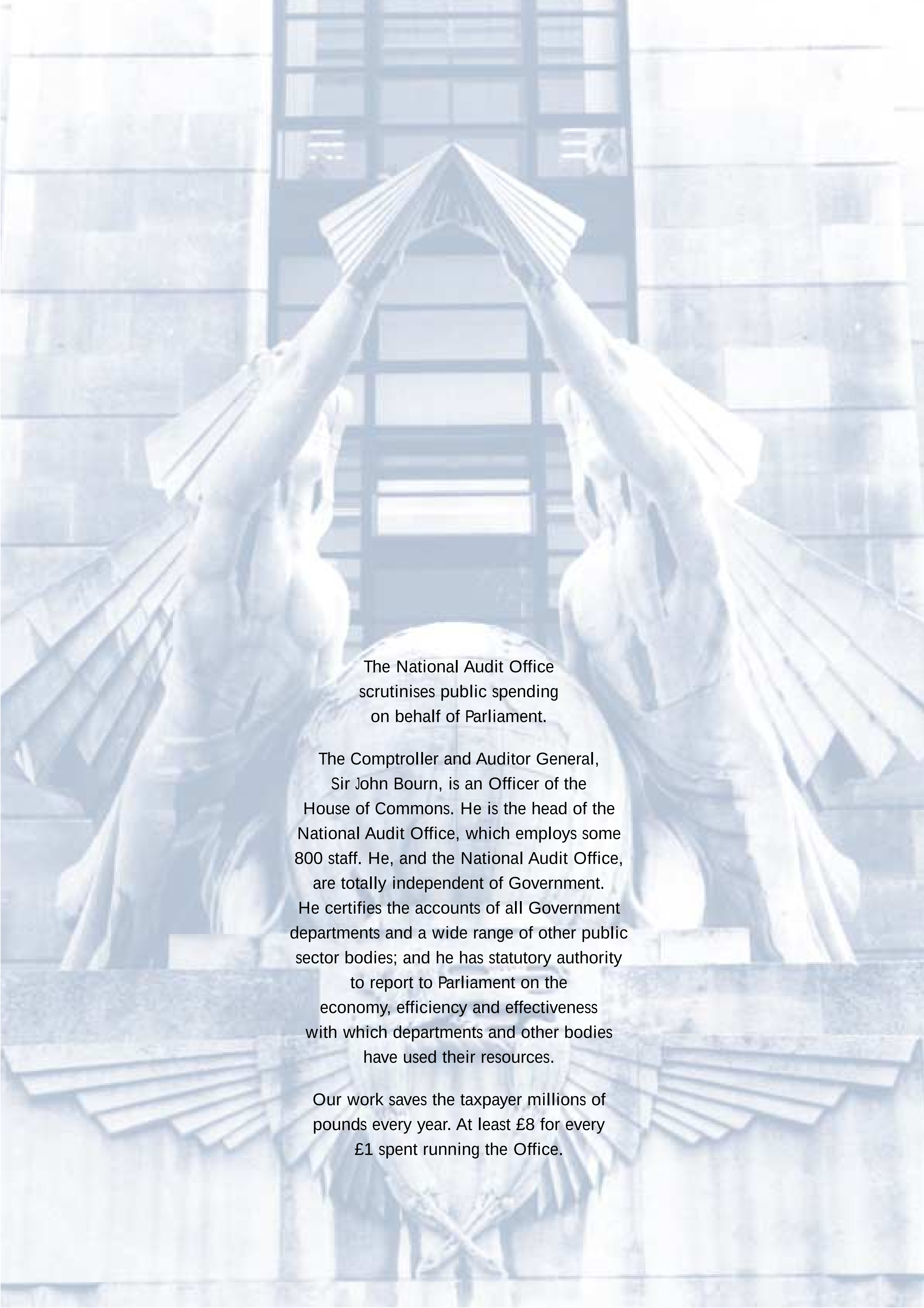
Network Rail - Making a Fresh Start

REPORT BY THE COMPTROLLER AND AUDITOR GENERAL
HC 532 Session 2003-2004: 14 May 2004



The National Audit Office scrutinises public spending on behalf of Parliament.

The Comptroller and Auditor General, Sir John Bourn, is an Officer of the House of Commons. He is the head of the National Audit Office, which employs some 800 staff. He, and the National Audit Office, are totally independent of Government. He certifies the accounts of all Government departments and a wide range of other public sector bodies; and he has statutory authority to report to Parliament on the economy, efficiency and effectiveness with which departments and other bodies have used their resources.

Our work saves the taxpayer millions of pounds every year. At least £8 for every £1 spent running the Office.

Network Rail - Making a Fresh Start

REPORT BY THE COMPTROLLER AND AUDITOR GENERAL
HC 532 Session 2003-2004: 14 May 2004

LONDON: The Stationery Office
£9.25

Ordered by the
House of Commons
to be printed on 10 May 2004

This report has been prepared under Section 6 of the National Audit Act 1983 for presentation to the House of Commons in accordance with Section 9 of the Act.

John Bourn	**National Audit Office**
Comptroller and Auditor General	**7 May 2004**

The National Audit Office study team consisted of:

Oliver Lodge, Heather Thompson, Andy Tindall and Richard Wade under the direction of Patricia Leahy.

This report can be found on the National Audit Office web site at www.nao.org.uk

For further information about the National Audit Office please contact:

National Audit Office
Press Office
157-197 Buckingham Palace Road
Victoria
London
SW1W 9SP

Tel: 020 7798 7400

Email: enquiries@nao.gsi.gov.uk

Contents

Summary

1 Network Rail owns and maintains the national rail network, which mainly comprises tracks, bridges, stations and signals. The structure of the rail industry and the relationships between Network Rail and the other parties in it are shown in **Figure 1**.

Network Rail acquired Railtrack, which went into administration in 2001

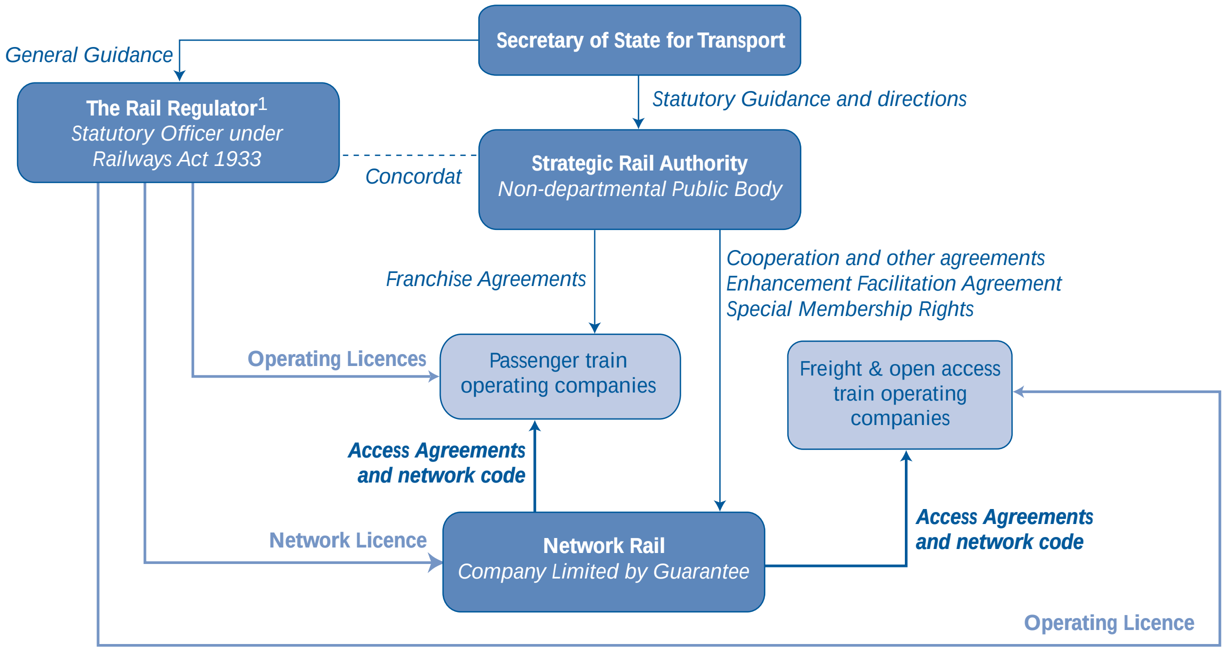
2 The owner of the national rail network from privatisation in 1996 was Railtrack, which had been created as part of the restructuring of British Rail. Railtrack was placed in railway administration on 7 October 2001 after which date Railtrack's business was conducted by administrators (see glossary) appointed by the High Court. A number of factors contributed to Railtrack's failure including lack of attention to its core business leading to underinvestment in the infrastructure, loss of engineering skills and poor asset knowledge.

3 Network Rail was established by the Department for Transport (the Department) with support from the SRA in March 2002 to secure the submission of at least one viable bid for Railtrack that would address the network's problems. Network Rail is a Company Limited by Guarantee, which means that it does not have shareholders, it pays no dividends and it finances its activities by retained surpluses and borrowing. Instead of shareholders, it has 114 members representing different interest groups. Network Rail's bid for Railtrack was the only one received. It took over the business in October 2002.

4 As Network Rail's income was not sufficient for it to meet its expenditure plans and develop into a self standing business, the Rail Regulator (the Regulator) undertook an Interim Track Access Charges Review. The review was completed in December 2003 and the conclusions, which came into force in April 2004, determined the following:

- the infrastructure expenditure permitted for the five years to 2009 (£22,200 million excluding enhancements to the network) and the income Network Rail will need to cover such spending;
- the outputs Network Rail must deliver (particularly in terms of cutting delays and improving asset condition); and
- the range of performance incentives that will apply, taking into account Network Rail's status as a company limited by guarantee.

1 The structure of the Rail Industry



NOTE

1 The Rail Regulator is legally independent of the Secretary of State, approves access agreements and supervises the terms of the network code (see glossary).

2 Her Majesty's Rail Inspectorate & The Rail Safety and Standards Board are not shown on the diagram (see glossary).

Source: National Audit Office

5 Despite the establishment of Network Rail and other changes to the industry since Railtrack went into administration, the Department was not satisfied with the performance of the rail industry. In January 2004 it announced a review, to be concluded by summer 2004, of:

- the structure and organisational changes needed to improve performance for customers;
- the progress being made by increased investment in the industry and the means by which costs can be better controlled; and
- the right organisation to focus safety regulation on the real risks to passengers and employees without being an obstacle to providing reliable train services.

The Department made it clear that its review would not call into question the independent economic regulation of the industry.

Would changes to Network Rail's governance and financing framework improve the management of the rail network?

6 This report examines Network Rail's governance and financing framework and whether changes would incentivise improved management of the network. It finds a number of challenges still outstanding:

i The establishment of a framework to incentivise value for money was handicapped by lack of information on asset condition and the drivers of costs. The incentives to achieve value for money, as opposed to staying within budgetary targets, depend to a large extent on the effectiveness of the corporate and management incentive arrangements. Management will also be concerned to avoid reputational damage (for example from the business being seen to fail) and the impact of this will be compounded by the transparency with which industry progress is reported. Although the incentive arrangements are overseen by the Regulator, it is notoriously difficult to get such management incentive plans right. Given Network Rail's key role in the industry the relevant parties should address whether the existing incentives could usefully be complemented by longer term financial objectives.

ii Rail industry costs are coming under control although expenditure is forecast to remain 30 per cent higher than before the 2000 Hatfield derailment by the end of the current regulatory settlement in 2008/09. There are a number of reasons for expenditure remaining higher than before the Hatfield incident. These include inadequate investment in the core business by Railtrack, a "bow wave" of expenditure over the next few years as a high proportion of assets come to the end of their useful life and higher spending to address safety concerns. Network Rail has undertaken a number of initiatives aimed at improving business planning to prioritise work that will provide long term benefits and control the unit costs of such work. Progress cannot be achieved by Network Rail's actions alone. The review needs to identify how the totality of the rail industry can best work together and facilitate the objective to push overall rail costs down.

iii Network Rail's governance structure is complex. It is clearly accountable to many parties, including customers, members and the Regulator. Its accountability to the SRA has been an issue given the desire for it to be classified as a private sector business, the necessity of SRA support for its funding programme and the SRA's assumption of the equity risk of the business until Network Rail's financing is put on a long term, self standing basis. In particular:

a Members of Network Rail cannot fully replicate the role of shareholders. All of Network Rail's equity risk falls ultimately on the SRA. An issue is how the SRA can manage this risk effectively, with the Regulator, given the few direct levers it has.

b Network Rail cannot yet borrow on its own. Its short and medium term funding is supported by the SRA at a higher cost than pure government funding. The regulatory settlement has provided revenue certainty for the period 2004-2009 and the SRA takes comfort from regulatory responsibilities toward Network Rail's financial viability. SRA support, however, remains fundamental to Network Rail's long term debt finance. Although there is no current threat, there is nevertheless an issue as to how effectively the SRA can manage its exposure to the credit risk it monitors.

c There is an issue as to how the SRA can effectively provide the industry with a strategic lead. The Regulator has to act in a way he considers best calculated to achieve a broad range of duties, one of which is facilitating the furtherance by the SRA of its strategies when this duty is not in conflict with others (see glossary). The SRA can also contract with Network Rail for new projects to enhance the network. In other circumstances the SRA is wholly reliant on Network Rail's own commitment to the strategic objectives.

