.10 The Regulator recognises that the long lead times in developing engineering strategies and in planning possessions may preclude the introduction of the new regime for the summer timetable 2001. However he expects that the planning process for timetables thereafter will be based on these new arrangements.
- 8.11 Schedule 4 also includes provision for maximum and key journey times for specific journeys. The specification of operators' rights is being discussed through the

Regulator's consultation on model clauses for track access agreements. These provisions are included in that discussion.

8.12 The draft model clauses for Schedule 4 will be published in June/July 2000.

Enhancement

8.13 Railtrack (or the proposer of the network change) compensates operators for possessions taken to enhance the network through the negotiated process included in Track Access Condition G. This provides for compensation both for the effect of the possessions and for the on-going effect of the enhancement. Both questions have been discussed through the Regulator's work on model clauses for track access agreements.

8.14 The concerns with the Part G process are that it does not give certainty about the expected compensation costs and that it can be time consuming. The Regulator therefore currently proposes that compensation for disruptive possessions for enhancement should be paid under the same arrangements as those for maintenance and renewal. That is, the payment rates should be based on the Railtrack rate in Schedule 8 and depend on the length of notice given.

8.15 Other changes to the structure of Part G have been proposed (e.g. to require operators to contribute to the costs of a scheme where they will share in the benefits). These proposals and changes to the arrangements for compensation for the on-going effect of network charge will be considered through the Regulator's work on model clauses for track access agreements.

Conclusions and next steps

8.16 Given the principles outlined in this chapter, the Regulator has asked Railtrack to estimate its expected revenue requirements to cover the costs of compensating operators for the required possessions. This should be consistent with the maintenance and renewal work assumed in the 2000 NMS.

8.17 Consultees are invited to comment on the proposed changes to the possession regime, including the removal of free possession allowances in Schedule 4 and the use of Schedule 4 rates to determine the level of compensation for disruptive enhancements under Part G of the Track Access Conditions.

9. *Baseline outputs*

Introduction

9.1 Chapter 12 of the December 1999 periodic review document set out the Regulator's proposed approach to defining the baseline outputs which Railtrack will be expected to deliver so that its performance can be monitored over the next control period. The baseline network includes both:

- the sustained network outputs, essentially based on the existing network, which are achieved primarily through efficient maintenance and renewal of the network; and
- incremental outputs which are included in the baseline, generally as enhancements to the existing network, to accommodate the needs of passengers, operators and funders.

9.2 In addition, Chapter 6 of the October 1999 periodic review document explained, in broad terms, the way in which he expected to make use of this information. Responses to these consultations were broadly supportive of the Regulator's proposed approach. Railtrack was, however, concerned about the level of detail which needed to be developed in order to make these proposals operational.

9.3 Since the December 1999 periodic review document, the Regulator has continued to develop appropriate measures of the serviceability and condition of Railtrack's network, working closely with Railtrack. As well as the Regulator's own in-house engineering advisers, the Regulator has developed these ideas with assistance from his engineering consultants Booz Allen & Hamilton (BAH). More recently, he has also appointed Binnie Black and Veatch (BBV), to advise him, drawing on their considerable experience acting as reporters for OFWAT.

9.4 The purpose of this chapter is to set out the Regulator's present thinking in relation to Railtrack's sustained network outputs:

- the relevant measures of serviceability and condition of Railtrack's network; and
- the way in which the Regulator expects to make use of this information.

9.5 The Regulator presently intends to publish a further document in May/June 2000 relating to the treatment of incremental outputs that fall within the scope of the review. These issues are not therefore discussed in this chapter.

Developing measures of serviceability and condition

9.6 The Regulator is committed to the establishment of a framework of output measurement which represents both serviceability and network condition. However, a number of practical difficulties need to be resolved before this framework is fully established and a baseline position can be defined for the start of the next control period. There is a considerable amount of work still to be done and important issues remain outstanding. These include:

- the nature and definition of the proposed measures in certain asset categories. Railtrack has argued that some measures are unnecessarily intrusive or are incompatible with present asset management processes;
- how the information should be presented. Several consultees were concerned that the proposed network-wide measures would not provide the level of information that they required, and suggested that operator or route-specific measures were necessary;
- the frequency of reporting of asset condition measures;
- the need to sample asset condition where the full population of assets will not be assessed before the start of the next control period and will only gradually be extended with time in accordance with existing inspection cycles; and
- the use the Regulator intends to make of such asset condition measures as indicators of the underlying network health.

9.7 The proposed measures of serviceability and condition have been under development with Railtrack for a considerable time and significant progress has been made. It is important that these measures are finalised so that Railtrack can progress the collection of data and population of measures for the start of the next control period.

9.8 In January 2000 the Regulator wrote to Railtrack with a comprehensive description of all proposed measures and a summary of the outstanding actions he considered necessary to establish the required framework. This document developed the

December 1999 framework in greater detail and drew together the most recent thinking on measures by both the Regulator and Railtrack. It expanded the definitions of each individual measure in each main asset group, and in some cases it also proposed new measures to widen the coverage of the network assets subject to reporting.

9.9 Table 9.1 (at the end of this chapter) sets out the present status of proposed serviceability and condition measures. Some of this framework comprises measures which are already available and reported. For some measures certain improvements and enhancements have been agreed to make them more meaningful. In other instances, new measures have been developed and are now in the process of being quantified. In these cases, and given the relatively short time available before the start of the next control period, full representation of the particular asset type may not be practicable. Where this is the case, the Regulator will need to be assured that:

- information will be gathered rapidly in the next control period in order to redress any deficiencies; and
- the information that is available at 31 March 2001 provides a statistically robust and meaningful sample that is representative of the whole population of the asset type.

9.10 Despite these practical difficulties, it is essential that the baseline position for the next control period is fully defined and quantified. In considering future network condition during that control period, the Regulator does not expect to accept any claim that the baseline condition was not sufficiently understood. It is Railtrack's responsibility to ensure that the key network assets are sufficiently measured and represented. It is therefore for Railtrack to conclude the definition of serviceability and condition measures, and to ensure that it has in place a sufficiently resourced programme to collect asset data in the remaining time before 31 March 2001.

9.11 The Regulator also wishes to make it clear that:

- the present proposals for a measurement framework must be further enhanced to incorporate other key assets for which representative samples will not be available for the start of the new control period; and
- the measures will need to evolve to reflect developments in asset management systems, inspection methods and technologies. He therefore accepts that the

measurement framework will continue to develop during the next control period, provided that such changes are compatible with the policies laid down by the Regulator in December 1999 and can be introduced in a way which does not prevent clear and consistent monitoring throughout the next control period. It is expected that any new measures will enhance the framework in place at its commencement, rather than altering or amending existing measurements.

- 9.12 Unfortunately, it is within some of the very asset groups that could deteriorate without necessarily impacting upon performance that condition measures have been particularly difficult to establish. That is why the Regulator is requiring Railtrack not only to implement its new condition indexing system for bridges and viaducts as rapidly as possible, but also to extend the concept as a matter of priority to the measurement of other structures such as tunnels and walls. Similarly, he considers that it should be a priority for Railtrack to assess and monitor the condition of its drainage systems.

Reporting and monitoring frequencies

- 9.13 Table 9.1 sets out the proposed reporting frequencies for each measure. In most cases reporting will be required annually. The Regulator considers that this fits well with the proposed annual return and the role of reporters in verifying and commenting upon the measures. However, he has considered the present practice of other regulators in this respect, and accepts that there is a case for employing longer monitoring cycles in some cases, depending upon the type of asset and the nature of condition measurement. The key requirement is that the baseline is well established and that there is an up to date and comprehensive picture of asset condition available at the next periodic review (in practice, this will be based primarily on information relating to 2003/04).
- 9.14 Thus in the case of the network track assets, all of which are inspected at least once a year (and often at a much greater frequency), it is proposed that reporting and monitoring cycles should be no longer than annual. By contrast, bridges and viaducts are subject to detailed structural examination on a six yearly cycle, with the workload being divided annually across the total asset population. Whilst the Regulator would still require the output from these inspections to be reported each year, the cumulative asset condition picture will be constructed over the longer cycle and will be more significant in the monitoring of overall condition. This is acceptable because degradation of such long-life assets is usually slow, and monitoring of moving

average condition rating and start to finish periodic review comparisons should provide sufficient information for the Regulator.

Implications of non-delivery

Monitoring targets and the periodic review

- 9.15 The October 1999 periodic review document highlighted the need for clarity about the status of any targets relating to the serviceability and condition of Railtrack's assets. The main role for the proposed measures and targets would be to establish a base against which the Regulator can assess whether Railtrack is allowing the serviceability and condition to deteriorate. This would be taken into consideration by the Regulator at future periodic reviews when assessing Railtrack's future expenditure requirements (e.g. to ensure that it is not paid again for correcting any failures to meet the relevant targets). Railtrack would therefore have a clear incentive to maintain its assets in an appropriate condition.
- 9.16 In terms of the discussion in Chapter 7, most of the measures and targets referred to in the preceding sections would be classed as monitoring targets. They would therefore be set with reference to either the current base levels or the expected improvements over a period of years. Failure to meet these targets would not automatically result in enforcement action but would be taken into consideration at the next review.

Stewardship obligations

- 9.17 As indicated in the October 1999 periodic review document, however, if Railtrack is seen to be falling well short of the relevant targets this may be an indicator of major stewardship problems. In these circumstances, further action may be required. As with the performance targets discussed in the previous chapter, the first step may be for him to require Railtrack to provide an explanation and to prepare a detailed recovery plan. He would also expect to ask his reporters to assess the reasons for the failure and to review Railtrack's recovery plans. He would not, however, expect to impose monetary penalties at this stage in the process.
- 9.18 Once the Regulator has reviewed Railtrack's plans and considered the view of his reporters, he would need to decide whether any further action is required. If he is satisfied that the company is taking adequate steps to remedy the situation or that the matter should be dealt with at the next periodic review, he would not generally expect to take further action.

9.19 The Regulator would expect to take further action if he is satisfied that the serviceability and condition of the assets is in danger of deteriorating to such an extent that significant problems might be expected to arise in the future (e.g. a need for substantial increases in investment or the risk of reduced performance). In these circumstances, it would also be important for the Regulator to act while remedial action is still possible. However, this would be an extraordinary case. The factors to which the Regulator would expect to have regard in setting the level of any penalty in such a case are discussed in the context of the general guidelines on penalties in Chapter 10.

Enforceable targets

9.20 In its response to the December 1999 periodic review document, Railtrack proposed that there should be minimum enforceable targets for track quality and broken rails. The Regulator's view is that such targets would be appropriate, at least in the short term, since these measures are important both in terms of the direct effect on passengers and as a measure of asset condition. He is therefore considering the appropriate level of the targets and the potential penalties for failure to meet those targets. He invites Railtrack to propose appropriate values in line with the approach set out in Chapters 7 and 10 of this document.

9.21 In the longer term, however, the Regulator considers that it would be more appropriate to incentivise these outputs through the access agreements. As indicated in Chapter 2, he intends to investigate further the possibility of linking usage charges to the condition of track and vehicles, thereby incentivising more efficient maintenance. There has been general support from operators for such an approach in his consultation on model clauses for track access agreements.

9.22 A variant on this approach, which could possibly be introduced as part of the current review, would be to include an automatic adjustment to the fixed charge based on aggregate national measures of track quality and broken rails. The Regulator is considering whether this approach would be preferable to the enforcement approach described above.

Conclusions and next steps

9.23 Considerable progress has been made with Railtrack in defining the relevant measures of asset condition and serviceability. Railtrack has also made progress towards establishing a baseline position for 31 March 2001. Although there are differences in

emphasis, there is a large measure of agreement between the Regulator, Railtrack, operators and funders on the appropriate measures and the way in which they should be monitored and incentivised.

- 9.24 Consultees are invited to comment on the proposed measures and targets relating to the serviceability and condition of Railtrack's network and on the appropriate status of these targets. Particular comments are invited on the appropriate level of minimum targets for track quality and broken rails, on the potential penalties for failure to meet those targets, and on whether this should be implemented through enforceable targets or an automatic adjustment to the fixed charge.