Recommendations and

While careful thought went into setting up Network Rail, and it must live within its borrowing limits and meet the requirements set by the Regulator, there are risks that remain and constitute challenges for Network Rail and for related parties.

Incentives and drivers of value for money

1 Incentives exist in the regulatory regime to promote better performance, to minimise the disruption caused by work on the track, to promote long term asset stewardship and to encourage overall financial efficiencies. The incentives to achieve value for money, that is to do more than stay within budgets (even though the budgets have been set to encourage efficiency) depend to a large extent on the effectiveness of the corporate incentives and the internally developed Management Incentive Plan. Reputational issues and the transparency of the industry performance will also play a part. It is notoriously difficult to get such Management Incentive Plans right. Profiled expenditure changes may already have made one element of Network Rail's 2003/04 targets appear less challenging than expected when set (para 2.33). Network Rail is improving its business planning to prioritise and control the unit costs of work that will provide long term benefits. Network Rail's management should go further and develop longer term output based efficiency and financial measures, such as bringing down the network cost per kilometre per passenger carried. These should complement, not replace, existing indices that promote better performance and long term asset stewardship. Network Rail should commit to a timetable for developing indicators that demonstrate whether or not it is meeting such objectives.

Costs of a network that is fit for purpose

2 There are complex cost-related issues:

a Adopting the right standards is essential to achieve cost effective safety related spending. Network Rail is increasingly adopting a more risk based approach to standard setting within its direct control. It should set an end date for concluding this process.

b The transition to a more risk based approach needs to be reinforced by supportive behaviour from all levels of management. This can be tackled through information and training, assisted by other parties whose actions can have an impact, and reinforced by monitoring levels of managerial competency.

challenges

Skilled personnel

3 The privatisation of maintenance and renewals work, through the establishment and sale of infrastructure companies, resulted in many former British Rail engineers being lost to the private sector related industries. This affects the important area of project management, where containment of costs for Network Rail's ongoing investment in network renewal depends on such specific expertise. Among other measures, current shortages in Network Rail could be redressed by promoting flexible secondment schemes between other businesses and Network Rail, which would benefit both parties.

Network Rail's governance and financial framework

4 The Regulator has a duty to facilitate the strategic network goals he considers best calculated to achieve a broad range of duties, one of which is facilitating the furtherance by the SRA of its strategies when possible. The SRA can also contract with Network Rail for new projects to enhance the network. In other circumstances the SRA is wholly reliant on Network Rail's own commitment to the strategic objectives. We therefore see difficulties for the SRA carrying out its strategic role within the industry. The Department should consider ways in which Network Rail, as a regulated monopoly, is to be given a strategic lead.

5 The SRA has formal powers to require a remedial plan after a significant financial failure has occurred leading to a drawdown of SRA standby facilities. The SRA monitors the projected use of standby loan facilities on a quarterly basis. Like any guarantor or lender, the SRA should require and act upon information on Network Rail's proposed course of action if projections of debt indicate a risk of future financial failure, recognising that Network Rail's proposed response would have to include seeking necessary consents from the Regulator and other bodies when applicable. The SRA have arrangements in place to enable them to do this. The Department should periodically examine the SRA's arrangements for managing the risks effectively.

6 The Regulator proposed a ceiling to Network Rail's borrowing which Network Rail has accepted although at 5 May 2004 the relevant licence modification had not taken effect. There should be limits to Network Rail's borrowing (expected to decline from a peak of 80 per cent of the Regulatory Asset Base in April 2004) so that imprudent borrowing is discouraged. It is possible that in the future there could be pressures to keep debt high, without repaying borrowing, in order to fund more work without increasing track access charges. Nevertheless, a prudent Network Rail should be put in a position to repay funds borrowed for investment over the useful life of the assets acquired in this way.

7 Network Rail is following a prudent and realistic accounting treatment of operation, maintenance and renewal expenditure. Operating and day to day maintenance expenses are expensed when incurred and renewals depreciated over the renewal cycle. Care should be taken to ensure a continuation of the current accounting treatment that prevents "patch and mend" spending being added to the Regulatory Asset Base as though it was renewals, as additions of this sort could lead to unrealistic increases in asset valuations and inappropriate debt funding.

8 The Department needs to bear in mind the relationship between the cost of Network Rail's debt and the extent of the SRA's credit support. If conditions in the financial markets change, the Department should assure itself that any wider benefits of indirectly supported borrowing by Network Rail can still be shown to outweigh the potential cost savings from Government directly supporting such debt, recognising that it might need to take legal powers to do this.

part one

Part 1

Drivers of value for money in Network Rail

This part of the Report examines the drivers for value for money in Network Rail's stewardship of the national railway network. Because there were no other bidders Network Rail's bid was not tested in competition. The terms on which the Department felt obliged to underwrite Network Rail's financial position meant the immediate incentive on Network Rail to improve value for money came from the Management Incentive Plan. The Regulator addressed cost and efficiency issues as part of his regulatory review in 2003-04 re-setting corporate incentives with effect from April 2004.

1.1 Railtrack was created to manage the fixed rail network infrastructure as part of the restructuring and privatisation of the rail industry, pursuant to the 1993 Railways Act. The Department sold almost 100 per cent of its shares in a stock market flotation in 1996[1]. After the Hatfield accident in October 2000, in which four people died and 70 were injured when their train derailed after travelling over a broken rail, Railtrack urgently reviewed the condition of the network in response to fundamental safety issues. Expenditure arising from this review, as well as the impact of financial penalties arising from the failure to meet performance targets, added significantly to Railtrack's costs. These were already escalating as a result of cost increases on the West Coast Route Modernisation project. This project is now expected to cost around £8,000 million compared to an initial budget of £2,100 million.

1.2 Despite the Government bringing forward £1,500 million of funding from the period beyond 2006 to the five year period beginning in 2001, Railtrack's financial position continued to deteriorate. On 7 October 2001, it was placed in railway administration by order of the High Court following an application by the Secretary of State for Transport. The High Court was satisfied, on the basis of information put before it, that the company was unable or unlikely to be able to pay its debts.

The structure of the rail industry is complex

1.3 The SRA was created in February 2001 specifically to deliver strategic leadership to the rail industry, which the Government considered had been lacking. It took on most of the former responsibilities of the Office of Passenger Rail Franchising (OPRAF). The major part of Network Rail's income derives from track access charges paid by train operating companies (around £1,700 million in 2002/03), most of whom are subsidised by the SRA (£1,025 million in 2002/03). Before the acquisition, the SRA also provided direct grants to Railtrack (£996 million revenue grants in 2002/03) and to Passenger Transport Executives (£218 million in 2002/03). Under the Transport Act 2000, the SRA has a statutory duty to ensure that the funding it provides to the rail industry is used effectively. The SRA relies heavily on the Regulator in the exercise of this duty.

1 *The National Audit Office examined the privatisation of Railtrack in the C&AG's report on The Flotation of Railtrack, HC25, 1998-99.*

1.4 The Regulator has extensive statutory powers over Network Rail including the modification and enforcement of the conditions of its operating licences, originally issued by the Secretary of State. The Regulator also carries out reviews of track access charges. That process involves him in deciding on outputs (including efficiency and performance targets - see paragraph 2.8) and in setting the charges for Network Rail's delivery of infrastructure services, having regard to a number of factors. These include the reasonable requirements of customers and funders and Network Rail's contractual obligations (see Appendix 2). The Regulator also determines the level of Network Rail's Regulatory Asset Base (RAB) which is the value of assets on which the company is allowed to make a return, and the allowed rate of return, which is expressed as a percentage of the RAB.

1.5 Following Railtrack's entry into administration, the Department's advisers identified a poor relationship between the SRA and the Regulator as leading to confusion in the industry and a lack of co-ordination between the bodies. The SRA and the Regulator signed a Concordat in February 2002 which set out their respective powers and duties and their aim to cooperate more. Both parties have expressed satisfaction with the Concordat and co-operation between the Regulator and the SRA has generally been good although there have been disagreements. The January 2004 review of the rail industry and the move to a Regulatory Board from July 2004 bring some uncertainty about how the relationship will develop.

The Department identified Railtrack's major shortcomings

1.6 When establishing Network Rail, the Department took into account the factors that had contributed to Railtrack's problems. It identified a number of factors itself and commissioned Mercer Management Consulting[2] to carry out a wide-ranging series of interviews with participants in the UK rail industry and stakeholders. This aimed to gain an insight into the root causes of the problems faced. The following shortcomings were identified.

Under-investment in the infrastructure

1.7 The rail network consists of around 30,000 km of track and signalling, 2,500 stations and 65,000 bridges and tunnels. The majority of stations, structures and tunnels are not to a standard specification and many are over 100 years old, as are the underlying earthworks and cuttings. Three types of activity are undertaken to improve the network. These are:

- Maintenance - routine repair;
- Renewals - the non-routine repair or replacement of expired assets; and
- Enhancements - the development of new or existing assets to improve network capability, performance and capacity.

1.8 The view of the rail industry, as reported by Mercer, is that under-investment, coupled with poor asset management, had resulted in the deterioration of network assets. **Figure 2** shows the annual level of track laid since 1945. While there has been a significant investment in new track since the Hatfield accident in 2000, the rate of track replacement in the preceding 15 years had been declining. British Rail estimated that in order to maintain track condition at a "steady state", around 800km of track needed to be replaced every year. This was not being achieved in most years, and it is therefore likely that the state of track, allied with management failings, has impacted adversely on the operational performance of the network.

1.9 Growth in the number of trains using the network (18 per cent since 1997) has added to the pressure on the network, which has not been expanded to cater for the unexpected increase in demand. The result is a congested network that requires increasing levels of maintenance owing to higher volumes of traffic, but with fewer opportunities for the network manager to carry out engineering work.

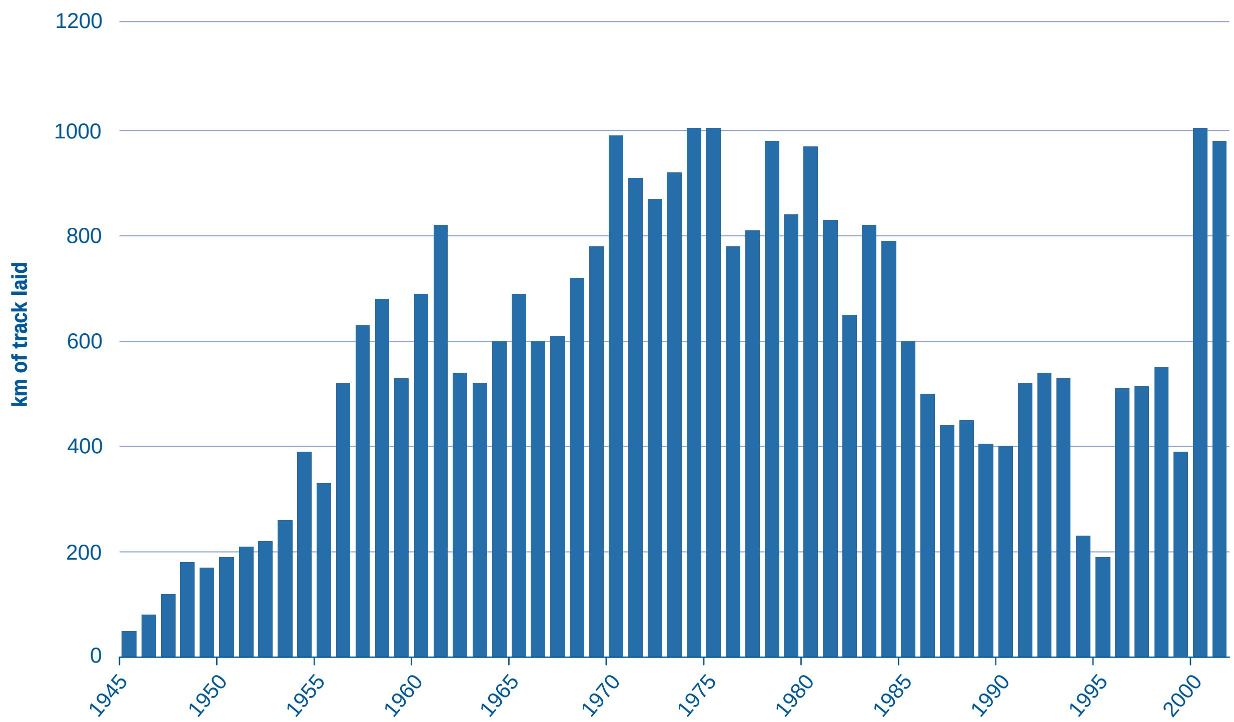
Poor value for money management and use of funds

1.10 The Department concluded that Railtrack did not focus sufficiently on its core business of maintaining the rail network. This conclusion was supported by the Mercer report which found that managers did not effectively oversee maintenance and renewals work, which at the time of railway privatisation had largely been contracted out, while concentrating on raising revenue from commercial projects, for example property development. Mercer also criticised Railtrack's decision-making, particularly in prioritisation of work because Railtrack did not take into account a full assessment of the relative costs and benefits of different pieces of work.

1.11 The Mercer report also blamed poor project management and investment planning strategies for Railtrack's difficulties on the West Coast Route Modernisation project. This project originated within British Rail and was made more complex under Railtrack. Mercer describes the project as poorly scoped and managed, with outputs that were not clearly defined and costs that escalated substantially.

2 'The GB Rail Industry: In its own words', Mercer Management Consultants, May 2002. Views and evidence collected by Mercer were not attributed.

2 **Track replacement since 1945**



Source: Network Rail Business Plan, March 2003

Loss of engineering skills and asset knowledge

1.12 The privatisation of maintenance and renewals work, through the establishment and sale of infrastructure companies, resulted in many former British Rail engineers being lost to Railtrack. Moreover Mercer found that, at the time of privatisation, employment by Railtrack was viewed as lacking in career prospects compared to the opportunities outside the company. For these reasons Railtrack lost much of its rail expertise and engineering skills. Infrastructure maintenance contracts were fixed price and closed book - in other words Railtrack didn't have a clear idea of what work was being done for the price paid. Railtrack had also failed to establish a register of asset condition. The combination of the loss of experienced staff, limited access to its outsourced contracts and the lack of an asset register meant that Railtrack had inadequate asset knowledge to run its business effectively.

1.13 The Government, the Regulator and the Health and Safety Executive considered that, while understandable as a reaction to the Hatfield crash, Railtrack may have adopted a risk-averse approach to safety issues and maintenance and renewals, for example by imposing widespread and overly prolonged speed restrictions, and renewing large amounts of track. Based on a lack of asset knowledge, this approach was also influenced by a fear, perhaps overly apprehensive, of corporate or individual criminal prosecution should another accident take place.

Poor industry relationships and general lack of leadership

1.14 Although the SRA was created to bring leadership to the industry. Mercer (reporting before the 25 February 2002 Concordat), found that the SRA's creation led to some confusion, with the rail industry receiving inconsistent information, objectives and priorities from the Regulator and the SRA. These differing priorities, according to Mercer, were thought to reduce the predictability of regulatory decisions, making planning more difficult. Nevertheless Mercer believed that the rail industry wanted to see the SRA take a clear leadership role in delivering government objectives.

1.15 Relationships within the industry were viewed by the Department and Mercer as poor. Railtrack's management culture in particular was blamed for fostering antagonistic relationships with its customers, the train operating companies and the Regulator. For example, Railtrack was criticised by its customers for failing to discuss planned maintenance work with operators whose services would be disrupted. Relations between Railtrack and its customers varied markedly across Railtrack's geographical zones, which historically had a considerable degree of independence, and often their own working practices.

Network Rail's approved bid could say little about value for money

1.16 In October 2001 the Department took the initial steps to engage the Network Rail team to develop a bid for Railtrack, addressing the network's problems, based on the concept of a company limited by guarantee. They considered that it was in the public interest that at least one viable bid was submitted to the administrators to judge alongside any other bids that were made. The costs of the SRA supporting the Network Rail bid team came to some £26.5 million including VAT.

1.17 As a not-for-dividend Company Limited by Guarantee, Network Rail does not have shareholders, financing its activities by debt and retained surpluses. Instead of shareholders, it has 114 members representing different interest groups. The Government favoured this particular corporate structure on the grounds that all surpluses could be ploughed back into the company, and the company could be run in the interests of the public, passengers and industry rather than shareholders. In addition, appointing the train operating companies as members would encourage Network Rail to be more responsive to the demands of the train operators.

1.18 There were no other bidders for Railtrack although two parties had expressed interest in bidding. One potential bidder, Swiftrail, told us that they put considerable effort into trying to develop an offer for the business intended to include all the financing then required. Subject to being allowed access to more detailed information, Swiftrail estimated immediate funding needs of £13,500 million. They drew their interest to the attention of the Treasury, the Department for Transport and the Regulator. They told us that they were discouraged by the Government's stated preference for a "not for commercial return" non-share company, and also because such a company had already been launched with Government financial backing. Further deterrents to bids were the poor quality of Railtrack's business data and, as a consequence, the time it took the administrators to put together essential information for potential bidders. Railtrack's knowledge of the condition of its assets had deteriorated since privatisation so it did not know what needed to be done to put problems right, how much it would cost, or what the risks were. While declining to bid for the reasons stated above, Swiftrail, told us that they had no complaints about the bidding procedure and considered that they had been treated fairly by the Department.

1.19 Network Rail put its bid to the Board of Railtrack Group, the parent company of Railtrack (which had not been put into administration) on 25 March 2002. The Government also had to decide whether it found the bid acceptable, as it would be providing Network Rail with a significant financial support package including a grant of £300 million for an early exit from administration. Network Rail agreed to pay Railtrack Group £500 million for its shares in Railtrack plc and assumed £6,300 million of debt. The bid was accepted by the shareholders of Railtrack Group on 23 July 2002. Network Rail also paid £85 million for the right to operate, manage and maintain a section of the Channel Tunnel Rail Link and for the concession to manage the future St Pancras Station (from 2007).

1.20 As at April 2004, the role of the Secretary of State for Transport and the Department for Transport in the decision to place Railtrack plc into administration was subject to legal challenge from individuals who were shareholders in Railtrack Group at the time that Railtrack plc went into administration.

The Department had to compare the value for money of the bid with leaving Railtrack in administration

1.21 Evaluation of the bid by the Department, SRA and their advisers took place in early June 2002. The Department had established a separate team, behind "Chinese walls", to carry out the bid evaluation. A report dated 10 June 2002 assessed the bid against specified evaluation criteria. The Department's criteria for selecting Railtrack's successor had already been published[3] and sent to Network Rail[4] and the administrators. As the realities of the situation (such as the poor quality of data on asset condition) became clear, the Department realised that the depth of the analysis that Network Rail could carry out, and therefore the detail of the plans it put together, was limited.

3 *Secretary of State of Transport, 31 October 2001.*
4 *'Concerns and Preferences', Department for Transport, 14 February 2002. The administrators would have made this document available to other bidders, had there been any.*

1.22 As there was no other bid it could not be compared to an alternative. The lack of knowledge of Railtrack's assets meant that the Department could not measure value for money in terms of the level of output per unit of expenditure. The value for money evaluation was, therefore, carried out in comparison to the only viable alternative option at the time of continuing with Railtrack in administration. This was in line with guidance in the Green Book that a do minimum option should be considered. The Department's evaluation report said that "the administrators have often, in accordance with their duties to the High Court, adopted a risk-averse stance towards investment and contracting". Management had focussed on performance "with little movement towards cost-control and efficiency." The Department therefore attached importance to an early exit from administration. The Department's initiative to secure the Network Rail bid ensured that there was at least one proposal for ending the administration. Without this the Department identified a significant risk that Railtrack would remain in administration for an indefinite period as there was a danger that no other viable proposal would be received.

1.23 In support of Network Rail's bid, the SRA agreed to fund any spending Network Rail incurred in excess of the Regulator's previously set allowance for operating costs, maintenance and renewals work in 2003/04. The Regulator said publicly that he was minded to allow for similar overspends relating to 2001/02 and 2002/03 (which mostly relate to Railtrack's stewardship of the business not Network Rail's), on the grounds that he did not want Network Rail to be held responsible for the inefficiencies of its predecessor. In our opinion, the SRA could have taken a different, and more restrictive, stance for 2003/04 spending on the basis that, by then, Network Rail would have had a significant degree of control. The Network Rail bid team told us that they would not have been willing to proceed on this basis.

1.24 The Department told us that this funding support for 2003/04 (which the Regulator estimates as approximating £3,000 million) was agreed to give comfort to potential lenders in advance of the Regulator's review of Network Rail's income. Such unconditional funding does not incentivise value for money. Funding ceilings, as the most relevant external constraint on management leave considerable latitude and little scrutiny. But the Department was clear that it would have been unable to attach conditions on funding that had any "bite" before the Regulator's interim review was complete. Prior to that date, financial discipline was driven through internal factors, such as the personal commitment of Network Rail's top management and their obligation to produce and follow a business plan.

1.25 Network Rail's top management also told us that lead times of as much as two years would in any case restrain spending and said that the need to minimise future borrowing was a powerful constraint. In addition Network Rail's top management were subject to a formal management incentive plan. This plan was agreed in detail with the SRA for 2002/03 as a precondition to final acceptance of the bid subject to further approval by the Remuneration Committee after the deal went through (see paragraph 2.31). It was intended to follow the general principles agreed with the SRA for future years and links Directors' and senior managers' pay to the achievement of a range of targets which indirectly incentivise value for money. In addition the plan discourages excessive borrowing because, if indebtedness exceeds a predetermined sum in the business plan, no bonuses are payable even if other targets are achieved. The Regulator's approval will be needed for any change to the management incentive policy proposed by the Remuneration Committee.

Interim conditions were not easy to attach to Network Rail's transitional financing arrangements

1.26 The Department considered that it could not have put in place any stronger external incentives against any risk of overspending by Network Rail during the eighteen months preceding the new regulatory settlement. Pending that review, we consider that the Department should have fully explored whether there were any measures which could have encouraged Network Rail to use its finances efficiently, for example:

- Measures for incentivising Network Rail management before Network Rail's bid was accepted. Management incentive schemes are a major driver of business efficiency. The Department and the SRA were responsible for the initial incentives policy for Network Rail and the SRA negotiated some of the detailed provisions with the Network Rail bid team. The SRA satisfied itself that the Management Incentive Plan for the six months of 2002-03 consisted of stretching targets. We agree that these targets incentivise value for money indirectly when taken together. The SRA takes the view that they have a direct impact.

- As a condition of the acceptance of its bid, pending the outcome of the regulatory review, Network Rail could have been funded to keep levels of maintenance and renewals at a safe but relatively low level until an improved understanding of asset condition and cost drivers enabled it to reduce maintenance costs for such work. For example, adopting a more explicit phased approach, or linking levels of credit support to reductions in unit costs for maintenance and renewals work.

1.27 The Department argues that the unique circumstances in which it was setting up Network Rail would have rendered these steps of doubtful or largely theoretical value. In particular there was the need to show the Court that there was no material risk of a return to insolvency as a result of interrupting or cutting off the flow of funds. Conditions such as milestones would have needed to allow for extensions of time ("grace periods") to reduce risk that Network Rail would be put in a position of being unable to deliver outputs required by its licence or contracts. The poor quality of Railtrack's information made it difficult to set meaningful milestones at the time and the interim review was intended to ascertain the extent of the problem and set down conditions and objectives for achieving it. As a result, the Department told us that such grace periods would have been likely to stretch into the period following the Regulator's interim review, and would have rendered such conditions ineffective.

1.28 The Department also argues that commercial lenders would have been reluctant, or would have required a higher price, to advance funds if conditions had been attached to any of the credit support facilities from the SRA. In our view conditions setting out an explicit phased approach to spending, attaching conditions to drawing loans but not attaching conditions to credit support for amounts properly drawn, could have been designed to address the possible concerns of lenders. When granting the standby loans, the SRA attached such a condition, requiring submission of a business case, if Network Rail were to request funding for accelerated network renewals additional to those renewals already provided for by the Regulator. But the SRA argues that this is not analogous to attaching conditions to overall support facilities because accelerated renewals are discretionary and not part of the core business, and therefore it was not necessary to demonstrate that Network Rail had unconditional access to funds for that purpose.

Part 2

Meeting the challenges

This Part of the report examines the start that Network Rail has made, and how far this goes towards meeting the Department's objectives in setting up Network Rail, since acquiring Railtrack and responsibility for the management of the infrastructure in October 2002. It shows that costs remain high, but Network Rail is working to change the corporate culture and is implementing measures to bring spending under control. The methods for incentivising Network Rail could be complemented by the development of longer term financial objectives.

2.1 There are a number of reasons for costs remaining higher than before the Hatfield incident. These include inadequate investment in the core business by Railtrack, a "bow wave" of expenditure over the next few years as a high proportion of assets come to the end of their useful life and higher safety related costs. The challenge for Network Rail will be to cut costs rather than purely to cut back on the work it carries out. There is also a risk that, as costs and the volume of work come under control, the targets and incentives set become outdated and unchallenging. It is for the Regulator to adjust targets at the next regulatory settlement if that proves to be the case.