Table 9.1: Asset serviceability and condition measures

Asset Category	Output measures	Comments	Proposed Reporting	Status	2001 Baseline?	Issues
Track	Serviceability: 1. Temporary Speed Restrictions (TSR) due to track condition	Present measure modified to report severity of impact by length affected and advertised line speed	Annual	Agreed	Yes	None
	2. Track failure (Broken /Defective rails)	Existing measure remains unchanged	4 weekly and annual	Agreed	Yes	None
	Quality/condition: 3. Track Geometry measurement	Existing measure modified to provide track quality information by 4 speed bands as well as national figure	Annual	Agreed	Yes	None
	4. Exceedance of specific track design Parameters	New measure to report occurrences of specific exceedances of industry standards	Annual	Agreed	Yes	None
Structures	Serviceability: 1. Temporary Speed Restrictions (TSR) due to bridge condition	Existing measure remains unchanged - report by number of structures subject to speed restriction	Annual	Agreed	Yes	None
	2. Route Availability	New measure proposed to monitor changes in load carrying capability of structures	Annual	Not agreed		Reporting mechanism to be developed
	Quality/condition: 3. Condition marking	New measure to report condition of each structure	Annual sample reflecting inspection cycle	Agreed	Partial (initially)	
Line of route assets	Serviceability: 1. Earthwork (embankments and cuttings) condition: <ul style="list-style-type: none"> • Requiring condition TSR • Causing delays • Causing derailment 	New measures	Annual	Agreed	Yes	None

Signalling & control Systems	Serviceability: 1. Number of failures causing delay	New measure replaces previous measure of 'repeat failures'	Annual	Agreed in principle	Yes	Reporting threshold to be agreed
	Quality/condition Assessed remaining life of interlockings	New measure applying Primary SICA process to assess overall condition of major components of each interlocking	Varies according to type and age of installation	Agreed	Partial	Interlocking inspections vary with condition
Electrification & Plant	Serviceability: 1. Number of failures causing delay	New measures	Annual	Agreed in principle	Yes	Reporting threshold to be agreed
	Quality/condition: 2. Assessed condition of contact equipment	All measures to report a.c and d.c. systems separately	Varies according to equipment age	Agreed	Partial	None
	3. Assessed condition of substation equipment		Varies according to equipment age	Agreed in principle	Partial	Minor issues over exclusions
Stations	Serviceability: 1. Facility scores under 5 headings for 6 station categories	Existing measures as reported in NMS	Annual	Agreed	Yes	None
	Quality/condition: 2. Condition scores in 5 bands for 6 station categories	Existing measures as reported in NMS	Annual	Agreed	Yes	None
Depots	Quality/condition: 1. Condition score by 5 bands for key depot elements	New measure	Annual report of sample of depots; whole population inspected over 5 years	Awaiting Full agreement	Partial: develops during control period	Scoring method to be agreed

10. General guidelines on penalties

Introduction

- 10.1 Under section 55 of the Railways Act 1993, where the Regulator is satisfied that a relevant operator is contravening, or is likely to contravene, any relevant condition or requirement, he is required (subject to section 55(5)) by final or provisional order to make such provision as is requisite for the purpose of securing compliance with that condition or requirement. The provision that may be made in a final order includes the imposition of a monetary penalty of such amount as may be appropriate, in all the circumstances of the case, in respect of the contravention in question.
- 10.2 In addition, clause 200(1) of the Transport Bill would, if enacted, enable the Regulator to impose penalties in relation to past or continuing contraventions of relevant conditions, requirements or orders. If enacted, the Transport Bill would also require him to prepare a statement of policy with respect to the imposition of penalties and the determination of their amount.
- 10.3 Having regard to his section 4 duties, the Regulator's policy objective in setting monetary penalties under the Railways Act 1993 is to incentivise compliance with the relevant condition or requirement without introducing unnecessary risks for the relevant operator. The potential penalty would therefore be proportionate to the nature and seriousness of the breach. In many cases, this may mean that no penalty is required (e.g. in the Regulator's recent action in relation to the West Coast Main Line) but, in other cases, the potential penalty may be substantial.
- 10.4 Any guidance on the Regulator's policy would therefore be designed to increase transparency by setting out the steps which the Regulator expects to follow when calculating the amount of any penalty. This chapter sets out the Regulator's present thinking on the issues which might be included in this general guidance. He proposes to develop this guidance further in conjunction with the periodic review and would expect to keep it under review in the light of experience in applying the policy over time.

General approach

- 10.5 When deciding whether to impose a penalty and in determining the amount of the penalty, the Regulator would need to have regard to all the relevant circumstances of

the case, including all of his section 4 duties. Given this, he would generally expect to have regard *inter alia* to the following issues which are discussed in more detail below:

- the implications of any previous relevant policy statements or decisions;
- the costs (to the relevant operator) and the benefits (to other relevant parties) from securing compliance;
- adjustments for mitigating or aggravating factors; and
- consistency with the Regulator's duties in relation to financing.

Previous policy statements and decisions

10.6 The Regulator's section 4 duties include a duty to enable persons providing railway services to plan the future of their businesses with a reasonable degree of assurance and a duty not to make it unduly difficult for holders of network licences to finance their activities. Given these duties, the Regulator would expect to have regard to any current relevant policy statements or precedents when assessing the appropriate level of penalty. This may include:

- any general guidance set out by the Regulator (as amended from time to time). If the Transport Bill is enacted, the Regulator would in any case be required to have regard to the statement of policy referred to above;
- any other relevant policy statement in relation to the specific conditions or requirements in question which are current at the time of the contravention. These might include guidance issued as part of the final periodic review settlement or other policy statements about the way in which the Regulator would expect to assess the appropriate penalties arising from failure to meet specific obligations (e.g. the matters referred to in Chapter 7 on operational performance and Chapter 9 on other baseline outputs);
- any relevant precedents arising from the Regulator's previous decisions on similar or related cases; and
- examples (if any) from other industries, particularly other regulated utilities in the United Kingdom, which may assist the Regulator's thinking.

10.7 Where relevant, he would expect to explain the reasons for any differences between the proposed level of penalty and that implied by the current relevant policy statements or precedents referred to above.

Costs and benefits of non-compliance

10.8 Given the objective of incentivising compliance with the relevant conditions or requirements, the Regulator considers that the potential monetary penalty (together with any other provision of the order) should make it in aggregate more expensive for the operator to continue in breach than to comply. In addition, however, the objective of avoiding unnecessary risks to the operator implies that the monetary penalty should not generally exceed the amount required to incentivise compliance. The penalty should therefore be proportionate to the nature and severity of the breach. In the case of Railtrack, for example, the penalties relating to failures in part of its network would generally be lower than those associated with the network as a whole.

10.9 The Regulator would therefore expect to assess the appropriate level of penalty primarily in terms of the following evidence which is discussed in more detail below:

- the expected cost to the relevant operator of securing compliance with the relevant condition or requirement (including both additional revenues and reduced costs which may have been realisable from continuing breach); and
- the likely benefit to other parties (including users, funders and operators) of securing compliance with the relevant condition or requirement.

10.10 Where the cost of compliance is relatively straightforward to assess, the Regulator would expect to set the penalty based on this cost (subject to other considerations discussed in the following sections). For example, the penalty relating to the National Rail Enquiry Scheme call answering performance was based on available information on the savings to operators from not having to pay contractors for unanswered calls.

10.11 In the case of Railtrack, estimates of the cost of compliance with some conditions or obligations may be implicit in the Regulator's assessment of the appropriate level of charges as part of the periodic review. In considering the appropriate level of penalty, however, the Regulator would need to assess whether these estimates were sufficient to achieve the objective of incentivising compliance. Indeed, the fact that enforcement action was considered necessary may indicate that the costs have increased (e.g. due to inefficiency or inadequate planning).

- 10.12 Where the Regulator has only limited information on the likely cost of compliance, he would either need to proceed on the basis of available information or delay any action until further information can be obtained. In some cases, it may be possible to obtain this information from the operator in question, but in other cases extensive analysis may be required. Where urgent action is required by the operator in order to secure compliance, it may therefore be necessary for the Regulator to reach a provisional view on the appropriate level of penalty and to take account of any representations made in finalising his decision.
- 10.13 Where there is relatively little information on the cost of compliance, the Regulator would seek to consider the appropriate level of penalty by reference to the benefit to other parties of securing compliance. In some cases, this may be taken as an indirect estimate of the cost of compliance on the assumption that the condition or obligation was established on the basis that the benefits were at least equal to the costs. Even where robust cost information is available, he may wish to use any available information on the potential benefits of compliance as a check on the estimated costs.
- 10.14 If the estimated benefit is significantly greater than the estimated cost of compliance, securing compliance would result in a significant net benefit to the industry and its customers. However, where the cost of compliance is known with some confidence, the Regulator considers that setting the penalty based on these costs should be sufficient to incentivise compliance (e.g. because of the wider implications of enforcement action for the perceptions of investors). Subject to the aggravating factors discussed below, setting the penalty based on the (higher) benefits to other relevant parties would therefore be excessive relative to the objective of securing compliance and would result in unnecessary additional risks to the operator in question.
- 10.15 If the estimated cost was significantly greater than the estimated benefit, the Regulator would need to consider whether his section 4 duties precluded him from making an order. In doing so, however, he would also need to consider whether this difference was a reflection of the efficiency of the operator in question.

Adjustments for aggravating and mitigating factors

- 10.16 The Regulator would expect, in deciding on any penalty or penalty mechanism, to take account of relevant aggravating or mitigating factors. In each case, however, the Regulator would expect to have regard to the objective (referred to above) of

incentivising compliance with the relevant condition or requirement without introducing unnecessary risks for the relevant operator.

10.17 As regards aggravating factors, the Regulator is considering whether the following factors would be relevant considerations:

- repeated infringements of the same type by the same operator which might, for example, arise from serious or systematic weaknesses in management systems or control;
- infringements which are deliberate or reckless rather than ordinarily negligent, particularly where directors or senior management of the operator are either involved or have not introduced appropriate safeguards; and
- the extent to which the operator has actively concealed the breach from the Regulator.

10.18 As regards mitigating factors, the Regulator is considering whether the following factors would be relevant considerations:

- existing incentives arising from the operation of the contractual framework including contractual incentive regimes (e.g. Schedules 4 and 8 of the track access agreements) and the interaction with the periodic review process (e.g. in relation to adjustments to the Regulatory Asset Base (RAB) for underdelivery);
- where the operator can show to the satisfaction of the Regulator that there is a material risk that it would become liable and be pursued for material claims under section 57(5) of the Railways Act 1993;
- any remedial steps taken since the breach occurred or appeared likely to occur and whether or not they were taken only in response to the Regulator's actions; and
- the degree of co-operation shown by the operator during the Regulator's investigation of the alleged breach.

10.19 The Regulator would need to consider any other relevant mitigating or aggravating factors referred to in representations made by the operator or other interested parties.

If the Transport Bill is enacted, he would need to consider whether other mitigating or aggravating factors should be taken into consideration (e.g. in relation to the desirability of deterring contraventions of the relevant condition or requirement).

Financing implications

- 10.20 As noted above, the Regulator's section 4 duties include a duty not to make it unduly difficult for holders of network licences to finance certain of their functions. They also include a duty to have regard to the financial position of the Franchising Director. As a final step in the process, the Regulator would expect to check that the potential penalty derived from consideration of the issues described above would not conflict with these duties and objectives.
- 10.21 However, the Regulator does not believe that these financing duties require him to protect companies from their own inefficiency. In particular, his present view is that it would be inappropriate for him to refrain from imposing a monetary penalty which is sufficient to incentivise compliance merely because this would make it difficult for a highly inefficient operator to finance its functions. On the other hand, he recognises that improvements in efficiency cannot be achieved immediately or without costs, and he would therefore expect to take account of any constraints on the level of efficiency which the operator can realistically be expected to have achieved in all the circumstances.
- 10.22 Together with these financing duties, the duty to enable persons providing railway services to plan the future of their businesses with a reasonable degree of assurance suggests that there may be some merit in providing further general guidelines on the potential level of penalties which might be imposed. However, in the light of the purpose of the penalty under the Railways Act 1993 – to secure compliance – the Regulator's present view is that it would not be possible for him to provide further guidelines on the likely level of penalties other than on a case by case basis. To do so could result in penalties which are inadequate (for the purpose of incentivising compliance) or unnecessarily high (resulting in unnecessary risk to operators).

Conclusions and next steps

- 10.23 Consultees are invited to comment on the extent to which the Regulator should provide guidelines on the issues to which he would expect to have regard when deciding whether to impose a penalty and in determining the amount of the penalty.

Comments are also invited on the factors to which the Regulator should have regard and the Regulator's provisional views on these issues.