Consistent improvements in punctuality levels will be hard to achieve

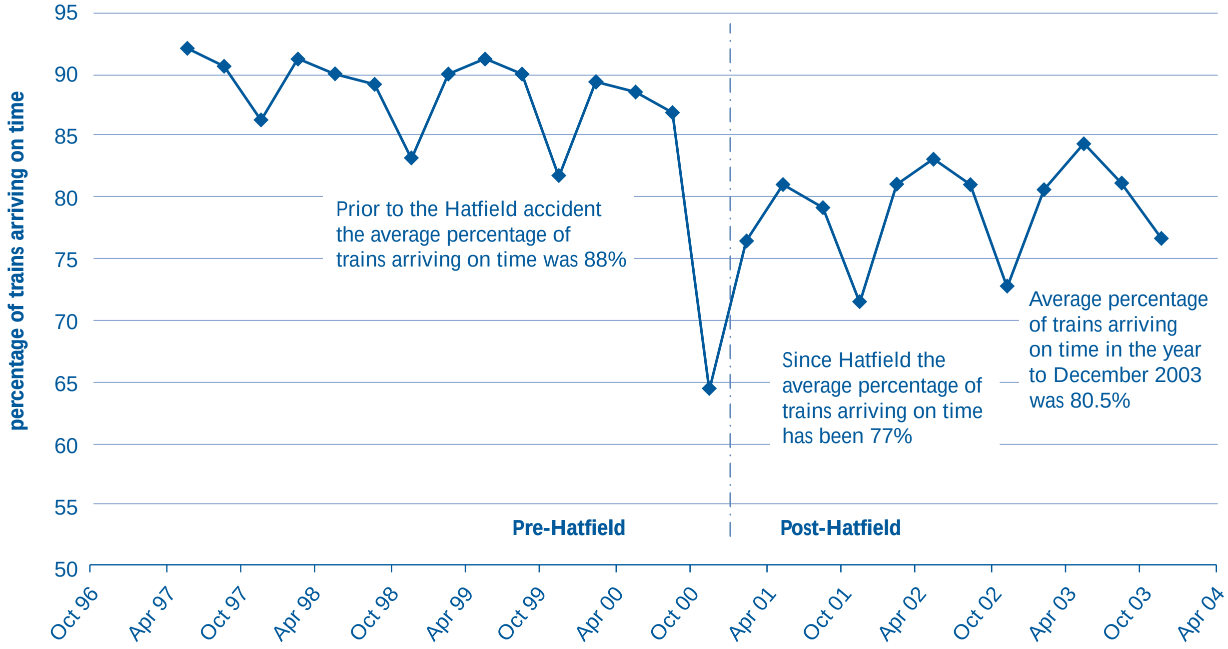
2.2 **Figure 3** shows the percentage of trains running on time during the period 1997/98 to 2002/03, the latest period for which information is available for the industry as a whole. Following the Hatfield accident in October 2000, the network was urgently reviewed and fundamental safety issues were addressed. Railtrack undertook a major track replacement exercise but in the meantime placed Temporary Speed Restrictions on routes which it considered at risk, causing a significant drop in punctuality performance. As Figure 3 shows, while there was a modest improvement when most Temporary Speed Restrictions were lifted, performance has not yet returned to pre-Hatfield levels.

2.3 Figure 3 reflects punctuality performance by the industry as a whole and not delays attributable solely to Railtrack or Network Rail. In 2002 -03, Network Rail caused 14.7 million minutes of delays, up nine per cent from 13.4 million the year before. The number of incidents of delay have not increased, but since the Hatfield derailment the time taken to deal with them has risen by 65 per cent. Network Rail recognised that this level of performance was unacceptable and said that it would give a clear focus for the future. Its March 2003 Business Plan target was to reduce delay minutes by 43 per cent to 8.4 million delay minutes by 2012/13, which would help the industry achieve an overall punctuality target of 91.4 per cent of trains arriving on time. In July 2003, the Regulator indicated that he considered this rate of progress unsatisfactory and, in December 2003, he set Network Rail the target of reducing delay minutes to 9.1 million by 2008/09. The last quarter of 2003 showed significant improvement. Delay minutes attributable to Network Rail fell by 26 per cent in the final three months of 2003 compared to the previous year. Total delay minutes for October to December 2003 were 3.3 million compared to 4.4 million in the same period the previous year, 3.4 million in 2001 and 7.9 million in 2000.

2.4 Part One of the report explained that one of the problems faced by Railtrack was the additional pressure on the network resulting from unanticipated passenger and freight growth. The increase in the number of train kilometres operated on the network is illustrated in **Figure 4**.

3 Percentage of trains running on time for the period 1997/98 to 2002/03

Since the sharp drop in punctuality following the Hatfield rail crash, there has been a modest improvement in performance.



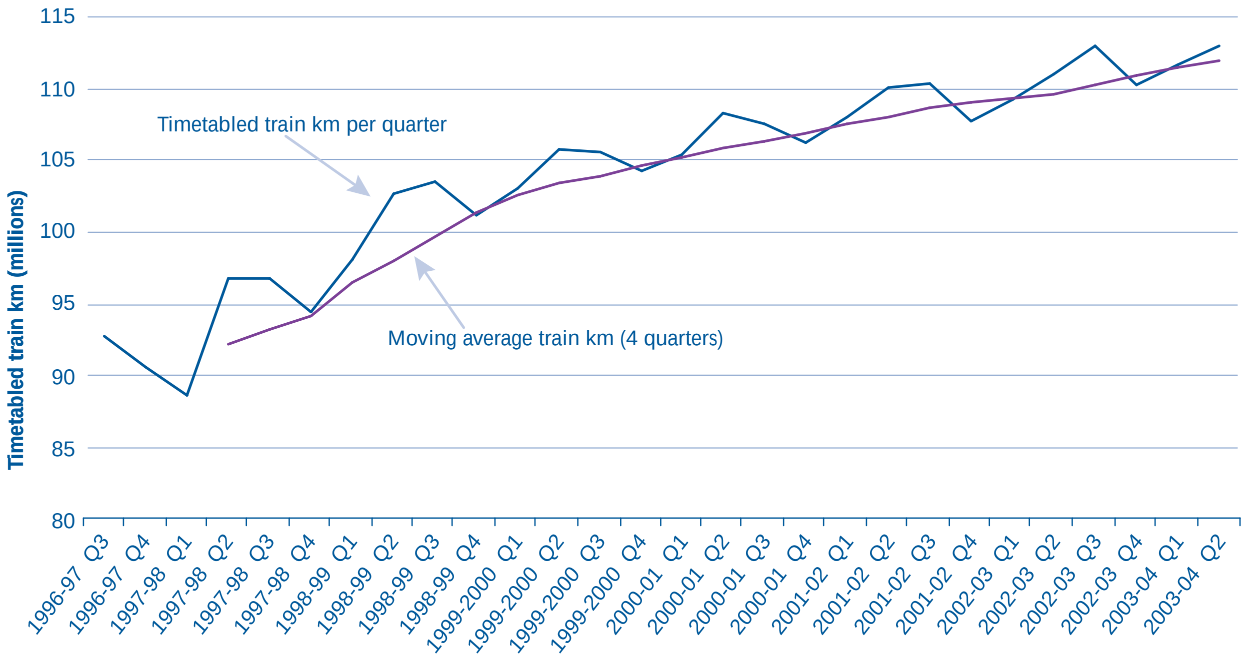
NOTE

In addition to the drop in performance caused by the Hatfield incident, there is a dip in performance in the third quarter (October - December) of each year. This reflects seasonal poor performance caused by bad weather conditions, 'leaves on the line' etc.

Source: National Audit Office analysis of 'National Rail Trends' data published by the Strategic Rail Authority

4 Growth in train miles operated since 1997

Use of the rail network 1997-2003.



Source: National Audit Office analysis of 'National Rail Trends' data published by the Strategic Rail Authority

Costs are coming under control, but a step change depends on recent initiatives

2.5 Rail infrastructure costs rose steeply in the period following the Hatfield accident and continued to rise through Railtrack's administration period. They have remained high since although lower than planned when in administration. The imposition of the results of the Regulator's track access charges review of Network Rail's business will contain this trend, but will still leave expenditure some 30 per cent above pre-Hatfield levels. Network Rail has introduced controls (see Figure 6) and new initiatives to enable it to bring costs better under control. At this stage the financial benefits of these initiatives are unknown. Network Rail faces major personnel challenges and needs to drive its change management programme forward.

2.6 Network Rail's bid for Railtrack, submitted in March 2002, used cost estimates largely based on Railtrack figures. As referred to earlier, Railtrack's knowledge of its own assets was poor and the Department recognised that Network Rail's figures contained a large element of uncertainty. When Network Rail took over Railtrack in October 2002, it quickly decided that its earlier forecasts had been over-optimistic. In its first Business Plan of March 2003, Network Rail's forecast of annual renewals, maintenance and other operating costs (known as OMR costs) increased to over £6,000 million per annum, compared to around £4,000 million in its bid, but with an intended 20 per cent efficiency target. This was still three per cent lower than spending planned by Railtrack at the close of the administration period.

2.7 In June 2003, as part of the access charge review process, Network Rail issued a revised Business Plan which proposed substantial reductions in its March 2003 figures. The Network Rail management had started to develop a unit cost framework and had initiated monthly business reviews. The potential impact of these initiatives had little impact on the March figures but expected benefits were taken into account in the June projections. From June 2003 a stage gate investment approval process known as GRIP was introduced. The impact of GRIP and new financial procedures, introduced earlier in April, on the actual spending that was projected for the year ending March 2004 has made it unlikely that, in this period, Network Rail will need to drawdown the SRA loan that replaces shareholders' funds in the financial structure and more likely to meet borrowing and financial efficiency targets.

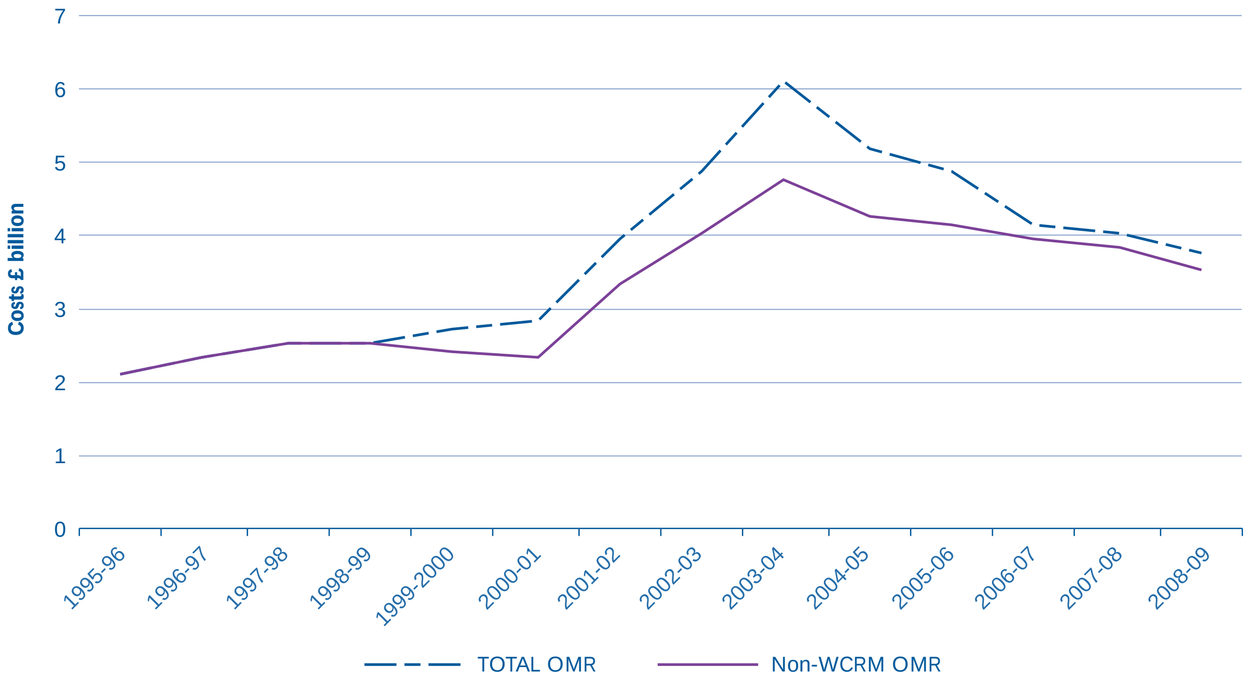
2.8 The Regulator considered that the June 2003 projections were still unacceptable, and indicated during the course of his interim review of Network Rail that he would be seeking cost cuts of up to 30 per cent. In September 2003, Network Rail reduced its projected spending to £26,100 million for the five years ending in April 2009. This was attributed to improvements in efficiency and tighter control of the volume of track and other renewals. In December 2003 the Regulator published the final conclusions of his interim review, which envisaged the reduction of Network Rail's annual OMR costs from £6.3 billion in 2003/04 to £3.8 billion in 2008/09 and allowed total spending of £22.2 billion in the five year period ending 31 March 2009.

2.9 The Regulator's spending levels require a reduction in annual expenditure of around 38 per cent. After the renewal costs of the West Coast Route modernisation project are removed, however, the reduction is actually of the order of 25 per cent. This will still leave annual OMR costs over 30 per cent above pre-Hatfield levels, after over seven years of Network Rail stewardship as is shown in **Figure 5**. The interim review has recognised that the underlying cost of operating, maintaining and renewing the network to deliver the existing outputs is greater than was previously believed, for example, due to previous under-investment.

2.10 Figure 5 also shows the dramatic increase in OMR costs in the years 2001/02 to 2003/04. Much of this increase was due to the reaction of Railtrack to the Hatfield accident, but the focus was on performance during the administration period (October 2001 to October 2002) rather than cost-control and efficiency.