11. Regulatory framework for enhancements

Introduction

- 11.1 Chapter 13 of the December 1999 periodic review document set out the Regulator's proposals in relation to the future framework for enhancement expenditure, including a new code of practice or policy statement relating to enhancements. Responses to the consultation were very favourable. Since last December, the Regulator has been developing these proposals in conjunction with the SSRA and Railtrack. Operators have also made further contributions through the franchise replacement process and some of the key issues have been discussed in the context of the Regulator's development of model clauses for track access agreements.
- 11.2 The Regulator's proposed policy statement would need to reflect his section 4 duties and the commitments made by Railtrack or others (to deliver enhancements) and operators/funders (to pay for enhancements). In the light of these duties and commitments, it would set out:
- the Regulator's criteria for the approval of access charges relating to enhancements; and
 - the way in which the Regulator expects to treat enhancement expenditure at future periodic reviews.
- 11.3 It is intended that the proposed policy statement would cover all types of enhancement, whether they fall within or outside the scope of the periodic review, whether they are initiated by operators, funders or Railtrack and whether they are carried out by Railtrack or other persons. The Regulator would expect to keep this policy under review in the light of his section 4 duties and experience with enhancements (e.g. in relation to Railtrack's performance in negotiating and delivering enhancements). Other than in exceptional circumstances, however, he would not expect to change retrospectively the treatment of enhancements which have been approved under an existing policy. He would also expect to consult widely before changing his policy with respect to future enhancements.
- 11.4 In addition to the proposed policy statement, the Regulator considers that the smooth operation of the enhancement process may require a number of modifications to Railtrack's network licence, most of which are also proposed for other reasons. It also

requires some changes to the Track Access Conditions and to Railtrack's criteria for renewing, developing and maintaining the rail network which were last issued in 1998. This chapter therefore sets out the Regulator's current thinking on the contents of the proposed policy statement, highlighting where relevant any related changes in the contractual and regulatory matrix which he considers necessary. The following issues are considered in turn:

- the interpretation of reasonable requirements;
- risk and return;
- criteria for approval of access charges for enhancements;
- establishing capital costs;
- provision of information and the treatment of project development costs;
- the Regulatory Asset Base (RAB);
- contractual and regulatory enforcement; and
- third party enhancements.

Reasonable requirements

11.5 Railtrack is required under Condition 7 of its network licence to secure the improvement, enhancement and development of the network in accordance with best practice and in a timely economic and efficient manner so as to satisfy the *reasonable* requirements of customers and funders. It must do this to the greatest extent reasonably practicable having regard to all the circumstances including its ability to finance its licensed activities.

11.6 In order to facilitate the implementation of efficient and worthwhile enhancements, and taking account of his section 4 duties, the Regulator considers that it would be desirable for him to clarify his interpretation of *reasonable* in the context of enhancements. His present view is that it would be *reasonable* (and therefore an obligation) for Railtrack to meet the requirements of its customers or funders if *any* of the following conditions are met:

- they can be achieved at no additional cost to Railtrack; or
- they can be achieved as part of a scheme which Railtrack is expecting to undertake for the renewal or enhancement of the network at no additional cost to Railtrack; or
- the customer or funder commits to pay additional charges (or procure the payment of additional charges) to Railtrack based on the efficient cost of delivering and financing the enhancement, including a return which is commensurate with the risks carried by Railtrack, in accordance with the Regulator's policy statement; or
- the funding for the expenditure involved is explicitly provided for at a periodic review;

and *each* of the following conditions is met:

- they can be accommodated safely, within a schedule of works which takes account of other activities on the network and which is acceptable to other users (subject to consultation, compensation and appeal arrangements in accordance with the contractual and regulatory framework); and
- it is not unduly difficult for Railtrack to finance the enhancement taking account of the other financing requirements of its regulated network business;
- they do not conflict with existing access rights of other operators (subject to possible variation in accordance with the terms of the contractual and regulatory framework); and
- the customer and/or funder has provided the necessary input at the relevant time.

11.7 The definition of reasonable requirements has direct implications for the boundary between renewal and enhancement of the network which was discussed at length in the December 1999 periodic review document. Most respondents supported the Regulator's proposed approach. Following the conclusions on the periodic review, Railtrack will need to revise its criteria for maintaining, renewing and developing the network to reflect the principles set out above and in Chapter 13 of the December 1999 document.

11.8 Such reasonable requirements also have implications for other elements of the enhancement framework. As noted in the December 1999 periodic review document, for example, the Regulator has powers to require Railtrack to carry out works and to enter into contracts which provide for enhancements and the Transport Bill (if enacted in its current form) would add to these powers. If necessary, the Regulator would expect to apply the principles set out above to establish whether it would be reasonable for him to require Railtrack to carry out such works (e.g. under section 17 or the proposed section 16A). This issue is discussed further below in the context of third party enhancements to the network.

Risk and return

Default allocation of risk

11.9 The December 1999 periodic review document explained the reasons for the Regulator's proposed default allocation of risks between Railtrack and operators/funders. In summary, the Regulator proposed that Railtrack should generally bear construction/delivery risk and that operators/funders should generally bear both long- and short-term demand risk. The Regulator also considers that it will generally be preferable for enhancements to be specified in terms of outputs rather than inputs. Most respondents agreed with the proposed allocation of risk. It has also been noted that this is broadly consistent with Treasury Task Force (TTF) guidance on standardisation of PFI contracts in that the risks are allocated to the parties best able to bear them.

11.10 Railtrack accepts that (consistent with TTF guidelines) it should bear project risks (including ground conditions, weather, historic artefacts, labour relations, third party risks, fire, theft and other contractor risks) and the risk of increases in the cost of labour materials and supplies for the project. On the same basis, it argues that it should not be required to bear any risk of changes to the project requirements following commencement of construction and that it should be compensated for any other change in requirements (e.g. because of planning, including TWA/HSE, requirements or changes in sponsor requirements).

11.11 Railtrack argues that it is important that it is in a position to understand all of the costs and risks before it commits to a firm price. It argues that it may take some time to move from indicative costing to firm costing at which it would be willing to enter into a contract to deliver the specified outputs without sharing the cost risks. It has

developed a five point scale representing progressive stages in project development: level zero is little more than an idea whilst at level five:

- all design development work has been completed;
- the programme of works and a risk management plan have been developed and resourced;
- the deliverability of the outputs has been verified through detailed timetabling;
- a contracting strategy has been established;
- the scheme has been fully costed (including network change costs), and all value engineering has been completed;
- the approvals and consents have been obtained; and
- the project has been developed to the point of commencing implementation.

11.12 This is the level at which Railtrack has indicated that it would be prepared to commit to a fixed price (although the Regulator is considering whether it would be more appropriate for it to commit to a fixed price at an earlier stage, conditional only on the relevant approvals being obtained). This approach is explained in more detail in Railtrack's January 2000 procedure for advance notice of planned works and cost transparency to train operators and Passenger Transport Executives. The Regulator has asked for comments on this procedure document from operators.

11.13 The default risk allocation assumptions and the implications for charges and the RAB are summarised in Table 11.1 below. These implications are discussed in more detail in the following sections.

Table 11.1: Default risk allocation

Risk	Allocation	Implications
Output specification	Operator/funder	Target cost estimate adjusted to compensate for changes in specification (e.g. due to approvals)
Construction cost risks	Railtrack	Fixed price contract with charges and RAB based on target cost estimate
Delivery risks	Railtrack	Charges and RAB adjustment conditional on delivery of agreed output specification
Demand risk (within contract)	Operator	Charges not dependent on passenger numbers or farebox
Demand risk (post-contract)	Funder	RAB not dependent on actual use of the enhancement

Default returns

11.14 The December 1999 periodic review document also consulted on the appropriate rates of return in relation to enhancements based on this default allocation of risk. There are three related questions:

- Should the costs be based on the mean estimate or should they include an element of contingency to deal with other asymmetric risks (i.e. where there is more downside than upside) which are not included in the analysis?
- Should there be a risk premium for enhancement expenditure to allow for these asymmetric risks?
- Should the allowed rate of return include a premium over its cost of capital to incentivise it to deliver enhancements?

11.15 Railtrack's response recognises that the first two issues are alternative ways of dealing with the same asymmetric risks. Depending on which approach is adopted, a range of different contingencies or rates of return may be used (for example, depending on the stage at which Railtrack commits to a firm price). Railtrack argues that a typical level five enhancement project would require a contingency of 15% or a premium return of 2.5% over the cost of capital for the sustained network.

11.16 The Regulator's provisional conclusion, however, is that the same pre-tax rate of return should be used for both the sustained network and for all enhancements (where Railtrack does not share demand risk). His conclusions on the appropriate rate of return will be published in July 2000 and will take account of the impact of the enhancement programme on Railtrack's cost of capital. Given this approach,

differences in risk associated with enhancement projects would be taken into consideration through the assumed capital cost.

- 11.17 Construction and delivery risks are assessed using a Quantified Risk Assessment (QRA) process. The QRA process results in an estimation of the probability of different out-turn costs, given the size and likelihood of each risk. With the proposed default allocation of risk, the established target cost estimate would be the mean estimate of cost from the QRA process. This would therefore include an explicit allowance for identified asymmetric cost risks (assuming that the project has been developed to level five, these risks should be well understood). For example, where there is a significant risk of cost overruns, the mean cost estimate will be significantly greater than the most likely cost out-turn. It would be up to Railtrack to ensure that the QRA process takes account of all relevant risks.
- 11.18 Based on his provisional conclusions in December 1999, this implies an expected real, pre-tax rate of return on enhancement expenditure of 7-7.5%. However, since the tax position associated with enhancement projects will tend to be more favourable than for the sustained network, the underlying expected post-tax rate of return will be higher for these projects. In addition, the proposed volume incentive would create the potential for some additional returns as a result of these enhancements. The Regulator therefore considers that his proposed approach will provide a clear incentive for Railtrack to deliver enhancements to the network.

Alternative risk allocations

- 11.19 In some cases, the contracting parties may wish to establish an alternative allocation of risks which is in their mutual interests. If so, this may have implications for the allowed rate of return and/or the expected costs.
- 11.20 If the parties prefer an alternative allocation of construction/delivery risk, this would need to be reflected in the target cost estimate. For example, if an input based specification is adopted, this would be likely to reduce the (asymmetric) risk of cost overruns and this would reduce the mean estimate of the cost. Similarly, if Railtrack were to commit to a fixed price before level five, this may increase the estimated mean cost from the QRA process and there may also be a case for including some contingencies for unidentified risks.
- 11.21 However, the Regulator would not generally expect the parties to propose charges based on actual or efficient costs since this would require an ex post efficiency study

into the costs of the scheme (although this approach may be an option in relation to some IOS enhancements in this periodic review).

- 11.22 By contrast, if the parties share an element of demand risk, this may increase its cost of capital. Railtrack has analysed the potential impact of demand risk sharing on its cost of capital by considering the relationship between GDP, volume and the FTSE. The Regulator would expect to assess the need for any premium returns based on consideration of these relationships.

Criteria for approval of access charges relating to enhancements

- 11.23 For franchised passenger access agreements, the Regulator would normally expect the variable charges associated with enhancements to be consistent with the charges which he proposes as part of his periodic review conclusions. This would include usage charges, electric traction charges and capacity charges. Moreover, in place of the current negotiated share of benefits, he would normally expect the proposed volume incentive payment to be reflected in agreements relating to enhancements.
- 11.24 This tariff-based approach would improve the predictability and transparency of the negotiation process. In some cases, however, the parties may prefer to establish alternative arrangements (e.g. they may wish to share demand risk to a greater or lesser extent). The existing franchised passenger access charges would then provide a backstop against which negotiations could take place. In considering whether to approve these variations, however, the Regulator would need to assess whether Railtrack was abusing its monopoly position. He would also need to consider whether bespoke arrangements were likely to create a significant incentive for Railtrack to discriminate unduly between operators and whether any additional risk should be reflected in the allowed rate of return (see above). He would not expect to approve variable charges which are different to the established charges for existing services where this is only due to unanticipated changes in costs (e.g. improved efficiency).
- 11.25 Given this tariff-based approach, the main area for discussion would normally relate to the fixed charges associated with enhancement projects. Moreover, given the guidance on risks and returns in the preceding section, there would not normally be any need for detailed discussion of the allowed returns (even if there were some sharing of demand risk, the preceding section provides a framework for establishing the appropriate adjustment to allowed returns). The main outstanding area would therefore relate to the capital cost of the enhancement plus any (fixed) costs of maintaining and renewing the new parts of the network.

11.26 Before approving access agreements, the Regulator would also expect to be satisfied that there is a common understanding about the way in which any enhancement expenditure would be treated in the RAB at subsequent periodic reviews. The next two sections therefore discuss the process for establishing capital costs and the implications for the RAB.

Establishing capital costs

Defining the relevant costs

11.27 Only once the desired outputs have been defined clearly and the allocation of risks has been agreed is Railtrack able to cost a proposed enhancement. In the first instance, these costs should be based on the default allocation of risk. The cost estimate should include, where appropriate:

- construction costs, including an allowance for asymmetric cost distributions derived through a QRA procedure and, possibly, contingencies for unidentified cost risks (e.g. where Railtrack is committing to a fixed price at an early stage);
- project specific research and development costs;
- project management costs;
- costs of finance for renewals brought forward;
- net compensation of other operators under Part G of the Track Access Conditions, including for disruptive possessions;
- costs of project development (e.g. TWA and other planning approval costs, consultation costs etc.);
- capitalised interest during construction at the assumed cost of capital; and
- additional (fixed) operating, maintenance and renewals expenditure relating to the new assets (i.e. excluding any incremental costs arising from increased usage which would be reflected in the usage charges payable under the relevant agreement and any maintenance and renewal costs which are included in the baseline).