2.11 As we have noted in Part One of this report, the Government relied on Network Rail's plans to deliver short term improvement, rather than attaching conditions to the financial support for Network Rail. The level of activity and spending inherited by Network Rail was high, for example the Regulator found (in his track access charges review) that much planned expenditure was unsupported by a properly documented business case. Network Rail told us that it immediately responded **(see Figure 6)** to the positive external incentives acting on it. From October 2002, for example, it required senior management approval of all expenditure in excess of £25,000 and 'ring-fenced' approved projects to avoid transfer to other uses without Board approval. It could not immediately control expenditure on pre-existing contracts that still had time to run, but it phased out badly managed and long term fixed priced and cost plus contracts.

5 Annual OMR costs for Railtrack and Network Rail, from 1995-06 to 2008-09



Source: The figures from 1995-06 to 2000-01 are taken from the Regulator's 2000 track access charges review. Figures from 2001-02 and 2002-03 are taken from Railtrack Regulatory Accounts. The 2003-04 figure is a Network Rail estimate, whereas the figures from 2004-05 are the final conclusions of the Regulator's December 2003 track access charges review

6 Introduction of new cost control measures

Date Introduced	Cost Control Measure
October '02	Authority to recruit staff and employ agency staff vested in Board Directors. Monthly Board Directors business reviews of all regions and major projects were initiated. Work on developing a unit cost framework was commissioned. New delegated authorities of managers and committees (e.g. Investment Board).
December '02	Reviewed maintenance control procedures - action plans to improve cost reviews.
January '03	Twice yearly compliance checks of business units' adherence to finance regulations. The reporting lines of all regional finance staff were changed so that all staff reported to the Financial Controller at HQ and not Regional Directors. This reinforces the independence of the finance department with greater emphasis on financial controls.
February '03	New Investment Regulations were written and introduced for expenditure over £25,000.
March '03	New financial regulations were written and introduced to take effect from 1 April 2003. For the 2003-04 budget, all renewal projects over £1million and all enhancement projects were given a separate ring-fenced budget to avoid budgets being transferred between projects.
June '03	A new framework for controlling investment (called GRIP) mandated a consistent set of project management and control processes across all Network Rail renewal and enhancement investment. The stage gate reviews at set milestones required compliance with business case methodology before each scheme was allowed to progress. Improved analytical review of financial results improves control of HQ operating costs.
October '03	Tracking system to monitor progress on meeting internal audit recommendation.
November '03	New consistent and tighter delegated authorities for the control of operating costs.

2.12 Safety issues also have an impact on Network Rail's costs. Safety practices followed by management since privatisation have added to costs, and demand more engineering possessions (when lines are closed to normal traffic). All major stakeholders agree that it is desirable to take forward a more risk based approach to standard setting and decision making on safety related spending. This requires further development of an industry model that has been progressed by the industry standards body and further development of safety standards, in substitution for a raft of pre-existing engineering standards, not all of which allow for differing levels of accident risk. There is also a challenge to ensure that European standards, currently under development through working groups attended by industry representatives, are set appropriately for UK needs.

2.13 There is a recognition, supported by the safety regulator and the industry, that the 'value per preventable fatality', currently £1.2 million, that is used in planning road schemes, should generally apply to rail. This is, however, only one element in the decision making alongside a range of wider factors, including softer issues, and these are hard to quantify. The potential for prosecution if an accident occurs can also encourage individual managers to take a risk-averse stance. This would particularly be the case if personal criminal prosecution was feared. Even though the likelihood of such prosecution is small, the perception can be the opposite. This could lead to the cost of safety-related improvements being very high when compared to the risk of accident.

2.14 Although costs currently remain high, Network Rail has a number of initiatives underway designed to improve understanding of the likely future behaviour of its assets and therefore to develop strategies that minimise whole-life costs. In particular, Network Rail is developing 'decision support tools' to help assess the key factors that cause asset degradation. The company has also introduced the New Maintenance Programme which returns the key elements of asset stewardship decision making to Network Rail engineers (such as deciding what work is required, its timing, and checking that it has been carried out correctly). Network Rail is currently in the process of bringing in house 100 per cent of maintenance work (announced in October 2003) whilst still contracting out, as British Rail did, major work on renewals and enhancements. Implementation of a pilot programme commenced in the East Anglia region in June 2003. Reading and Wessex areas were brought in house in November 2003.

2.15 The corporate restructuring will accelerate another step that Network Rail is taking to help it prioritise its work and spend more efficiently - to improve oversight of spending at a regional level. Network Rail is also attempting to standardise working practices across its geographical regions, while at the same time leaving appropriate levels of responsibility at a local level. Performance between regions varies considerably and, if by standardising working practices Network Rail can ensure that best practices are taken up across the network, there should be a significant improvement in network-wide performance.

Network Rail aspires to improve value for money with better vetting of business cases

2.16 As described in Part One, Railtrack had lost much of its engineering expertise and pursued commercial rather than engineering concerns. During administration, senior executives were brought in to re-focus the company with an emphasis on engineering skills. Network Rail has described its vision for the railway network as one of engineering and operating excellence and said in its March 2003 Business Plan that "fit for purpose at the lowest cost" was part of this vision. Interviews that we have held with various railway industry figures suggest there may be a danger that, although many within Network Rail are working hard to improve its efficiency, some may see achieving engineering excellence as an over-riding priority ahead of prioritising activities according to a balanced assessment of the relative costs incurred and benefits expected. The earlier findings of the Regulator supported this concern, for example the apparent willingness in the past of Network Rail to plan renewals expenditure without a full business case. Network Rail says this is no longer the case and has pointed to the introduction of stage gate investment approval process in June 2003 as supporting evidence.

2.17 Network Rail will set out its approach to prioritisation of work through revisions to its stewardship criteria (which were published in March 2003). This includes consideration of the alternative, proposed by the SRA on 30 September 2003, that Network Rail adopt a two-tier approach to maintenance and renewal levels, with spending concentrated on busier lines.

Risk management processes which prioritise value for money are being developed

2.18 Since taking over management of the network, the Network Rail Board has taken steps to establish processes to identify, evaluate and manage key strategic risks. These include agreeing a risk management policy together with a strategy for its delivery; developing risk management processes and systems; identifying the key business risks; and agreeing a regular internal audit of the risk management system and the effectiveness of internal controls. In October 2003 Network Rail introduced a tracking system for progress on meeting internal audit recommendations, which Railtrack had not put in place.

2.19 Together with these initiatives, Network Rail is developing an Integrated Risk Management System. Steps are being taken to embed risk management into all of its operations, and to ensure that managers have responsibility for implementing risk management within their functions. Network Rail recognises the importance of effective internal control and risk management systems, and progress is gradually being made. For example the top 17 strategic risks were identified but quantification of each of these risks did not feed into the March 2003 Business Plan. Network Rail told us that by October 2003 extensive further work had been done to quantify these risks and that this would feed into the next Business Plan.

2.20 These developments suggest that gradual progress is being made but from a low base. Further improvement work still needs to be undertaken if a step change is to be achieved. In particular:

- Network Rail has yet to assess fully the risk (and associated impact) of failing to develop a convincing value for money assessment of the relative costs incurred and benefits expected from different activities in order to prioritise expenditure. Its management plans expressed this activity as an aspiration for 2003/04.
- Network Rail will be setting out how it intends to improve on Railtrack's performance in reducing the knock-on delays associated with incidents, as required by the Regulator following a performance summit held in December 2003.
- Network Rail had not initially set out how it intended to manage all the financial risks it faces, although a major risk has been partly addressed following Board approval of a short term hedging strategy in June 2003 and a treasury committee was formed in November 2003 to oversee the management of financial risks. The hedging strategy was further extended in January 2004.

Network Rail faces major personnel challenges

2.21 Part One of this report described Railtrack's problems following a loss of experienced staff to the private sector. This section examines how Network Rail aims to tackle the problem and what it is doing to drive forward culture change within the company.

Network Rail is tackling the shortage of skilled and experienced staff

2.22 There are a number of constraints acting on Network Rail's labour market. These are:

- **Specialist skills:** The skills and competencies that Network Rail requires of many of its staff are of a specialist nature and in short supply. For example, within the United Kingdom, signalling operations staff are employed by Network Rail, exclusively, and are not available from an external market.
- **A lack of structured training and development:** Although British Rail had well structured training schemes, the privatised industry has tended to rely on the development of skills and expertise through experience rather than structured training. Network Rail has reported a shortage of engineers because of limited recruitment and training within the industry at a junior level - companies are tending to source staff from each other rather than introducing new blood into the industry.
- **Uncertainty within the industry:** The UK rail industry has faced many recent changes including the creation of Railtrack and its privatisation, the decision to put it into administration and its purchase by Network Rail. Network Rail's view is that workload uncertainty across the industry has discouraged investment in staff and instead there has been an increase in the use of casual labour.

2.23 Network Rail has two key initiatives in progress to deal with these problems, which are also indirectly assisted by a third initiative linked to bringing maintenance in-house (see paragraph 2.14):

- Jointly working with contractors to increase the proportion of directly employed labour.
- Recruiting engineers from other industries, such as highway engineering, and providing them with appropriate skills through conversion programmes.
- Tightening up of training and lengthening of training periods as part of the process of bringing maintenance staff in-house within Network Rail.

Network Rail told us that two conversion programmes are already established for track engineers and signalling engineers. Both programmes are designed to provide specific training to convert employees with an engineering background into front line engineering staff. A conversion course for front line electrification engineers began in October 2003.

Network Rail needs to drive forward its change management programme

2.24 When Network Rail purchased Railtrack it identified a need to develop a new approach for a not-for-dividend company, which would emphasise openness with stakeholders, collaboration and team working and would focus on the core values of safety, performance and excellence. **Figure 7** provides details of the four main action plans Network Rail is implementing as part of its initiative to 'Carry out organisational change'. The scale of the organisational change required is extensive, involving 12,500 staff, 18 geographical areas and thousands of supply chain resources. Network Rail's plans are built on a short term 18 month framework, and a longer 3-year framework.

2.25 In particular, Network Rail aims to change the culture it inherited from Railtrack under its action plan to implement culture transformation. Network Rail considered that the Railtrack culture fostered poor value for money and risk management with an inadequate focus on customers and low staff morale. Network Rail's plan included briefings to senior management and employees, and teambuilding workshops which were all completed by March 2003. Since it took over the company, Network Rail has also taken positive steps to identify the extent of the culture change required within old Railtrack and in February 2003 used the Gallup Poll Q12 survey[5] to assess staff engagement in the change management process and measure job satisfaction. Initial results, as expected, showed a very low level of commitment to Network Rail's change initiatives and indicated resistance to change in the organisation. The intention is to use the Q12 survey programme as an on-going tool to assist in measurement of the success of the change management process on a periodical basis. The second survey took place in December 2003 and Network Rail finds that the results indicate a significant improvement.

2.26 Pending problem identification through the results of the Q12 survey, Network Rail's original action plan had not set out how problems would be addressed, and how cultural transformation would be implemented. The company held Chairman's employee forums across the company until April 2003 but Network Rail had not set out in its action plan what else it would then do to drive forward cultural transformation and improve internal management controls. Following the Q12 survey, Network Rail's middle management teams prepared action plans to address the identified issues. In October 2003 Network Rail announced a move away from the previous geographic structure with a major corporate restructuring on a functional basis. This intends to simplify the organisation, reduce management overheads and streamline decision-making. But it also aims to lower the resistance to change identified by the Q12 survey. Another initiative is a change to the performance appraisal system for managers to encourage them to engage staff in the change management process and to improve morale.

7 Network Rail's action plans to carry out organisational change

Implement Organisational Structure Change	Implementation of new regional structure and new maintenance programme to ensure that the organisation is correctly aligned and that business approaches are standardised across the organisation.
Implement Culture Transformation	Employee engagement programmes including the Q12 survey (see opposite) and employee briefings and team building workshops for senior managers.
Performance Management Human Resources	Ensuring that all managers have a clear understanding of their role, using an accountability matrix, role profiles and an incentive plan.
Develop Manpower Resource Plan	Better long-term planning to make best use of resources through the development of a manpower planning system.

Source: 'Action Plans Explained', Network Rail

5 *Gallup's Q12 Survey has been developed by the Gallop organisation and used by over 800 companies worldwide to measure employee engagement with their company. It consists of 12 questions that measure employee engagement and link to relevant business outcomes, including retention, productivity, profitability, customer engagement and safety.*

2.27 The available evidence therefore suggests that, having aspired to change the Railtrack culture, Network Rail is picking up the pace to drive forward that change and is moving in the right direction. Office of Government Commerce guidance on implementing organisational change emphasises the importance of good leadership and clear accountability for change.[6] Reporting to the Deputy Chief Executive, the manager responsible for taking Network Rail's change programme forward is supported by an executive committee of the Board. The Chairman told us that the size of the challenge and the resistance within the organisation, meant that the change programme was an over-riding priority that would be driven forward vigorously by the Chief Executive and other Board members.

Co-operation between Network Rail and its customers, the train operating companies, is improving

2.28 Evidence so far is that co-operation between Network Rail and its customers, the train operating companies, is improving. For example local output commitments between Network Rail and individual train operating companies should lead to better alignment of incentives between the parties, as Network Rail will be committed to delivering a level of performance that allows the train companies to meet their targets. The train operating companies are satisfied that the Regulator's new model contracts for track access, which are due to become enforceable in 2004, will also give them the power to hold Network Rail to regional performance targets. Alongside a clearer specification of what Network Rail has to deliver, the contracts generally provide stronger remedies for when things go wrong.

2.29 The Regulator has taken other measures to improve co-operation between Network Rail and its customers, for example a binding code of practice for dealing with those who depend on the network operator encouraging the timely flow of needed information between the parties. Representatives of the train operating companies have told us that they are willing to co-operate with Network Rail if it proposes new ways to save money, and there are examples where this has happened. On the other hand it is not clear how pro-active the train operators are in suggesting new approaches to Network Rail. Network Rail's new functional structure is intended to encourage better communication and will, in some cases, lead to combined control rooms replacing adjacent control rooms. The first such integrated control centre opened in February 2004 at Waterloo.

An over-arching incentive for delivery of key performance results could be beneficial

2.30 The following paragraphs suggest that at present some of the incentives operating on Network Rail and its senior executives are complex to calculate and do not always encourage management focus on overall longer term operational and financial performance. A greater management focus could be achieved if an over-arching financial measure of performance was adopted, as in some other industries.

Internal Key Performance Incentives are not easily understandable, and do not specifically encourage value for money

2.31 Inappropriate commercial incentives played a large part in Railtrack's problems, so having the correct incentives for Network Rail to perform well is extremely important. Network Rail's own incentive schemes have a direct effect on managers' bonuses and are therefore of key importance. The principles that cover Network Rail's incentive schemes are described in its Incentive Policy, which was produced by the SRA and agreed with Network Rail before October 2002. As required by the network licence, Network Rail produces an annual Management Incentive Plan, which states the bonuses available for executives and senior management and how they can be secured. The Plan is reviewed by an independent expert for compliance with the Incentive Policy, and by the Regulator to ensure that it is in line with the delivery of performance targets. Within these constraints, and shortly after finalising its Business Plan for the coming year, Network Rail sets its own internal targets and their weighting, subject to approval or amendment by the Remuneration Committee, composed of Network Rail's non-executive Directors including one nominated by the SRA.

2.32 Bonuses are obtained by measuring performance against a number of Key Performance Indicators (KPIs). Bonuses are not paid if Network Rail fails to meet the minimum performance levels. Conversely, bonuses can be increased if performance targets are exceeded by a certain amount. **Figure 8a** explains the three KPIs against which performance has been measured. All have an equal weighting. Additionally, the Remuneration Committee has an overriding discretion to reduce or not pay bonuses, for example, if it considers performance to be inadequate. **Figure 8b** suggests that the financial aspect of Network Rail's Management Incentive Plan for 2003/04, which the Remuneration Committee intends to be more easily understood by those it seeks to motivate, may appear less challenging than the target set for the previous year.

6 *Office of Government Commerce, Successful Delivery Toolkit, May 2003.*

8 a Key Performance Indicators in Network Rail's 2003-04 Management Incentive Plan

Key Performance Indicator	What is measured	NAO comment
Public Performance Measure (PPM)	Percentage of trains operating on time. The target applies to the network as a whole, and is affected by delays caused by other parties than Network Rail.	This is a transparent, output-based network-wide incentive that should encourage Network Rail to co-operate with the train operating companies in reducing delays.
Asset Stewardship Index (ASI)	A weighted average of a number of indicators, e.g signal failures, broken rails, instances of poor track geometry, traction power component failures and stations in poor condition.	This measures the condition of the network. Most of its constituent parts would result in train delays, already measured through the punctuality KPI. By adding important forward indicators the ASI avoids incentivising performance at the expense of the underlying asset condition.
Financial Efficiency Index (FEI)	A function of operating, maintenance and renewals costs. The renewals element includes a measure of value for money.	This target rewards Network Rail's ability to set attainable budgets, but will not on its own encourage an appropriate balance of long term versus short term spending and reduction of costs over time. There is a danger that the index could encourage renewals at the expense of maintenance.

8 b The 2003-04 key performance indicator targets

Measure	02-03 Target	02-03 Outcome	03-04 Target (30pts)	03-04 Enhanced (60pts)	03-04 Maximum (100pts)
PPM	80.5%	79.2%	82%	83%	84%
ASI	1.03	1.01	0.96	0.92	0.88
FEI (£m)	2,181[7]	2,290	2,446	2,383	2,320

2.33 Bonuses are awarded based on which level is achieved subject to the Remuneration Committee discretion referred to in 2.32. Achieving all the target levels triggers a bonus of 18 per cent of salary for the Group Executives, whereas attaining the enhanced and maximum levels brings bonuses of 36 per cent and 60 per cent respectively. The Financial Efficiency Index (FEI) score for 2002/03 was 2,214 exceeding (and therefore missing) the target level. However, if this score were to be maintained, it would be sufficient to achieve the maximum level for 2003/04 - but because of the higher planned level of transitional expenditure this maximum level will only be easier to achieve if spending budgets are cut back.

2.34 Our consultants examined the incentives used by Glas Cymru, the Welsh Water company that is also a Company Limited by Guarantee. Glas Cymru's financial efficiency incentive measures growth in reserves - improved performance and efficiency will lead to growth in reserves, which can be used to reduce customer bills. This measure, which also reflects some requirements sought by the providers of private finance, focuses on the financial outputs that Glas Cymru is trying to achieve.

2.35 We are also aware that in many industries over-arching financial targets, rather than targets concentrating on specific activities, encourage more efficient use of funds. The oil industry uses cost per gallon of refined oil for each refinery, and the air traffic industry uses cost per aircraft kilometre. Deutsche Bahn, the German railway company that operates both trains and network, has the target of reducing its price per train seat kilometre. A cost per train or per train seat kilometre measure, as well as encouraging financial efficiency, also allows for the fact that an increase in train kilometres (and therefore an increase in usage of the network) will lead to higher maintenance and renewals costs. Such a measure allows for international and domestic regional comparisons and can give useful information on trends and cost drivers to help identify and evaluate possible cost and performance improvements and obstacles to improvement.

7 *Target increased by £33 million and 2002/03 outcome by £76 million - in each case for insurance costs.*

2.36 The circumstances of other businesses will differ and although the Department, SRA and Network Rail see some attractions in such a measure they consider it is not possible to develop a meaningful one in Network Rail's context. Network Rail has said that its next priority is to get to grips with value for money. The adoption of a new way of measuring performance, applied both in business planning and for incentive payments, could also be a powerful mechanism for changing the culture. Network Rail are working along not dissimilar lines in trying to develop a benchmark standard cost for operations, maintenance and renewal that takes account of geological and other variables.

2.37 Network Rail's Management Incentive Plan for 2004/05 includes a long term element, which will be based on performance in each of the financial years 2003/04 to 2005/06, and for each three year period thereafter. The plan will take the form of a deferred cash plan, with awards made only at the end of each rolling period. This move, if correctly weighted, helps to avoid focus on short term issues. The optimal period is a difficult judgement. Over a normal three year period insufficient spending on maintenance work may save money and lead to increased rewards under the plan, but years later translate into increased delays.

A multitude of incentive schemes could lead to a lack of focus on key objectives

2.38 In addition to its own Management Incentive Plan, Network Rail is incentivised by regulatory performance targets and regimes, including monetary penalties. The Regulator agrees that ideally Network Rail should concentrate on a small number of key incentives and considers that all the current incentive schemes are needed.

2.39 Some of the incentives on the company are complex, such as the Asset Stewardship Index, or relate to specific activities, for example possessions. While factors such as deteriorating asset condition may take some time before leading to increased delays, such specific activity-based incentive schemes run the risk that management are not focused on outputs. For example, in 2002/03, while the number of broken rails was reduced by 17 per cent and the number of temporary speed restrictions went down by 28 per cent, delay minutes attributable to Network Rail rose by nine per cent. In short, many of the external incentive schemes may encourage Network Rail to concentrate on certain activities at the expense of others or without regard to the relative costs and benefits. Problems that take time to emerge may be better addressed by the longer term incentive arrangements, such as those Network Rail is currently developing. Network Rail intends, in doing this, also to reflect any refinements proposed by the Regulator.

Part 3

Network Rail's governance and financing arrangements are complex

This part of our report looks at the effectiveness of the current corporate governance of Network Rail. It finds the structure complex, and to be effective many parties need to work effectively together - for example both the Regulator and the SRA, in distinct and different ways, have a responsibility for influencing Network Rail's performance. It also finds that Network Rail's current and planned funding arrangements present a number of challenges to the long term effectiveness of the structure.

Network Rail's members face difficulties in replicating the role of shareholders

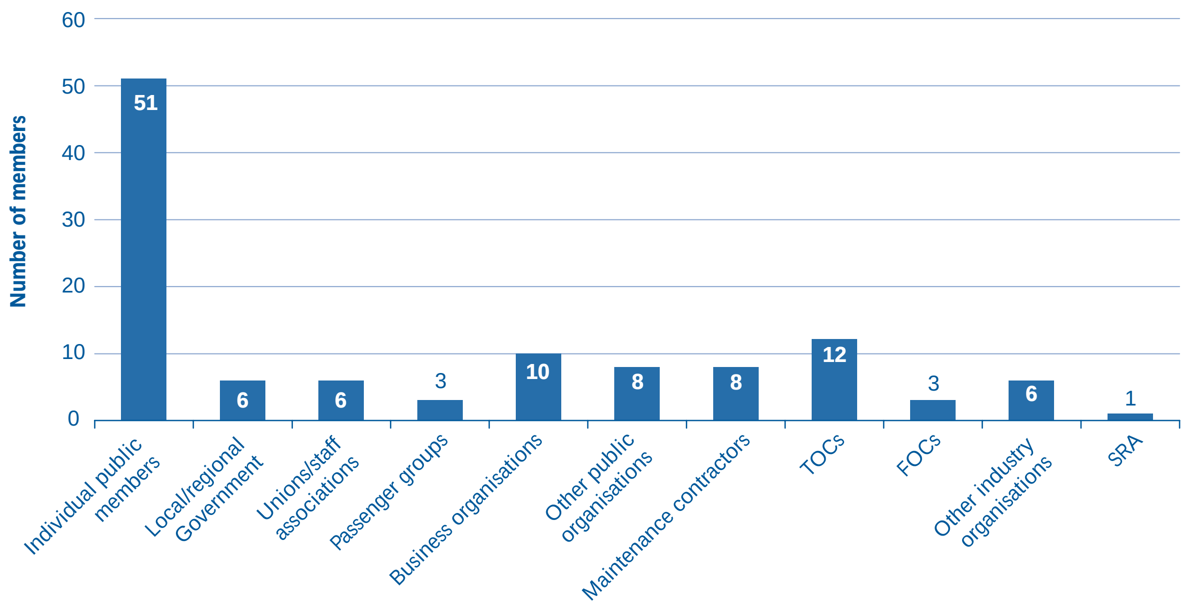
3.1 Network Rail has 114 members (at May 2004), who come from a wide range of groups as shown in **Figure 9**. In compliance with the articles of association, non-industry members are in the majority. Members attend Network Rail's Annual General Meeting and approve its accounts, approve the appointment and reappointment of directors and auditors and the Remuneration Report contained in the Annual Report and Accounts. The Board can also convene other members' meetings if required, as it has already done. They also receive extensive and regular information from the company and compliance with the Combined Code (see glossary) is an obligation under the operating licence. Network Rail intends that members will carry out the corporate governance role normally carried out by shareholders in equity-based companies. Such shareholders would however be focussed on improving share price and earnings per share. Network Rail's members all have the same aim of getting a better rail network, but there could be disagreement on how "better" is defined. For example, passenger organisations will be frustrated by disruptions caused by track possessions while Train Operating Companies are compensated for any delays they cause. Industry members, however, have an obligation to act in the best interests of the objects of company and not in furtherance of their own interests.

3.2 The SRA is a member with special powers and is also the ultimate risk bearer, as well as a major funder of Network Rail. Under previous regulatory settlements, the SRA provided direct grants to Network Rail (£996 million revenue grants in 2002/03). Following the Regulator's December 2003 conclusions, the level of SRA grants to Network Rail will rise to a total of £9,348 million over the next five year period. An additional £940 million of grant is provided towards the cost of repaying additional borrowing by Network Rail starting in 2006/07. The total grants are intended to meet an investment test[8] that they correspond to, or are less than, the estimated capital investment. They are then classified accordingly in the Government accounts.

3.3 **Figure 10** shows that while Network Rail members' powers approximate those of shareholders, the members, apart from the SRA, do not have equivalent exposure to risk. In the absence of direct exposure to financial risk and in view of different interests, Network Rail's members may not always be motivated to act swiftly to deal with problems. Shareholders often mobilise after a sharp fall in the share price (or after profit warnings or poor dividend payments) - not always as in the case of Railtrack before bankruptcy looms. Along with analysts' reports, profit warnings and dividend cuts, shareholders are able to see falls in the share price as a sign of possible problems. There is no equivalent mechanism for Network Rail's members. Given their early access to company information and the frequent media focus on Network Rail, the members, however, would be likely to see many of the same external indicators that move share prices and disturb analysts.