11.28 Where operators and funders wish to take forward an enhancement project or certain phases of the project subject to emerging capital cost, without full specification of the costs or outputs, the Regulator would expect to require the access agreements to include:

- full definition of the required outputs underpinning the cost estimates;
- a time-limited provision for development of the costs;
- a process by which the date of delivery of the outputs could be established;
- full explanation of the process to be followed in developing the costs;
- specification of the circumstances in which either side would be able to terminate the agreement in relation to those works or to seek alternative remedies; and
- a dispute resolution process.

11.29 If the operator and Railtrack agreed to share in the risk of cost change, then the Regulator would expect to see provision in the access agreement for the existing cost forecast, and a formula for sharing the difference between the forecast and out-turn costs. In circumstances where the operator still wished Railtrack to take the majority of the construction and delivery risk this concept could be limited to the difference between the cost estimate on signing of the agreement and the final estimate.

Identifying the relevant costs

11.30 Significant dispute has arisen in the past over:

- whether the operator or funder provided a fully defined output specification sufficiently early; and
- whether Railtrack worked effectively to produce a detailed cost estimate to the required degree of confidence, as required.

11.31 The Regulator recognises that there are substantial concerns on both sides. Operators or funders need to be able to plan their activities and Railtrack needs to be able to

manage the risks associated with commitment to a firm price for delivery of the outputs.

- 11.32 Railtrack's ability to respond to requests from its customers will depend on a range of factors including their complexity, size, location, planning requirements and the number of concurrent requests. It will also depend on the provision of certain information by operators/funders so that it can understand clearly what outputs are required.
- 11.33 As noted above, Railtrack has developed a five step process for monitoring the development of enhancement proposals. At the outset, the Regulator expects Railtrack to give each scheme a development rating (based on the scale described above) and an indication of the timescale for reaching each subsequent level of development, conditional on receipt of the necessary information from operators/funders. Railtrack would also be expected to provide illustrative guidelines on the information which would be required from operators/funders and the timescales required for different types of scheme.
- 11.34 In order to reach level two on Railtrack's proposed scale (the feasibility stage), the output (or possibly input) requirements would need to be defined by the operator/funder, including requirements relating to journey times, capacity and operational flexibility. Information concerning the location of the works (zone, route, location) may also be required. Although the input required from operators/funders beyond this stage would be greatly reduced, the Regulator would expect Railtrack to confirm the projected timescale for reaching each subsequent stage in the process.
- 11.35 These proposals would enable operators and funders to plan their activities and to raise concerns with the Regulator if they are not satisfied with the proposed timescales. If necessary, the Regulator would expect these requirements to be enforced either through the proposed licence condition requiring a code of practice in relation to the provision of information to third parties or through a separate licence condition relating specifically to enhancements.

Project development costs

- 11.36 Railtrack is likely to incur significant costs in developing schemes to the point at which it could undertake enhancement schemes for a fixed price. These costs will ultimately need to be recovered from Railtrack's customers or funders. The question concerns the way in which these costs are recovered. The Regulator considers that

project development is one of Railtrack's core activities. In his view, it would not be appropriate for him to allow automatic recovery of all project development costs since this would provide no incentive for Railtrack to economise on project development costs or to bring schemes to fruition. It is also important that Railtrack's customers and funders are not encouraged to make excessive speculative requests for detailed analysis without contributing to the cost.

- 11.37 Currently, under Part G of the Track Access Conditions, Railtrack must provide, at no charge, a preliminary assessment of any network change proposal. Thereafter Railtrack must be reimbursed for 75% of its development costs but only if the operator makes a formal proposal under Part G. For those schemes which are implemented the cost of project development is included in the overall capital cost. If a scheme is not implemented, Railtrack writes off the costs.
- 11.38 The current arrangements do not provide operators with certainty about what they can expect Railtrack to do without payment (i.e. how far Railtrack must develop the project in the preliminary assessment). Nor does it provide efficient incentives for operators, since they are not encouraged to consider the likelihood of the project progressing when they request advice from Railtrack.
- 11.39 As part of the Regulator's consultation on model clauses for track access agreements, Railtrack has proposed an approach which would share the project development risk with operators:
- it would bear only the costs of assessing the schemes to level zero;
 - to proceed beyond this level, the parties would enter into a (regulated) development agreement setting out the allocation of costs and the deliverables from the process;
 - the standard allocation of risks would involve the sponsor funding 100% of the established feasibility costs, with Railtrack funding 100% of any overspend;
 - for projects which proceed to implementation, the established feasibility costs would be put into the overall capital cost against which future access charges and changes in the RAB would be calculated;
 - for projects which are abandoned before implementation, Railtrack would write off 10% of its established feasibility costs post level two, 90% of the

costs of pre-level two costs and 100% of any cost overspend while the sponsor would pay 10% of the established cost up to level two, and 90% of the costs thereafter up to the point of abandonment; and

- the Regulator would make an allowance in the periodic review relating to written off development costs in the current period and projected write-offs in the next period, such that these costs are effectively recovered from all relevant operators.

11.40 The Regulator is presently minded to accept this broad structure (and to make appropriate allowance for this at the current periodic review). He is, however, considering the following adjustments:

- Railtrack should bear the full cost of project development to either level one or level two; and
- thereafter if a scheme is not implemented, Railtrack should write off 25% of the established costs of scheme development and the operators should pay 75%.

11.41 He is also minded to require Railtrack to provide a template project development agreement as part of the code of practice for dealing with provision of information for third parties.

The Regulatory Asset Base (RAB)

The gross value

11.42 The way in which investments are included in the RAB would be expected to reflect the position which is established before commencement of the project. In most cases, the amount to be included in the RAB would be based on the target cost estimate established by the parties (including any justifiable contingency as discussed above). This is likely to include most negotiated enhancements and most IOS enhancements. The value of any grants would need to be deducted from the gross value. In some cases the resulting value would need to be depreciated in accordance with the assumptions established by the parties. If the asset is fully depreciated over the relevant period there may be no terminal value for inclusion in the RAB. The initial values would also need to be indexed for the effect of inflation.

- 11.43 By contrast, any schemes which are implemented on the basis of emerging costs would enter the RAB at a value based on the certified costs which have emerged. In other respects, they would be treated in the same way as target cost schemes. The treatment of IOS enhancements will be discussed further in the May/June periodic review document on the West Coast Route Modernisation and IOS enhancements.
- 11.44 Those investments which are to be excluded from the RAB would be specified by the Regulator at the periodic review. This might include investments to improve efficiency or performance (as long as the incentive framework allows for part of the gains to be carried over to the next period in other ways). It might also include ring fenced commercial investments in property development (in which case Railtrack is likely to seek comfort from the Regulator about the future treatment of any benefit from these investments).

Timing and depreciation

- 11.45 In general, customers and funders would not expect to start paying additional access charges until the contracted outputs have been delivered. However, in an industry which is growing rapidly through significant enhancement expenditure this could stretch Railtrack's financing capability, particularly since it can take many years to develop and deliver large scale enhancement projects.
- 11.46 An alternative approach may therefore be adopted in certain circumstances in order to relieve financing constraints. In these circumstances, the investment could be remunerated in line with the expected expenditure but with provision for rebates (either automatically or at the next review) if the outputs are not delivered. This approach could be taken in relation to IOS enhancements or negotiated enhancements.
- 11.47 Similar considerations apply to depreciation. At the periodic review, there is considerable flexibility for the Regulator to tailor the depreciation profile to deliver the requisite cash-flows (although it would also be necessary to check that this situation is sustainable).
- 11.48 In relation to negotiated enhancements, the Regulator would generally expect the operator to pay for its share of the value of the asset. This would also help to ensure that the relevant funder can be confident that the operator has an incentive to assess the target cost estimate and that the terminal RAB adjustment does not exceed its residual value to a future operator. Railtrack has therefore been asked to provide default assumptions for the asset lives of different classes of asset. It is for

consideration whether it would be preferable to adopt a default assumption based on an annuity (which keeps the total capital charge constant) or straight line depreciation (which keeps only the depreciation charge constant).

11.49 It would, however, be open for the parties to adopt alternative depreciation profiles (e.g. where Railtrack's financial ratios would otherwise become unduly strained) as long as any increase in the terminal value at the end of the contract has been recognised by the funder.

Procedural issues

11.50 Before approving access agreements involving significant enhancement expenditure, the Regulator would expect both Railtrack and SSRA to write to him to ensure that there is a common understanding about the way in which this would be included in the RAB. Once he has approved the relevant agreements, he would expect to take account of this common understanding at future periodic reviews.

11.51 For small scale enhancement projects, the SSRA may be willing to support adjustments to the RAB without being specifically involved in the development of the project or giving direct approval of the costs. The circumstances in which the SSRA is currently minded to agree to this are as follows:

- the operator has a current franchise agreement with the SSRA and has more than one year to run on this agreement and on its track access agreement with Railtrack;
- the total investment is less than £10 million;
- the costs of the scheme have been independently audited;
- Railtrack is taking construction and delivery risk but is not sharing demand risk with the operator;
- the project is depreciated using straight line accounting principles over the specified life of the individual components of the project;
- the agreed rate of return for Railtrack does not include a premium over the base cost of capital determined by the Regulator;

- the agreed access charges ensure that the operator carries the appropriate portion of the costs as described in the December 1999 periodic review document; and
- the operator in question has not been explicitly excluded from the scope of this procedure by the SSRA.

11.52 Railtrack claims that only a small proportion of its enhancement expenditure over the current control period would have fallen into this category (although this would have accounted for a larger proportion of the number of projects). However, the SSRA has indicated that it would be minded to agree to the inclusion of schemes in the RAB (on a case-by-case basis) where there are reasonable grounds for believing that the scheme would enhance the overall value of the franchise for the long-term benefit of customers and the taxpayer.

Equity partner model

11.53 Where Railtrack takes long-term demand risk it would expect to be able to earn a higher return on its investment (assuming it is able to sell the output). In these circumstances, however, the Regulator would need to be satisfied that:

- the existing operator(s) and the relevant funder have been consulted;
- they do not wish to pay for the proposed enhancement on a contractor model basis; and
- it does not conflict with any other reasonable requirements of operators or funders (either because of operational, project management or financial constraints).

11.54 If Railtrack is able to satisfy the Regulator that these requirements have been met, he would indicate to Railtrack and the relevant funders the way in which he would expect to assess the appropriate level of charges if he were asked to approve access agreements in relation to this capacity. This would include an assessment of the relevant rate of return and the appropriate capital value (taking account of any additional non-diversifiable risk to investors in Railtrack as a result of the proposed scheme). He would also make it clear how the expected revenue requirement associated with the entire scheme should be translated into access charges to be approved, potentially at different times, for use of elements of the created capacity.

Existing approvals

11.55 The Regulator has approved a track access agreement in relation to the extension of Tyne and Wear Metro to Sunderland. Following his approval for this agreement, he confirmed that at future periodic reviews he would expect to treat the terms of the agreement in accordance with the principles set out in the framework for enhancements which is being developed as part of the current review. In the light of the discussion in this chapter, he expects the parties to write to him setting out their understanding of the proposed approach to the next review. If he is content with these arrangements, he would indicate that he would expect to reflect this position at future periodic reviews.

11.56 Railtrack has also sought and received comfort from previous Regulators in relation to the West Coast Main Line Passenger Upgrade 2 and Thameslink 2000 projects. Following completion of the periodic review, the Regulator intends to review these arrangements and consider whether there is any need for clarification of these arrangements in the light of the periodic review conclusions and the developing policy on the enhancement framework. The purpose of doing so would be to provide greater transparency and predictability about the way in which these costs would be treated at the next review, not to reopen the issues.

Contractual and regulatory enforcement

Contractual enforcement

11.57 The delivery of enhancements will generally be enforced by the operators in question through the terms of their access agreements. The Regulator is developing model clauses for track access agreements to improve the clarity of these contractual commitments.

11.58 The Regulator is also discussing with SSRA and Railtrack the best way for operators to enforce delivery of IOS enhancements which are included within the scope of the periodic review. He intends to consult further on the treatment of these enhancements in May/June.

Regulatory enforcement

11.59 In some cases, however, it may not be possible to rely on contractual enforcement by an operator. This might be the case where the SSRA funds the delivery of an

enhancement scheme which is not specifically required by any individual operator. This may arise because of additional safety/accessibility requirements or where the enhanced capacity is to be sold to operators in the future. One means of enforcing this type of arrangement would be through Condition 7 of Railtrack's network licence. In the Regulator's view, this approach should provide both the necessary protection for Railtrack (to enable it to finance the enhancement even without a contract) and for the SSRA (so that it can have confidence in the delivery of the project).