8 *The test adheres to principles set by the Office for National Statistics.*

9 Distribution of Network Rail's members across stakeholder groups



Source: National Audit Office Analysis

10 A comparison of the risks, rewards, interests, access to information and powers of a typical shareholder with a Network Rail member

	Ordinary Shareholder	Network Rail Member
Risks, Rewards and Interests		
Exposure to financial loss or gain	✓	✗
Other rail industry financial interests (such as employment by or a shareholding in another industry participant)	variable	variable
Potential non-financial loss or gain	variable	✓
Access to information		
Daily price information	✓	✗
Access to company information	✓	✓
Powers		
Opportunity to vote at AGM	✓	✓
Opportunity to call EGM	✓	✓
Ability to remove directors	✓	✓
Party with special powers	variable	✓(SRA)

Source: National Audit Office Analysis

The SRA's network spending priorities influence Network Rail but do not override the regulatory framework

3.4 As part of the access charges review the SRA produced a strategy document, 'Specification of Network Outputs', setting out its view on spending priorities for the network (a 'differentiated network'). The Regulator's access charges review conclusions stated that he felt it would be inappropriate for him to prescribe a rigid framework of route differentiation and that Network Rail should make these judgements itself. This makes the SRA reliant on Network Rail's own commitment to the goals to which the SRA is committed.

3.5 Generally speaking, an SRA specification can only be implemented if the Regulator decides to establish appropriate charges and incentive schemes to encourage Network Rail to achieve the SRA's desired performance levels, because the Regulator has his statutory duties to take into account. For example, in December 2002 the SRA requested that the Regulator remove the volume incentive (which rewards Network Rail for allowing more trains to be run on the network). The Regulator did not agree because he thought that removing the volume incentive would send a message to Network Rail that increasing, or making optimal use of, network capacity was no longer an important policy goal. The SRA also identified potential savings that could be made from scheduling lengthier periods for work on sections of the network (known as possessions). The Regulator was willing to conduct a further review of potential savings from longer possessions, which he expects to do in the next two years.

3.6 The SRA's statutory duty to obtain value for money gives it a role in ensuring that the funding of Network Rail, which it stands behind, is used effectively. It had, but from March 2004 no longer has, a limited role in setting the policy for the Management Incentive Plan. To encourage Network Rail to operate effectively, if the company draws down more than 5% of a standby loan provided by the SRA (and intended to act as a last resort facility) the Chairman and Chief Executive must resign unless both the SRA and the Board of Network Rail vote to retain them. More details of Network Rail's funding arrangements are at Figure 14. There is little direct action that the SRA can take before this point is reached, as use of credit facilities has not been linked to milestones such as performance improvement or bonus payments. In addition, the SRA might be reluctant to remove the Chairman and Chief Executive, as the Office for National Statistics has indicated that the possible consequences, but only when accompanied by financial failure, could lead to it reclassifying Network Rail as a public sector body in the National Accounts, upon which the Government's public sector fiscal measures are based.

The regulatory regime was designed for an equity-based company

3.7 The National Audit Office previously examined the performance of the Regulator in its report 'Ensuring that Railtrack maintain and renew the railway network'[9]. The report made a number of recommendations about how the Regulator monitors Railtrack's performance and sets effective incentives making clear the need for an agreed baseline for performance in maintaining and renewing the network and the need to develop a sufficient register of asset condition. Monitoring and incentivising performance remain just as relevant but the environment in which the Regulator's incentives operate has changed following the replacement of Railtrack by Network Rail, which has a different corporate structure.

3.8 The Regulator's penalty and incentive schemes were originally designed to have an impact on Railtrack's earnings, thereby affecting the value of shareholders' investment and ultimately the actions of its Board. After expressing concern that the existing regime would have less impact on a non-share company, the Regulator concluded that the penalty and incentive schemes still work by increasing the ultimate threat of management change (through the cumulative impact on earnings) that would arise if the use of SRA contingency funds exceeds a certain level, as described above. Before reaching this threshold the Regulator considered the Management Incentive Plan to be a worthwhile tool, but not in itself sufficient for motivating Network Rail. The plan's effectiveness will depend to a large extent on its impact on directors' remuneration, and Network Rail's management have said that they are incentivised to generate a surplus so that they can deliver better performance. The public transparency about the company's performance reinforces these management incentives.

9 *'Ensuring that Railtrack maintain and renew the railway network', HC 397, 1999-2000.*

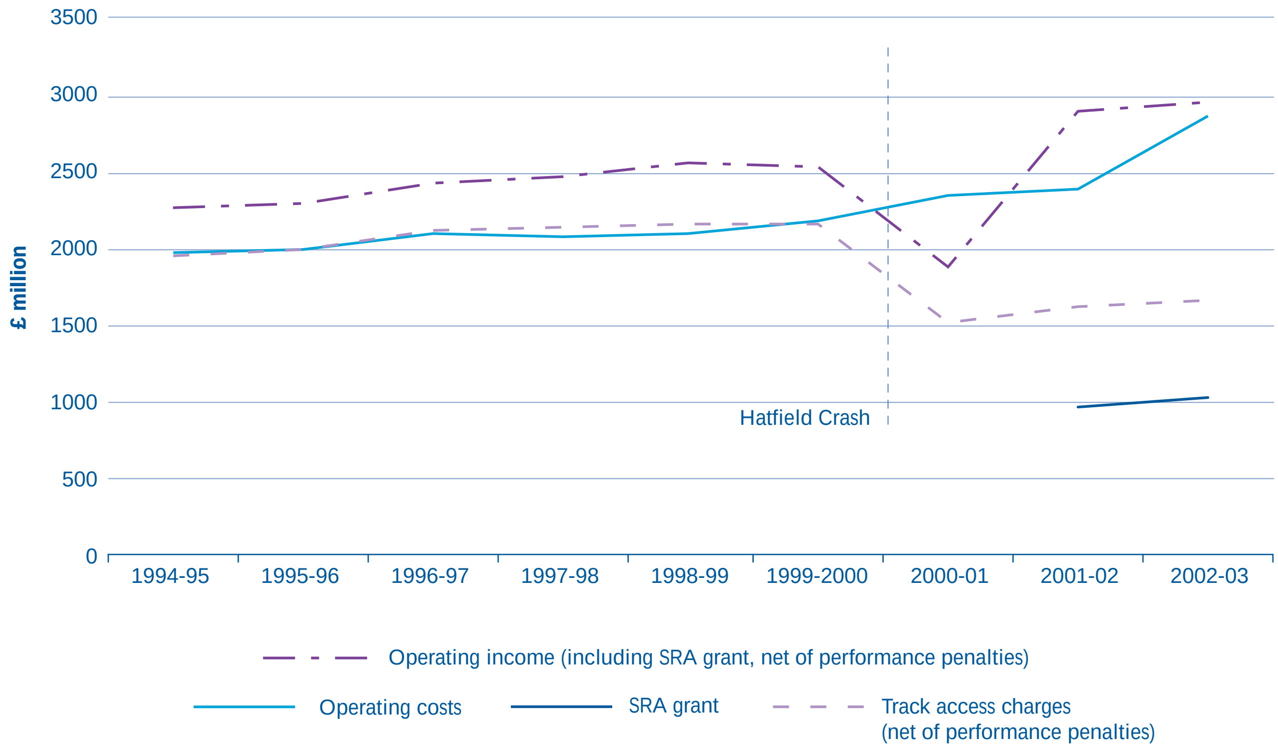
Although the funding regime is now clear, the long term funding costs are unknown

3.9 This section shows that funding needs and debt have risen. Although the outcome of the access charges review gives Network Rail greater certainty of income, the source and cost of finance has not yet been placed on a long term footing. As **Figure 11a** shows, the costs of running and repairing the network have increased considerably since privatisation in 1996. Before the Hatfield derailment, the cost of maintaining the network was met through track access charges and Railtrack made an operating profit varying from £300 million to £400 million per annum, including other income such as the leasing of stations to train operating companies. After Hatfield, Railtrack had to increase maintenance and renewals expenditure, and it also suffered a loss in income, because the speed restrictions it placed on the network, allied with the increased number of track possessions it made in order to repair track, contributed to large performance penalty payments reaching £591 million in the year to March 2001.

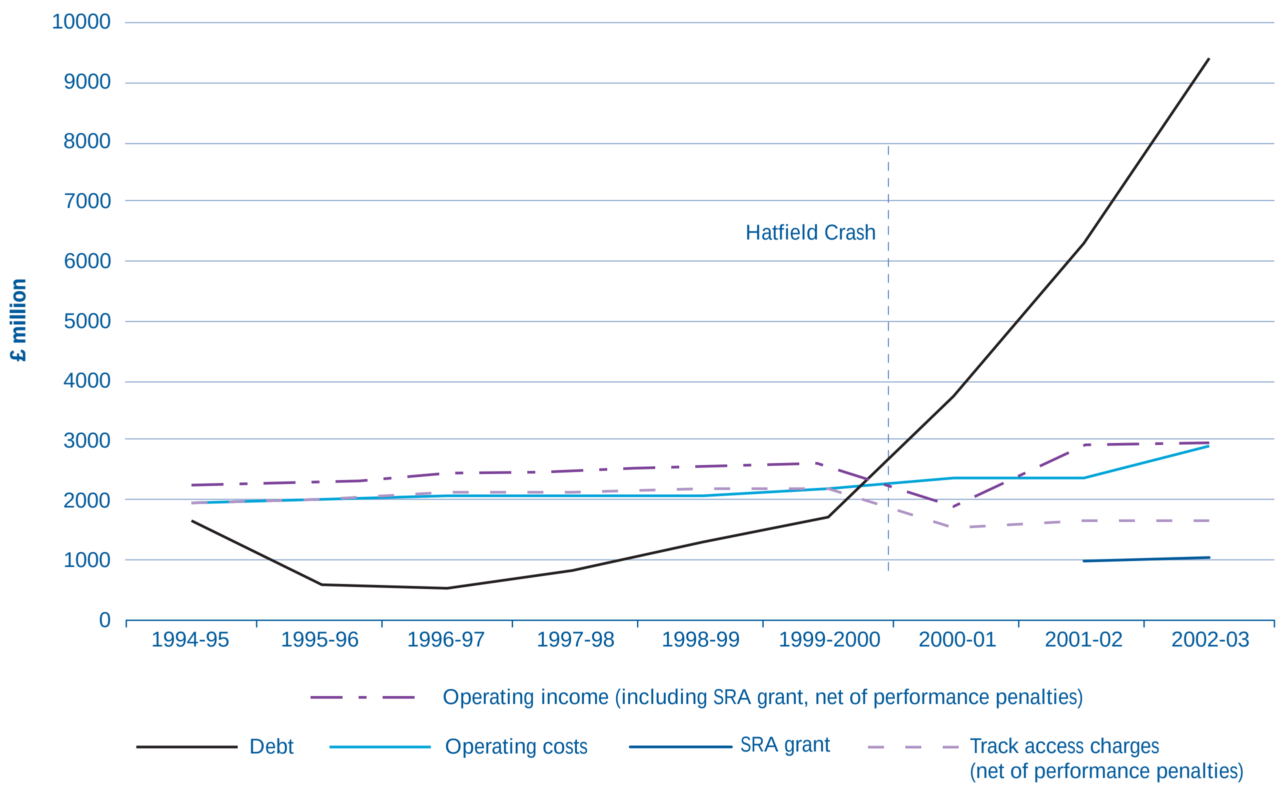
3.10 This increased the funding needs and the SRA started to make direct grants to Railtrack in 2001/02, with the Regulator's consent, as a way of paying part of the present and (from April 2001) agreed future track access charges. Bringing forward such revenue helped prevent Railtrack breaching the conditions of its existing loans, and allowed it to raise new debt to deliver existing enhancement projects. In spite of these grants, and because operating costs continued to rise during Railtrack's period in administration, as **Figure 11b** shows, Railtrack's net debt has risen from £585 million at privatisation to £9,404 million by March 2003. The Regulator has concluded in his access charges review that Network Rail should allow for expenditure of £22.2 billion on operating, maintaining and renewing the network for the five years to April 2009.

11 a Network income and operating costs since 1996

In both 11a and 11b the figures from 1994-95 to 2000-01 have been taken from Railtrack Annual Report and Accounts and figures from 2001-02 to 2002-03 from Network Rail Annual Report and Accounts.