- 11.60 Regulatory enforcement of this type of commitment would require both Railtrack and the SSRA to write to the Regulator to ensure that there is a common understanding of the project specification, the timetable for delivery and the arrangements for remuneration. In effect Railtrack would acknowledge that these terms could be regarded as a reasonable requirement for the purposes of Condition 7. In return, the SSRA would commit to paying for delivery of the agreed outputs following the next review.
- 11.61 The correspondence between Railtrack, the SSRA and the Regulator could contain all the key commercial terms which would normally be included in a contract between Railtrack and an operator. If appropriate, for example, the increase in the RAB could be made conditional on delivery of the enhancement in the same way as in any other commercial contract. A detailed specification of the works to be carried out, the milestones for progress, the standard of the works and the remedies for failures could be included. It would also be possible for Railtrack to acknowledge the underlying assumptions in relation to the operation, maintenance and renewal of the relevant part of the network. This would define the so-called regulatory contract in relation to charging for this part of the network, even beyond the next periodic review. It could therefore avoid the difficulties which have emerged in the case of the WCRM where Railtrack's charges and obligations relating to users other than West Coast Trains were not so well specified in advance.
- 11.62 The Regulator would review the proposed arrangements, including the extent to which other interested parties had been consulted and were content with the proposals. If he accepted the relevant commitments, he would expect to enforce Railtrack's commitments under Condition 7 of its network licence and to take account of the SSRA's financial commitments at future periodic reviews.

Third party involvement

Background

11.63 Railtrack is currently in the position of sole contractor for most enhancements which operators or funders wish to buy. In most cases it then sub-contracts the work to appropriately qualified engineering firms. However, the December 1999 periodic review document raised the possibility that contractors might be employed directly by the operator instead of Railtrack.

11.64 The franchise replacement process has brought the issue of third party investment further to the fore. This is because operators are being encouraged to make significant investments in rolling stock, stations and in some cases in new or enhanced track and signalling. Several operators have proposed innovative financing arrangements, some of which involve the use of special purpose vehicles (SPVs) to finance and/or deliver these enhancements. Some proposals envisage the SPV undertaking construction only. In other cases it has been suggested that the SPV would operate the enhancement once complete.

11.65 The SSRA has encouraged innovative thinking from operators about different ways of financing and ensuring delivery of network enhancements, including SPVs. However, Railtrack has expressed significant concerns about third party enhancement (and SPVs in particular). The company has told the Regulator that:

- SPV structures would be very complex and would probably cost a great deal more than if Railtrack were to do the work, particularly in the core network;
- there are potentially insuperable problems over applying the structure to a part of the core network, as it could be both inefficient and difficult to control (for the Regulator as well as Railtrack); but that
- there are options to develop SPV structures in relation to the periphery of its network which it is willing to explore.

11.66 In the light of recent discussion, there appear to be three separate areas where third party enhancement may be an option:

- stations and depots;

- new connections; and
- existing network assets.

Stations and depots

11.67 It appears to be widely accepted that the most straightforward areas for third party enhancement are stations and depots. This is because these activities are more closely related to the operators' existing business, there is less need for integration with the rest of the network and they are subject to a separate licensing and access regime. The issues relating to enhancement of stations will be dealt with in May 2000 in conjunction with other aspects of the Station Access Conditions and station access charges.

New connections

11.68 There is also some measure of agreement that third parties could provide new connections. These would consist of enhancements which are outside the boundaries of the existing railway (but potentially on Railtrack land) and connect to the existing Railtrack network. The key issues with this type of third party enhancement relate to the interface with the existing network (particularly if the enhancement is not operated by Railtrack). This interface would need to be managed in a way which avoids potential safety hazards (although of course both facility owners would have safety obligations under the law) and ensures seamless operation of the network. Railtrack could be required to enter into a conventional contractor model scheme to finalise the connection between its network and the new connection on the basis that this would be a reasonable requirement as discussed above.

Existing network assets

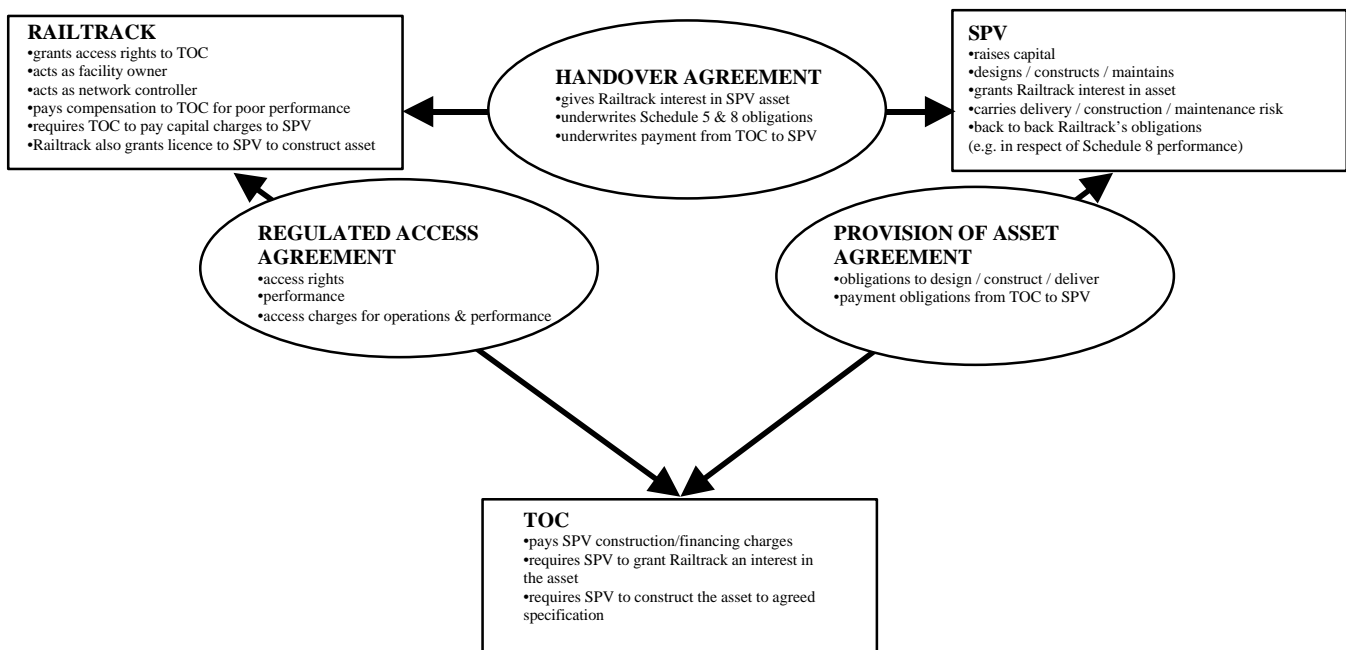
11.69 Third party investment on the existing rail network is likely to be more difficult. In this case, the key issues concern the need to maintain the safety and operational integrity of the network. The Regulator is also concerned to avoid introducing unnecessary complexity or risk allowing infrastructure assets to become unregulated. Possible models are therefore being considered in which a third party investor would design and deliver the relevant assets but where Railtrack would retain responsibility for safety, operational control and the granting of access rights (subject to regulatory approval). Railtrack would therefore remain as both:

- the facility owner and licensed operator for the purposes of the Railways Act 1993; and
- the infrastructure controller for the purposes of all applicable safety requirements.

11.70 The SSRA has developed an outline of how these models would work in practice (although further work is required to ensure that these models are workable). The resulting contractual and regulatory arrangements are illustrated in Figure 11.1 below.

11.71 Under these models the train operator would not secure access from the SPV but from Railtrack, as at present. Railtrack's access charges would therefore be designed to recover both its own costs and any payments to the SPV. The operator would enter into an agreement with the SPV which requires the SPV to construct the asset and enter into a handover agreement with Railtrack. The handover agreement would provide for Railtrack to have an interest in the SPV which is sufficient to ensure safety and constitute Railtrack as the facility owner for the purposes of the Railways Act 1993. Insofar as it is necessary to go on to Railtrack's land, Railtrack would also need to grant some form of agreement to allow the SPV to construct the new assets.

Figure 11.1: Third party enhancements



11.72 The Regulator believes that there are potentially significant public interest benefits from allowing third parties the opportunity of undertaking work on Railtrack's network. In particular, he considers that it would impose greater competitive pressures on Railtrack in relation to the cost of building and financing enhancements. It would also help to relieve any financing constraints on the scale of the enhancement programme or the outcome of the periodic review.

11.73 However, the Regulator will need to be satisfied that his approval of any third party enhancement schemes is consistent with his duties and takes account of the concerns discussed above. Moreover, the extent to which third party enhancement actually occurs will depend on the extent to which Railtrack enhancements can be financed either by Railtrack itself or by operators. He is also considering the extent to which:

- Railtrack will be able to finance the investment that is likely to be required over the next control period (including the possible use of more innovative financing structures); and
- operators will be in a position to use their own balance sheets (or securitised cash-flows from season tickets for example) to finance investment in Railtrack's network without getting involved in the actual work.

11.74 In the light of these considerations, the Regulator remains of the view that it is important for him to ensure that the option of third party enhancement is safeguarded. He therefore intends to continue to discuss the proposed contractual and regulatory arrangements with SSRA, Railtrack and operators. He is also considering the best way of ensuring that this option remains available: that is, how to ensure that Railtrack can be required to allow third party enhancement on its network.

11.75 Third party enhancements to the network would generally be driven by operators or potential operators whose primary concern will be to ensure that the enhancement project is delivered on time, to specification and for a fixed price. They would not generally be interested in doing the work *per se* but would see this as a means to an end. This suggests that Railtrack should be given the opportunity to match any proposals made by a third party. The Regulator's present view is that it is unlikely to be necessary or appropriate for him to require Railtrack to allow a third party to enhance its network without giving it this option.

11.76 Under this approach, the third party proposals would need to be contractually binding and the Regulator would need to be satisfied that the project vehicle is able to finance

the proposals (otherwise operators may be able to submit unrealistic bids as a negotiating ploy). To achieve this, however, Railtrack would need to provide sufficient information to enable the third party to develop, specify and cost the enhancement. The Regulator's proposals in relation to Railtrack's asset register would help to facilitate this process. However, the third party may still require a significant degree of co-operation from Railtrack. These requirements could be dealt with as a requirement under the proposed code of practice for the provision of information to dependent parties or, in some cases, under the Competition Act 1998.

11.77 One way of implementing this approach would be for the Regulator to use Condition 7 of Railtrack's network licence. Railtrack's criteria for the maintenance, renewal and development of the network would be amended to reflect the following process (although Railtrack is not presently required to obtain the Regulator's approval of these criteria):

- operators wishing to develop third party enhancement proposals would obtain information from Railtrack to enable them to develop proposals;
- the third party proposals would be submitted to Railtrack and the Regulator;
- following submission of these proposals, the Regulator would define the precise commercial terms on which he considers it reasonable for him to require Railtrack to undertake the work;
- Railtrack would then be given the option of either (a) delivering the enhancement itself in accordance with the reasonable requirements specified above or (b) if it is unable or unwilling to do so on those terms, allowing the third party enhancement to proceed on the basis specified in the proposals; and
- if Railtrack refused to take either course of action, the Regulator would expect to enforce the preferred option by reference to Condition 7 of Railtrack's network licence and/or the proposed section 16a (if enacted) and /or section 17 of the Railways Act 1993.

11.78 An alternative approach would be for the Regulator to modify Railtrack's network licence to include a specific condition in relation to enhancements. This would set out the process described above including the requirements for Railtrack to provide information, the process for establishing reasonable requirements based on third party proposals, and the requirement for Railtrack to comply with these requirements. Such

a licence condition may provide further clarity and transparency about the proposed process (although this could be set out in some detail in the Regulator's proposed policy statement).

Conclusions and next steps

11.79 Further work is required to develop some elements of the formal framework for dealing with enhancements. In addition to the Regulator's proposed policy statement or code of practice, a number of other changes will be required to the existing contractual and regulatory framework:

- modifications to Railtrack's network licence requiring it to develop a code of practice in relation to the provision of information to third parties, including information relating to the cost of enhancements and information required to facilitate third party enhancements;
- licence modification and guidelines relating to regulatory accounts and logging up of enhancements (see Chapter 12 and Appendix C);
- licence modification requiring Railtrack to develop an asset register (among other things this will help operators/funders to identify enhancement opportunities and consider the scope for third party enhancements);
- licence modification relating to ring-fencing of the regulated business;
- possible licence condition relating to the process for allowing third party enhancements to Railtrack's network (although it may be appropriate for the Regulator to rely on existing powers);
- modification to Railtrack's criteria for maintaining, renewing and developing its network to reflect the Regulator's interpretation of reasonable requirements and, possibly, the proposed approach to third party enhancements; and
- publication of model clauses for track access agreements and possible changes to the existing Track Access Conditions. In particular these changes may relate to the specification of enhancements and operators rights, enhancements which benefit more than one operator and the timing of the network change process.

- 11.80 Most of the licence modifications referred to above will be necessary regardless of developments in the enhancement framework. However, an alternative approach would be to make these modifications more focussed and to introduce a further licence condition covering all the issues relating to enhancements.
- 11.81 The Regulator will continue to discuss these matters with Railtrack, operators and funders and would hope to be able to introduce most changes in conjunction with the periodic review. As part of this process, the Regulator proposes to use Line 9 at London Bridge as a test case (this is a multi-user scheme to be carried out by Railtrack which is fundamental to the successful redesign of London Bridge station and to the delivery of the Thameslink 2000 project). The Regulator would also expect any other enhancement projects which are currently under consideration (including those associated with the franchise replacement process) to reflect the issues set out in this chapter and in Chapter 13 of the December 1999 periodic review document.
- 11.82 Consultees are invited to comment on the Regulator's present thinking on his proposed policy statement on enhancements and the need for associated changes to Railtrack's network licence.

12. Information reporting requirements

Introduction

12.1 This chapter deals with proposed changes to information reporting requirements on Railtrack. In order to improve the effectiveness and transparency of regulation, the Regulator is proposing a series of licence modifications accompanied by detailed guidelines. The aim is to bring the existing arrangements up to date with regulatory best practice and to ensure improved transparency through the collection of robust, relevant data in a well structured and easily accessible form. Railtrack has indicated that it supports the principles underlying these proposals.

12.2 This chapter covers the following issues:

- regulatory accounting requirements;
- enhancement logging up;
- Railtrack's annual and monthly returns; and
- the role of auditors and reporters.

Regulatory accounting requirements

12.3 At present, Railtrack publishes standard accounts for both Railtrack Group PLC and Railtrack PLC, as required by the Companies Act 1985. Supplementary regulatory information is also provided in accordance with Condition 10 of Railtrack's network licence and notices issued by the Regulator pursuant to that condition. These supplementary regulatory accounts include a current cost profit and loss statement (with reconciliation back to historical cost), balance sheet and a statement of total recognised gains and losses. The statements are reconciled back to the published statements.

12.4 The Regulator considers that the current regulatory accounting arrangements do not provide the information that he requires. In particular, the financial statements are not consistent with the approach he proposes to use in setting the price controls and are therefore of limited relevance to his periodic review of access charges. This also constrains investors and other interested parties in their ability to interpret the

underlying performance of the company in relation to its regulatory determination. The Regulator is concerned that this reduces the transparency of regulation and may have an adverse effect on Railtrack's regulatory incentives.

12.5 One way in which these arrangements could be improved would be through the employment of more detailed guidelines. However, the Regulator considers that it would be preferable to introduce a specific licence condition which gives a clear overview of the new regulatory accounting requirements, to be backed up by detailed regulatory accounting guidelines.

12.6 The Regulator proposes that the licence condition should include an explicit requirement for Railtrack to keep regulatory accounts which reflect more closely the so-called regulatory contract and enable interested parties to make a clear assessment of the licence holder's financial performance. A draft licence condition is provided in Appendix C on which comments are invited. It proposes that:

- Railtrack prepare separate financial statements for separate businesses (for example, the network business, the stations business and the property business) from March 2002 onwards;
- financial statements be prepared on a current value, value in use basis that links the valuation of relevant operating assets to the way in which the RAB is established at the periodic review;
- definitions adopted within the accounts adhere as closely as possible to the basis actually used in the periodic review;
- general accounting best practice is adopted where appropriate;
- regulatory accounts are reconciled with statutory accounts;
- a statement is provided comparing income, expenditure, profits and losses with the determination assumptions; and
- statements adhere to guidelines issued by the Regulator.

12.7 The aim of the regulatory accounting guidelines referred to above would be to set out in detail the form and content of the regulatory accounts. These guidelines would provide details of the basis for accounting statements preparation (e.g. the

requirement to identify income and expenditure in a way that corresponds to the single till approach, the valuation of assets, the relationship with logging up, and detailed instructions as to the format of the primary statements). Initial guidelines are being drawn up in consultation with Railtrack and the Regulator expects to consult more widely on their content following the publication of his final conclusions.

- 12.8 In establishing the RAB for use in future periodic reviews, the Regulator would expect to have regard to the approach adopted at the previous review, the regulatory accounting guidelines and the regulatory accounts. In doing so he would of course expect to review whether the principles established at the previous review remain appropriate and whether they have been properly applied in the regulatory accounts.

Enhancement logging up

- 12.9 Chapter 13 of the December 1999 periodic review document refers to the proposals to require Railtrack to provide information on enhancement schemes for logging-up into the RAB. The Regulator proposes that the requirement to provide this information is included in the regulatory accounting licence condition referred to above.

- 12.10 The draft licence condition in Appendix C provides for the Regulator to issue guidelines requiring Railtrack to provide two classes of information for the purposes of logging up in the form of an annual statement to the Regulator in association with the regulatory accounts:

- detailed information in relation to each scheme which commenced in the year in question (see paragraph 13.54 of the December 1999 periodic review document); and
- supplementary information in relation to schemes which commenced in preceding years (see paragraph 13.55 of the December 1999 periodic review document).

- 12.11 The guidelines may also include details in relation to the form and content of this statement.

Annual and other returns

- 12.12 At present, Railtrack provides a series of separate, regular information submissions to the Regulator with differing frequency requirements. These arrangements have

evolved over a period of years in response to ORR information requests and are therefore rather *ad hoc* and fragmented in nature. Moreover, the present arrangements lead, in some cases, to overlap between information submissions and fail to provide clear definitional guidance. This imposes a significant and unnecessary administrative burden on Railtrack, it fails to maximise transparency both for the Regulator and other interested parties, and it results in an inconsistent definition in different submissions.

12.13 The Regulator is minded to replace the present *ad hoc* arrangements with a requirement for Railtrack to prepare and submit to the Regulator a consolidated annual return on or before 1 July in each year. This should ensure that information is submitted in a more consistent and useful manner. He has discussed this issue with Railtrack and received its support to the key principles. Data would be presented in a pre-determined, tabular format.

12.14 The annual return would be made up of the following components:

- regulatory accounts, which would also need to be made available separately (referred to above);
- information on enhancement schemes for logging up (referred to above);
- NMS reconciliation statement, as required by Condition 7 of Railtrack's network licence (this would require a minor consequential change to paragraph 8 of Condition 7 of Railtrack's network licence);
- other items specified by the Regulator as a result of the periodic review of Railtrack's access charges (for example, asset condition measures and Railtrack's results on operational performance criteria); and
- further requirements specified by the Regulator.

12.15 The Regulator proposes that he would approve the form and content of the annual return at a detailed level, following consultation with Railtrack. This might include the production of detailed definitions and *pro formas* akin to the OFWAT June Returns Definitions Manual.

12.16 The Regulator proposes that the annual return should primarily report data for the year just ended, with historic comparisons and comparisons with the assumptions underlying the periodic review where appropriate. The annual NMS would continue

to be produced separately and would concentrate on the forward looking position. The NMS would be primarily customer- and funder-orientated, providing information on development plans and expenditure proposals. The annual return would focus more on delivery against existing obligations.

- 12.17 The Regulator proposes that the annual return should replace the *ad hoc* reports made previously. However, from time to time the Regulator may require further information submissions to be made on an *ad hoc* basis (e.g. he currently receives regular reports on advance timetable information). Similarly, the Regulator may require certain information to be provided on a more frequent and regular basis, perhaps in the form of a monthly return (e.g. information on operational performance). As proposed for the annual returns, the form and content of these monthly returns would be approved by the Regulator in advance.
- 12.18 This condition would be without prejudice to the Regulator's existing powers to obtain information. However, the Regulator would hope to approve the form and content of the returns at a detailed level beforehand so as to minimise the need for further *ad hoc* information requests.

Role of auditors and reporters

- 12.19 Over the past 10 years, OFWAT has developed a system of reporters. Reporters are employed to provide an independent assessment of the robustness of company information submissions and the assumptions underlying them. The reporter model has generally been seen as successful in the water industry in improving the accuracy and consistency of data received by OFWAT. It can also improve information flows within the companies themselves.
- 12.20 Apart from the use of the company's auditors to audit Railtrack's financial statements, no such arrangements operate in the rail regulatory system at present. The Regulator set out his proposals for the appointment of independent reporters in both his November 1999 Network Stewardship paper and his December 1999 periodic review document. The Regulator is still strongly minded to adopt these arrangements, and has been consulting with Railtrack as to the exact form that the reporter model should take. Railtrack has expressed its support for the key principles underlying the Regulator's proposals in this area.
- 12.21 Appendix C sets out a proposed network licence condition for the introduction of reporters for Railtrack. The Regulator proposes that reporters be appointed following

consultation between the Regulator and Railtrack. The Regulator's approval would be required before any appointment and Railtrack would meet the costs of reporters. Reporters would investigate the robustness of information submitted by Railtrack in its annual return (and other information submissions as and when necessary), co-ordinating with the company's auditors where appropriate on financial reporting issues. The licence condition would be accompanied by a set of guidelines to reporters, issued by the Regulator from time to time, setting out their role and function in detail. Initial guidelines are being drawn up in consultation with Railtrack. The Regulator expects to consult on these in conjunction with his final conclusions.

12.22 As indicated in the draft licence condition on regulatory accounts (see Appendix C), Railtrack would be required to procure true and fair assurances from its auditors. Auditors would be required to work closely with reporters to ensure that all financial aspects of Railtrack's annual return were adequately investigated.

Conclusions and next steps

12.23 Consultees are invited to comment on the proposed improvements in information reporting arrangements. In particular, comments are invited on the proposed:

- licence modifications and associated guidelines;
- regulatory accounting requirements;
- logging up of enhancement projects;
- annual and monthly returns; and
- use of reporters to provide an assessment of the robustness of Railtrack's information submissions.

PART III:

**TIMETABLE AND
IMPLEMENTATION**

13. Timetable and implementation

Introduction

13.1 This chapter sets out the Regulator's proposed timetable for finalising and implementing his conclusions on the periodic review. In particular it discusses:

- further proposed consultation in advance of the Regulator's conclusions;
- the Regulator's proposal to publish draft conclusions in July 2000 followed by final conclusions in early September 2000;
- the timetable implications of a potential reference to the Competition Commission; and
- the process for implementing licence modifications which relate to the periodic review settlement.

Timetable for further consultation

13.2 The Regulator intends to consult further on a number of issues before reaching conclusions on the periodic review as a whole:

- May 2000: provisional conclusions on the level and structure of station access charges and station access arrangements;
- May 2000: consultation on freight charging policy;
- May/June 2000: technical consultation on the proposed capacity charges;
- May/June 2000: update on revenue requirements and incentives relating to the West Coast Route Modernisation (WCRM) and Incremental Output Statements (IOS);
- June 2000: KPMG report on recalibration of the contractual performance regimes; and

- June/July 2000: draft model clauses on Schedules 4 (possessions), 7 (charges) and 8 (performance) of the track access agreements.

Proposed timetable extension

13.3 Annex 1 of the October 1999 periodic review document summarised the provisions in Part 8 of Schedule 7 of each franchised passenger track access agreement. This enables the Regulator to initiate a procedure which is intended to lead to amendments being submitted to him for approval under section 22 of the Railways Act 1993. The key dates in this procedure are as follows:

- 31 July 2000: in order to give effect to the periodic review, the Regulator is required to serve a review notice on the contracting parties stating his conclusions;
- 15 October 2000: if the contracting parties fail to submit to the Regulator for his approval proposed amendments to the access agreements, the Regulator may serve a termination notice terminating the agreement with effect not less than 150 days after the notice; and
- 31 December 2000: if the Regulator has not approved the proposed amendments he may issue a termination notice as above.

13.4 This provision also allows the Regulator to defer the dates referred to above by up to 90 days. However, he may not do so unless the following conditions are satisfied:

- the Regulator must have satisfied himself on reasonable grounds that the information available to him for the purposes of the review is insufficient in any material respect or that his conclusions as to the matters in question are likely to be incomplete or unsatisfactory in any material respect; and
- the Regulator must have consulted the parties and the Franchising Director and taken into account any representations or objections which any of them have made to him.

13.5 For the reasons explained below, the Regulator is satisfied that he has sufficient grounds for seeking an extension to the timetable:

- **due process:** even if Railtrack is granted a right of appeal to the Competition Commission (see below), the Regulator considers that it would be appropriate for Railtrack, the train operators and the SSRA to have an opportunity to consider his draft final conclusions and to comment on them before he issues his formal review notice. In his view, the conclusions could be incomplete or unsatisfactory in a material respect if that opportunity is not given. Other utility regulators have generally consulted on draft conclusions. However, it would not be practical for the Regulator to publish draft conclusions in sufficient time for him to consult on these, consider the responses and issue a notice by the end of July 2000; and
- **new information:** the December 1999 periodic review document drew attention to the fact that lack of information on the current condition and capability of the network meant that there was considerable uncertainty about future maintenance and renewal requirements, particularly in relation to the West Coast Main Line. In addition, the March 2000 NMS provided the first indication of the potential costs associated with the IOS enhancements which the SSRA indicated in December 1999 that it may wish to buy as part of the periodic review. As noted above, the Regulator intends to make a further statement on WCRM and IOS related issues in May/June 2000. However, there is still likely to be significant work required to ensure that the information available to him for the purpose of the review is not insufficient in any material respect.

13.6 The Regulator therefore proposes to issue draft conclusions on the periodic review before the end of July 2000. This would include a draft review notice. He would then propose to give interested parties three to four weeks to make final representations and allow a further three to four weeks in which to consider these representations and publish final conclusions. His present view is that (unless he is unable to obtain the necessary information from Railtrack in relation to WCRM and IOS in a timely manner) the review notice should be issued no later than 11 September 2000. This would represent an extension of up to 42 out of the 90 days which are allowed under the access agreements.

13.7 The Regulator does not, however, consider that it would be desirable or necessary for him to extend the other dates referred to above by the same period. In particular, he does not consider that it would be desirable to extend the period of uncertainty associated with the periodic review or to delay its implementation beyond 1 April 2001 (although this might be necessary in the event of a Competition Commission

reference). Moreover, his present view is that the time which the parties require to submit proposed amendments to the Regulator following the issue of the review notice could be reduced significantly. The main reasons for this are that:

- the Regulator would expect the parties to begin preparing their proposed modifications following publication of the draft conclusions (or indeed before, e.g. if the parties wish to negotiate bespoke performance regimes);
- the publication of draft model clauses would help to reduce the amount of work required in order to submit proposed amendments; and
- the changes to the draft conclusions are more likely to relate to the precise numbers to be inserted in the relevant schedules rather than the structure of those schedules upon which there would already have been considerable consultation.

13.8 The Regulator's present view is that (assuming final conclusions are published by 11 September 2000) the date by which the parties are expected to submit proposed amendments for approval should be extended from 15 October to 31 October 2000. If the parties fail to submit proposed amendments to the Regulator by this date, this would still enable (but not require) him to issue a termination notice which has effect before the end of March 2001 (since the notice cannot have effect less than 150 days after serving the notice). During this time, the train operator could lodge an immediate section 17 application and there should be sufficient time for that to be considered and directions issued so that a replacement access agreement could come into effect by 1 April 2001. If a section 17 application were made within the specified time, he would expect to provide in the termination notice that the notice would not take effect until directions had been issued in relation to the section 17 application and the train operator had a reasonable period in which to enter into the new access agreement. If this went beyond 1 April 2001, he would expect to provide for the new charging arrangements to be back-dated to this date.

13.9 The Regulator does, however, intend to keep this issue under review in the light of emerging information, particularly in relation to the WCRM and the IOS. If necessary, he may wish to extend the timetable further so that he can be sufficiently confident in the robustness of the projected costs. In the light of responses to this consultation document, the Regulator will decide whether to issue appropriate notices and the dates to be included in them in sufficient time, to enable the parties to plan accordingly. As noted above, the proposed dates would not preclude further notices

extending all or any of the dates up to the full 90 days if developing circumstances so require.

Competition Commission reference

- 13.10 Unlike other regulated utilities, the charges payable to Railtrack for access to track and stations are set out in bilateral access agreements rather than in Railtrack's network licence. Because of this, Railtrack has no right of appeal to the Competition Commission in relation to the Regulator's conclusions on the periodic review. Currently Railtrack's only right of legal challenge to the Regulator's review notice would be likely to be by way of application for judicial review.
- 13.11 The Regulator has, however, given his strong support to an amendment to the periodic review process which would afford Railtrack a full right of appeal to the Competition Commission on the same basis as in other utilities. He believes that this would enhance the integrity of the periodic review process and reduce the perception of regulatory risk. Accordingly, the Regulator has supported the inclusion of a provision in the Transport Bill for such an appeal process to be introduced. If amendments are proposed to implement this, the Regulator will then make a statement as to how he would expect the process to operate.
- 13.12 Given the likely timing of the Transport Bill, it may not be possible for the Regulator to make a reference to the Competition Commission in the current calendar year (if Railtrack were to object to his proposals). Moreover, the Commission would be likely to require at least six months for such an inquiry and the Regulator would then need to publish the Commission's report and consider how its conclusions should be implemented. Should these circumstances arise, the final conclusions from the review may not be implemented until after April 2001. The Regulator would therefore need to consider appropriate transitional arrangements and these would need to be provided for in the Competition Commission's conclusions.

Potential licence modifications

- 13.13 In addition to the changes to Schedules 4, 7 and 8 of the track access agreements, the periodic review has considered whether there is any need for other changes to the regulatory framework, including modifications to Railtrack's network licence. A number of licence modifications have been proposed which would improve the effectiveness and transparency of incentive-based regulation. These relate to:

- regulatory accounting requirements;
- further information reporting requirements;
- the role and appointment of reporters;
- ring-fencing requirements;
- asset disposal constraints;
- the development of an asset register; and
- provision of information to third parties.

13.14 Initial drafts of the proposed licence conditions relating to the first three issues are contained in Appendix C to this document (see also Chapter 12). These have been discussed with Railtrack and it has indicated that it agrees with the principles underlying these proposals. Initial drafts of the other proposed licence conditions will be discussed with Railtrack and will be published for informal consultation in the near future.

13.15 Due to the strong inter-relationships between these licence conditions and the periodic review, they will need to be kept under review to ensure that they are consistent with each other. Given this, the Regulator is also considering whether they should be introduced simultaneously or separately and whether they should be considered as part of the periodic review package of proposals. One approach would be to give Railtrack the option of accepting the entire package or having the entire package referred to the Competition Commission. An alternative approach would be to make formal licence modification proposals at the same time as the review notice but to allow parts of the package to be accepted whilst other parts are referred to the Competition Commission. This would not, of course, prevent further licence modifications following the Competition Commission reference.

Conclusions and next steps

13.16 The overall proposed timetable for the remainder of the periodic review (assuming that the Transport Bill provides for the possibility of an appeal to the Competition Commission) can be summarised as follows:

- pre-July 2000: further consultations on key outstanding issues;
- mid-July 2000: consultation on draft conclusions;
- early September 2000: publication of final conclusions;
- mid-October 2000: Railtrack accepts or rejects Regulator's conclusions;
- end-October 2000 (if Railtrack has accepted conclusions): parties submit proposed amendments to the Regulator for approval; and
- upon entering into force of the Transport Bill (if Railtrack rejects conclusions): Regulator would refer the matter to Competition Commission.

13.17 Consultees are invited to comment on the proposed timetable including the following questions.

- Are there sufficient grounds for the Regulator to extend the date for publication of the review notice?
- Would it then be necessary to extend the date by which the contracting parties are required to submit revised agreements to the Regulator for approval?
- What transitional arrangements would be required (if any) if the charges are referred to the Competition Commission?
- Should proposed licence modifications be introduced simultaneously and in conjunction with the periodic review conclusions?

Appendix A: Responses to consultation

Responses to consultation on charges for traction electricity

Railtrack

Passenger Train Operators and Owners of Passenger Train Operators

Anglia Railways

Central Trains

Connex

Eurostar

First Group

First North Western

Great North Eastern Railway

Heathrow Express

Merseyrail Electrics

National Express Group

Northern Spirit

Prism Rail

ScotRail

South West Trains

Thameslink

Virgin Trains

Freight Operators

English Welsh & Scottish Railway

Freightliner

Government, Local Government & Other Government Bodies

Shadow Strategic Rail Authority

Strathclyde Passenger Transport Executive

Merseytravel

West Yorkshire PTE

Industry Associations

ATOC

ESTA

Others

Angel Train Contracts

First Procurement Associates

ILEX

Northern Design

WS Atkins Rail

Responses to consultation on the incentives framework

Railtrack

Passenger Train Operators and Owners of Passenger Train Operators

Connex

Chiltern Railways

Eurostar

First Group

GB Railways Group

Great North Eastern Railway

Go-Ahead

Merseyrail Electrics

National Express Group

Northern Spirit

Prism Rail

South West Trains

Virgin Trains

Wales and West

Freight Operators

English Welsh & Scottish

Freightliner

Government, Local Government and Other Government Bodies

Association of Transport Co-ordinating Officers

Hampshire County Council

Shadow Strategic Rail Authority

West Sussex County Council

Centro

Merseytravel

Nexus

Passenger Transport Executive Group

Strathclyde Passenger Transport Executive

Industry Associations

ATOC

Rail Freight Group

Others

Angel Train Contracts

Central Rail Users Consultative Committee

Donald Box

John C Davison

The Institute of Logistics and Transport

London Transport

Reverend Peter Long

Professor C.A.Nash

Rail Users Consultative Committee for Eastern England

Rail Users Consultative Committee for Southern England

Rail Users Consultative Committee for Wales
Professor Jorg Schimmelpfennig
Railway Development Society
Robert Watson

Responses to consultation on usage charges

Railtrack

Passenger Train Operators and Owners of Passenger Train Operators

Connex

First Group

Great North Eastern Railway

Merseyrail Electrics

National Express Group

Northern Spirit

Prism Rail

Freight Operators

English Welsh & Scottish

Freightliner

Government, Local Government and Other Government Bodies

Shadow Strategic Rail Authority

Passenger Transport Executive Group

Strathclyde Passenger Transport Executive

Industry Associations

Rail Freight Group

Others

Donald Box

Rail Users Consultative Committee for Wales

Symonds Group

Scott Wilson Pavement Engineering

Responses to consultation on the Regulator's provisional conclusions on revenue requirements

Railtrack

Passenger Train Operators and Owners of Passenger Train Operators

Chiltern Railways

Connex

First Group

Merseyrail Electrics

National Express Group

Northern Spirit

Prism Rail

South West Trains

Virgin Trains

Freight Operators

English Welsh and Scottish

Freightliner

Government, Local Government and other Government Bodies

Shadow Strategic Rail Authority

Nexus

Strathclyde Passenger Transport Executive

West Yorkshire PTE

Industry Associations

ATOC

Rail Freight Group

Others

Reverend Peter Long

Merill Lynch

HSBC

Barclays

Appendix B: Consultation questions

1. Consultees views are invited on the Regulator's proposals for setting usage charges. In particular, consultees are invited to comment on:
 - the Regulator's provisional conclusions that usage charges should be derived using a top down model and that charges should continue to be based on national averages by vehicle type; and
 - the setting of usage charges based on the assumed level of efficiency over the price control period as a whole.

2. Consultees are invited to comment on the Regulator's provisional conclusions concerning the arrangements for traction electricity charges. In particular comments are invited on:
 - the proposed rebasing of tariffs and revision of consumption rates;
 - the proposed geographical disaggregation of the wash-up;
 - the introduction of a provision to enable the Regulator to introduce the option of competitive supply during the next control period; and
 - the proposal to exclude metered rolling stock from the wash-up.

3. The Regulator invites consultees' views on his provisional conclusions relating to the introduction of a capacity charge. In particular, consultees are invited to comment on:
 - whether the proposed tariff based system will improve the incentives on operators and Railtrack compared with the current system of fixed charges, which are negotiated for supplemental services;
 - the principles on which the Regulator expects to set the dimensions of the charge;
 - the proposal that the charges will only be recalculated before the next periodic review where there has been a significant change in the capacity of the network; and

- the Regulator's proposals for implementing the charge.
4. Comments are invited on the appropriate form of the volume incentive and the criteria for establishing its level.
 5. The Regulator invites consultees' comments on the proposed treatment of enhancements in the context of the fixed charge. Consultees' views are also invited on the Regulator's provisional conclusions on the method by which the fixed charge should be allocated.
 6. Consultees are invited to comment on the Regulator's provisional conclusions for changes to the operational performance regime, including both the proposed improvements to contractual incentives and the guidelines relating to regulatory enforcement of targets. In particular, comments are invited on the following questions.
 - Are the proposed changes to the template regime likely to result in significant performance improvements?
 - Do the Regulator's proposals provide sufficient flexibility to ensure commercial needs can be met?
 - Do the proposed arrangements for audit of Railtrack's delay attribution procedures and accuracy provide sufficient protection for operators and funders?
 - How should monitoring targets be established and what is the appropriate monitoring target for the next control period?
 - How should enforceable targets be defined (e.g. what percentage of monitoring targets) and should the comparison be done over more than one year?
 - What action should follow from a failure to meet enforceable targets (e.g. preparation of a recovery plan and potential monetary penalty to incentivise compliance)?
 - Is there any merit in setting disaggregated targets?

7. Consultees are invited to comment on the proposed changes to the possession regime, including the removal of free possession allowances in Schedule 4 and the use of Schedule 4 rates to determine the level of compensation for disruptive enhancements under Part G of the Track Access Conditions.
8. Consultees are invited to comment on the proposed measures and targets relating to the serviceability and condition of Railtrack's network and on the appropriate status of these targets. Particular comments are invited on the appropriate level of minimum targets for track quality and broken rails, on the potential penalties for failure to meet those targets, and on whether this should be implemented through enforceable targets or an automatic adjustment to the fixed charge.
9. Consultees are invited to comment on the extent to which the Regulator should provide guidelines on the issues to which he would expect to have regard when deciding whether to impose a penalty and in determining the amount of the penalty. Comments are also invited on the factors to which the Regulator should have regard and the Regulator's provisional views on these issues.
10. Consultees are invited to comment on the Regulator's present thinking on his proposed policy statement on enhancements and the need for associated changes to Railtrack's network licence.
11. Consultees are invited to comment on the proposed improvements in information reporting arrangements. In particular, comments are invited on the proposed:
 - licence modifications and associated guidelines;
 - regulatory accounting requirements;
 - logging up of enhancement projects;
 - annual and monthly returns; and
 - use of reporters to provide an assessment of the robustness of Railtrack's information submissions.
12. Consultees are invited to comment on the proposed timetable including the following questions.

- Are there sufficient grounds for the Regulator to extend the date for publication of the review notice?
- Would it then be necessary to extend the date by which the contracting parties are required to submit revised agreements to the Regulator for approval?
- What transitional arrangements would be required (if any) if the charges are referred to the Competition Commission?
- Should proposed licence modifications be introduced simultaneously and in conjunction with the periodic review conclusions?

Appendix C: Draft licence modifications

Condition X: Regulatory financial statements

1. The purpose of this Condition is to procure the provision of annual information on the financial performance and financial position of the licence holder that is useful to a wide range of users for assessing the stewardship of the licence holder's management and for making economic decisions and in particular:
 - (a) information that is relevant and useful to the Regulator for the assessment and determination of the licence holder's access charges, for monitoring compliance with its network licence or for exercising other functions under the Act; and
 - (b) information that is useful to other parties, including investors and customers of the licence holder.
2. In order to achieve the purpose referred to in paragraph 1, the licence holder shall prepare regulatory financial statements (and for such purpose maintain accounting records) in accordance with the following paragraphs of this Condition and any Regulatory Accounting Guidelines from time to time issued by the Regulator.
3. The financial statements referred to in paragraph 2:
 - (a) shall be prepared separately in respect of each Separate Business of the licence holder;
 - (b) shall be prepared in respect of the financial year ended 31 March 2002 and (save as otherwise provided in this Condition or the Regulatory Accounting Guidelines) thereafter on a consistent basis in respect of each succeeding financial year;
 - (c) so as to reflect the basis on which access charges are set:
 - (i) shall be prepared on a current value, value in use basis using the Financial Capital Maintenance principle with the assumption that the value in use of the licence holder's relevant operating assets will be

consistent with the Regulator's valuation of the Regulatory Asset Base for the purpose of determining access charges (where accounting terms in this paragraph shall have the meaning given to them in the Regulatory Accounting Guidelines);

- (ii) insofar as reasonably practicable, the definition of items in primary statements; the valuation of assets and liabilities; the treatment of income and expenditure as capital or revenue; adjustments in respect of the provision, utilisation, depreciation and amortisation of assets and liabilities; and any other relevant accounting policies should be consistent with the definitions and bases of measurement for the Determination Assumptions for the corresponding period (and so that where the presentation of an item in the primary statements departs from the basis for the Determination Assumptions, a reconciliation shall be included by way of a note).
- (d) so far as it is consistent with the purpose of this condition set out at paragraph 1, financial statements shall comply with the UK best commercial accounting practices and incorporate primary statements and notes thereto with the same content and format as the annual accounts of the licence holder prepared under the Companies Act 1985 as if its equity share capital were listed on the London Stock Exchange;
- (e) shall include all details reasonably necessary to reconcile items included in the primary statements with the corresponding items in the annual statutory accounts for the same period;
- (f) shall include, as a primary statement, a statement of regulatory financial performance comparing income, expenditure, profits and losses for the period with the Determination Assumptions;
- (g) shall include narrative explaining the variance from any previous year and from the Determination Assumptions;
- (h) so far as it is consistent with the purpose of this condition set out at paragraph 1, shall be prepared in accordance with any Regulatory Accounting Guidelines that the Regulator may from time to time notify to the licence holder, which guidelines may:

- (i) further specify the accounting policies, format and content of the financial statements and the matters to be shown or reported therein;
 - (ii) modify the requirements of sub-paragraphs (a) to (g) inclusive of this paragraph;
 - (iii) provide for further breakdown of any items contained in the primary statements;
 - (iv) provide for specification or description of any transactions or arrangements between any of the Separate Businesses of the licence holder or between the licence holder and any affiliated company or related undertaking (including, without limitation, so as to enable the Regulator to monitor compliance with the conditions of this licence).
4. The Regulatory Accounting Guidelines may further include provision requiring the licence holder to prepare and publish information in respect of each of:
- (a) proposed enhancements which the licence holder is required to put in place to log up as enhancement expenditure; and
 - (b) annually, information on those enhancements actually made.
5. The licence holder shall procure a report by the Auditors addressed to the Regulator in respect of the financial statements referred to in paragraphs 2 and 3 above or any other information produced in accordance with paragraph 4 above:
- (a) stating whether in their opinion the financial statements or information have been prepared in accordance with this Condition, including any Regulatory Accounting Guidelines;
 - (b) stating whether in their opinion the financial statements or information represent a true and fair view of the revenues, costs, assets and liabilities of the licence holder and of its Separate Businesses or otherwise are consistent with the purpose of this Condition as set out in paragraph 1; and
 - (c) stating their opinion as to such other matters as may be specified in any Regulatory Accounting Guidelines.

6. The licence holder shall enter into a contract of appointment with the Auditors which shall include a term that the Auditors will provide such further explanation or clarification of their reports, and such further financial information in respect of the matters which are the subject of their reports, as the Regulator may reasonably require for the exercise of his functions, including in relation to monitoring compliance by the licence holder with the conditions of this licence.
7. The licence holder shall deliver to the Regulator a copy of the financial statements together with any information provided for in the Regulatory Accounting Guidelines and the Auditor's report as soon as reasonably practicable and in any event not later than 1 July following the end of the financial year to which they relate (or a later date approved by the Regulator). The financial statements, information and Auditors' report, subject to any modifications approved by the Regulator, shall be published within one calendar month of delivery to the Regulator and thereafter made available to any member of the public on request.

8. In this Condition:

“Auditors” means the person appointed by the licence holder for the purpose of reporting on the regulatory financial statements referred to in this condition;

“Determination Assumptions” means any assumptions (including their definitions and bases of measurement) from time to time notified to the licence holder by the Regulator as assumptions that have been used for determining access charges;

“Regulatory Accounting Guidelines” means any guidelines notified by the Regulator in accordance with paragraph 2 (h) of this Condition;

“Regulatory Asset Base” means the asset values as from time to time notified to the licence holder by the Regulator as being asset values that have been or are to be used for determining access charges; and

“Separate Business” means each of (i) the Network Business (ii) the Stations Business (iii) the Rail Safety Activity,

(iv) the Property Business (v) any other business, project or activity in respect of which the Regulator shall require separate information and which the Regulator has defined and notified as a Separate Business for the purpose of this condition and (v) the balance of the activities, assets, liabilities, income and expenditure of the licence holder not otherwise identified under (i) to (iv) above.

Addition for Condition 13: Provision of information to the Regulator

6. Without prejudice to the generality of the preceding paragraphs of this Condition, the licence holder shall prepare on an annual basis and provide to the Regulator an annual return in a form previously approved by the Regulator which shall (without limitation) include:
 - (a) the regulatory financial statements prepared pursuant to Condition X;
 - (b) the Network Management Statement reconciliation prepared pursuant to paragraph 8 of Condition 7;
 - (c) information in relation to enhancements and their logging up which may from time to time be required to be prepared and published pursuant to paragraph 4 of Condition X;
 - (d) statistical and other data for the purpose of monitoring outcomes against the assumptions underlying the charges set by the Regulator; and
 - (e) statistical and other data specified by the Regulator.
7. The annual return referred to in paragraph 6 shall be provided to the Regulator as soon as reasonably practicable and in any event not later than 1 July following the end of the financial year to which relates (or a later date approved by the Regulator). Within one calendar month of delivery to the Regulator, subject to any modification approved by the Regulator, it shall be made available to any member of the public on request.
8. Without prejudice to the generality of the preceding paragraph of this Condition, the licence holder shall prepare monthly returns in a form approved by the Regulator to be

provided to the Regulator as soon as reasonably practicable and in any event not later than 14 days after the end of the month to which the information relates.

Condition Y: Appointment and role of reporter

1. The licence holder shall comply with the following paragraphs of this condition and with any Reporter Guidelines from time to time notified to it by the Regulator pursuant to paragraph 3 below insofar as concerns:
 - (a) co-operation in the process leading to appointment by the Regulator of one or more persons to act as Reporter;
 - (b) establishing the terms of the contract of appointment (which shall be subject to approval by the Regulator) between the licence holder and the Reporter;
 - (c) co-operating with the Reporter in the undertaking by it of any enquiries it is called upon by the Regulator to undertake pursuant to paragraph 2 below; and
 - (d) insofar as it is able to do so, procuring the co-operation of any affiliate of the licence holder or of the Auditors from time to time of the licence holder in the undertaking by the Reporter of any enquiries it is called upon by the Regulator to undertake pursuant to paragraph 2 below.
2. Subject to paragraph 3, the Regulator may require the Reporter to investigate and report:
 - (a) from time to time into any matter considered by the Regulator as material to the setting by the Regulator of access charges;
 - (b) periodically into any matter in respect of which the licence holder shall be required to make an annual return pursuant to Condition 13; and
 - (c) from time to time into any matter relating to the condition, capacity or capability of any premises or assets used or to be used for the purpose of its licensed activities.
3. The scope and content of any enquiry proposed to be undertaken by the Reporter in accordance with paragraph 3 shall be:

- (a) discussed with the licence holder;
 - (b) defined and costed in a written proposal made by the Reporter; and
 - (c) approved by the Regulator.
4. The Regulator may from time to time draw up and notify to the licence holder Reporter Guidelines which may (without limitation) contain provisions:
- (a) establishing criteria regarding the suitability (in terms of expertise, experience or otherwise) of persons for appointment as Reporter;
 - (b) drawing up procedures for the licence holder to appoint the Reporter including:
 - (i) procedures for the licence holder to put forward a short list of persons which it considers to be suitable for the purpose;
 - (ii) procedures for the Regulator to require the licence holder to include alternative persons to be included in the shortlist; and
 - (iii) procedures for the Regulator to require the licence holder to appoint a Reporter from the shortlist.
 - (c) specifying any particular terms (including without limitation regarding qualifications of the report, limitations or exclusion of liability of the Reporter, duration of appointment, dealing with possible conflicts of interest involving the Reporter and obligations regarding confidentiality of information provided to the Reporter by the licence holder) to be contained in the contract of appointment of the Reporter by the licence holder, which contract is to be subject of approval by the Regulator; and
 - (d) establishing procedures for specification and approval of the nature and scope of any work to be done by the Reporter in carrying out any project or audit or the drawing up of any report which the Regulator may call upon the Reporter to undertake.

5. It shall be a term of any contract entered into by the Reporter with the licence holder that in the carrying out of any enquiry that the Regulator may call upon the Reporter to undertake, the Reporter shall owe a duty of care to the Regulator.
6. The licence holder shall (and shall procure insofar as it is able to do so that any affiliate of the licence holder or its Auditors shall) co-operate fully with the Reporter so as to enable it to carry out, complete and report on any enquiry it is called upon to undertake, including without limitation and insofar as necessary or expedient for such purpose:
 - (a) subject to reasonable prior notice to the licence holder, providing access to management, employees, agents or independent contractors of the licence holder to make such enquiries and to discuss any matters reasonably considered by the Reporter as relevant to the carrying out by it of any enquiry or the drawing up of any report which the Regulator may have called upon the Reporter to undertake;
 - (b) subject to reasonable prior notice to the licence holder, giving to the Reporter access at reasonable hours to any premises occupied by the licence holder in relation to its licensed activities; and
 - (c) subject to reasonable prior notice to the licence holder, allowing the Reporter at reasonable hours:
 - (i) to inspect and make copies of, and take extracts from, any documents and records of the licence holder maintained in relation to its licensed activities;
 - (ii) to carry out inspections, measurements and tests on or in relation to any such premises or assets used for the purpose of the Network Business or Stations Business; and
 - (iii) to take on to such premises or on to or in to any assets used for the Network Business or in the Stations Business such other persons and such equipment as may be necessary or expedient for the purposes of preparing and completing his report.
7. In this condition: "documents" includes information recorded in any form, and the ability to inspect and make copies shall, in relation to information recorded

electronically or otherwise than in legible form, include the ability to require production of a copy of such information in the manner in which it is recorded or in a legible form, or both.

8. In this condition:

“Reporter” means the person appointed by the Regulator in accordance with the procedures referred to paragraph 3(b); and

“Reporter Guidelines” means any guidelines notified by the Regulator in accordance with paragraph 4.