11 b Network income and operating costs and debt since 1996



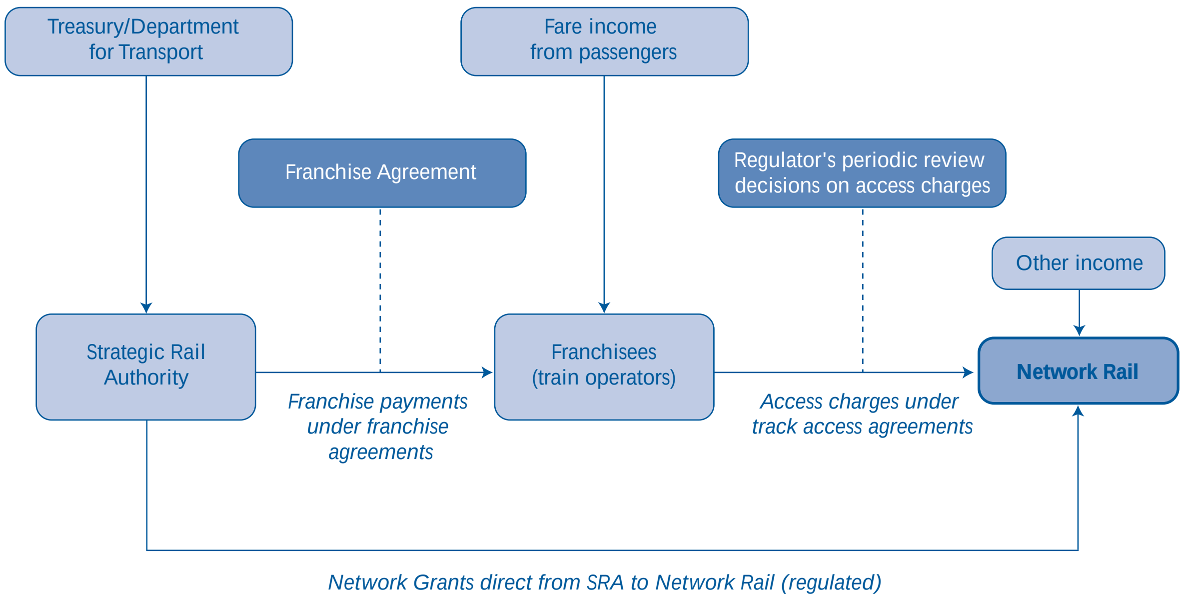
Source: National Audit Office analysis of data reported by Network Rail/Railtrack

Network Rail's main income consists of track access charges and grants

3.11 As **Figure 12** shows, Network Rail currently receives its main income through track access charges from Train Operating Companies and grants direct from the SRA. The Regulator determines the level of Network Rail's income for operation and maintenance (including renewal) and enhancement by calculating what Network Rail needs to spend to operate efficiently, the level of profit it should be allowed to make, and hence the level of funding it needs. For the five year period ending in April 2009, the Regulator has allowed a rate of return on the RAB of between 6.5 and 7 per cent. The rate of return allowed at previous reviews has been 8 per cent and the new lower range allows for the reduced risk in the new structure.

3.12 The Regulator approves additions to the RAB in recognition of increasing asset value provided that Network Rail's capital expenditure in renewing and enhancing the network has been economic and efficient. The Regulator said, however, that he was not minded to test expenditure incurred between his last periodic review and Network Rail's acquisition of Railtrack (2001/02 and 2002/03) in this way, as he did not wish to hold Network Rail responsible for its predecessor's inefficiency. In addition, as a consequence of the Government decision to pay out Railtrack's creditors in full, the Regulator felt that he had no choice but to allow for any inefficiencies in spending by Network Rail in 2003/4 by adding them to the RAB - otherwise Network Rail's ability to borrow the sums of money it needed would be restricted.

12 Railway industry money flows



NOTE

Other income includes freight access charges, property and station income.

Source: Office of the Rail Regulator

3.13 In consequence, **Figure 13** shows that the Regulator has made a number of adjustments to the 1 April 2004 RAB and that only a relatively small proportion (£1.95 billion) of these adjustments are due to network enhancements; some £7,500 million adjustments relate to capitalising past overspending and shortfalls in revenue. Figure 11 shows these costs rising during the period that Railtrack was in administration and during Network Rail's first year. In his access charges review of 2000, the Regulator estimated that Railtrack's operating expenditure, maintenance and renewals costs in the period 2001/02 to 2003/04 should total around £9,500 million (£10,300 million in 2002/03 prices). They are now forecast to reach £15,000 million. Much of this additional spending derived from safety related expenditure following the Hatfield crash. In the event of a future crisis, if overspends were also added to the RAB, this would allow a further increase in the debt burden which passengers would have to pay for. Costs which are not related to productive investment should normally be met from current income or from reserves. The Department considers that this case differs in that current income / reserves also come from the passenger or taxpayer. The risk of an excessive debt burden would be mitigated if Network Rail held its indebtedness to levels well below the maximum permitted by its Regulatory Asset Base.

Network Rail borrowing, linked to SRA grants and credit support, mobilises supplementary funding

3.14 In the absence of SRA support, the level of Network Rail's future borrowing is limited by its projected revenues and therefore indirectly by the size of its Regulatory Asset Base (RAB). Lack of asset knowledge meant uncertainty about costs and therefore about the extent of borrowing that would be needed. There was also uncertainty about the timing of repayment from the proceeds of a long term borrowing programme. Because of this uncertainty, in the short term Network Rail's borrowing limit was determined by the level of borrowing the SRA was prepared to support. It was expected that an adjustment to the RAB by the Regulator would enable Network Rail to finance this debt in the longer term without SRA support. The financial structure put in place after June 2002 by Network Rail would not be satisfactory on a permanent basis because it consists of £14,100 million in short term borrowing facilities, from banks and from the commercial paper market.

13 Proposed adjustments to the April 2004 Regulatory Asset Base

	2001-02 (£m)	2002-03 (£m)	2003-04 (£m)	Cumulative total (£m)
Opening RAB				**7333**
Other enhancements in RAB	176	201	413	789
Additional stations and depot renewals	43	39	20	103
Adjustments				
Volume incentives (passenger and freight)	56	15	22	93
Broken rails incentives	21	21	276	318
Railway Safety cost passthrough	1	-1	5	5
Retiming of SRA grants and other deferred income	-	-	-	360
Aggregate overspending	990	1705	2963	5658
Shortfall in revenues in 2001 to 2004	-	-	-	1875
Ring-fenced enhancements	570	290	303	1163
Annual total	**1858**	**2271**	**4001**	
1 April 2004 RAB				**17696**

Source: Office of the Rail Regulator Final Conclusions p.176 Table 12.3

3.15 The banks, providing £9,000 million on a temporary or 'bridging' loan basis, charge a small margin over their cost of funds, starting at 0.1 per cent for the first year and increasing to 0.2 per cent if the loans are still outstanding after two years. Many of the banks were former lenders to Railtrack and willing to accept competitively low lending margins above LIBOR, although the all-in cost is still some 20 to 35 basis points higher than short term public sector borrowing rates[10]. Network Rail has supplemented this by issuing commercial paper at some 5 to 10 basis points above public sector rates. As a result the annual cost has been held down to about £20 million to £35 million per year more than if Network Rail had borrowed from the public sector.

3.16 The SRA currently supports the bulk of Network Rail's commercial finance facilities (£14,400 million) and provides standby facilities. In aggregate this support totals £21,050 million as set out in **Figure 14** and therefore controls the amount that Network Rail can borrow both for investment purposes and for working capital purposes. The initial short term debt was to be repaid and re-borrowed annually, and in March 2004 has been partly substituted by Medium Term Loan Notes with maturities varying from two years to five years. The SRA provided £7,000 million of standby facilities to support contingency funding (Tranches A and B). In seeking Government approval for this contingency funding, Network Rail and the SRA emphasised that the standby facilities were unlikely to be drawn. In particular, Tranche A provides a standby loan of £4,000 million intended to perform the function of an 'equity cushion' (originally intended to be replaced by the reserves that Network Rail aspires to build from any operating surplus).

10 At 27 June 2003 public sector six month rates were 3.4375 per cent (Public Works Loan Board rate) compared to LIBOR at 3.585 per cent.

14 Network Rail acquisition & initial finance arrangements

Facility	Total used or available (£ billion)	Amount drawn at 31 March 2003 (£ billion)	Expiry or transfer date[3]	Function
SRA acquisition grant	0.30	n/a	n/a	Payment of part of the purchase price of Railtrack
DfT tax indemnity	0.15	n/a	n/a	Offset tax liabilities arising as a result of the sale of Railtrack
Bridge facility[1]	9.00	8.14	2005	SRA support to enable Network Rail i) to help fund acquisition of Railtrack ii) to repay certain existing Railtrack creditors iii) to provide short term working capital
EIB/KfW	1.05	1.05	2005	SRA support to enable transfer from Railtrack to Network Rail of loans from the European Investment Bank and the Kreditanstalt für Wiederaufbau
Legacy Working Capital Support Facility[2]	4.00	nil	2005	SRA support to allow Network Rail to raise short-term funds to finance legacy costs not covered by the bridge facility
Opco facility Tranche B[2]	3.00	nil	2005	Network Rail can borrow direct from the SRA under this facility or borrow against it using commercial banks. The facility is designed to cover cost overruns in excess of the Regulator's assumptions
Opco facility Tranche A	4.00	nil	2052	Network Rail can borrow direct from the SRA under this facility or borrow against it using commercial banks. The facility is designed to act as substitute equity
TOTAL[4]	**21.05**	9.19		
Legacy project support agreement[2]	5.00	nil	2005	Provides SRA grants for Network Rail to cover legacy costs not covered by the Regulator's 2004 interim review

NOTES

1 During March 2004 part of this bridge facility was replaced by Medium Term Loan Notes issued to a value of about £6 billion (out of a £7 billion facility) at prevailing exchange rates.

2 Network Rail's use of these three facilities could not exceed a total of £8 billion, however as of March 2004, working capital up to £3 billion can also be substituted from Medium Term Loan Notes. Providers of the Bridge facility can put the loans back to the SRA.

3 Latest possible date for transfer to finance subsidiary or expiry date (after extension).

4 Total excludes the acquisition grant, tax indemnity and legacy project support agreement.

Source: National Audit Office analysis supported by SRA data

3.17 £17,000 million of the support package, part of which was due to be renewable in June 2003, could be extended by up to two years, and is in place as at April 2004. The Department had expected that by this time Network Rail would have sufficient knowledge of its business (and envisaged future track access charges) to be able to develop a structure for securing sufficient long term debt to render the short term credit facilities unnecessary. On 4 February 2004 the Secretary of State informed Parliament that this support would be extended to March 2009, without increasing the total amount, to permit up to £7,000 million of medium term facilities to replace the equivalent amount of short term facilities.

And there is little scope for risk transfer to lenders

3.18 Network Rail plans to raise longer term funds through "securitising" its revenue from track access charges. Given the scale of Network Rail's debt, it needs to secure a strong credit rating. To achieve this, a corporate borrowing entity[11], designed to be remote from the risk of bankruptcy, will issue bonds secured against a first call on the track access charge and grant revenues with the intention that no identifiable operating risk is transferred to bond holders. Bond holders will not accept any significant operating risk on such a new business entity, largely because such risks make it hard to predict the level of operating surplus that Network Rail can make. Such operating risks might include cost uncertainty, historically variable penalty payments and failing to meet the efficiency assumptions set by the Regulator.

3.19 Network Rail plans to raise £15,000 - 20,000 million over the next two to three years through the debt issuance programme. Rather than raise more expensive forms of debt that explicitly share aspects of the operating risk within Network Rail's control, Network Rail plans to issue additional securitised debt as and when contingent spending needs arise. Also, because market conditions can prove volatile, Network Rail considers that it may be advantageous to issue bonds in stages if its planned long term bond issue is delayed or available for less than the total requirement. Network Rail said that details of its funding plans were commercially confidential but that it did not expect that the SRA would be providing a direct guarantee.

3.20 The Regulator agreed in March 2004, that the SRA should make grant payments on an unconditional basis as part of Network Rail's regulated revenues. This alteration provides Network Rail with revenues of £9,348 million over the five years to April 2009. The Regulator has been satisfied that this does not dilute Network Rail's obligations to its customers or under its licence. Lenders can view this as a Government undertaking to pay specified amounts on specified dates. The amendment should incidentally allow the future cost of finance to be lower.

3.21 Following these changes, Network Rail, the Department and the SRA are confident that a debt issuance programme will go ahead in 2004. The outcome of the access charges review, statements by the Government and Network Rail, and the structure of the borrowing arrangements will need to satisfy rating agencies and lenders in principle that Network Rail will be able to meet its debt service obligations on time and in full and that:

- The track access charges set to take effect in April 2004, and those set at future reviews, will provide Network Rail with adequate surpluses to provide robust contingencies against cost overruns; and
- Funding for Network Rail will be sufficient to cover not only the future level of operating expenditure, maintenance and renewals costs, but also additional cost commitments from taking delivery of enhancement projects if any were to be implemented through special purpose vehicles. No such major project is scheduled before April 2009 and thereafter would be subject to contractual arrangements between SRA and Network Rail along with appropriate funding.

3.22 As a consequence of the interim financing arrangements, at March 2003, only seven per cent of Network Rail's debt was at a fixed interest rate. This low level of fixed rate debt could have had a significant impact on Network Rail's finances were long term debt rates to rise. Since June 2003, however, Network Rail has been reducing its exposure through forward hedging of currency and interest rates under a Board approved policy. The Medium Term Note issue, launched in March 2004, further stabilises the position.

3.23 Network Rail has the opportunity to arrange long term funding with extended periods of grace before it is required to make any repayment of the principal sums due. Starting at a future date, not yet determined, repayments are however expected to be completed before expiry of the average useful life of the track and signals renewals. The profile eventually selected will have an impact on track access charges in a future period.

11 The SRA intends to indemnify the corporate borrowing entity against any changes in Government policy that affect its ability to make debt service payments.

Glossary

Access charges review	A review carried out by the Regulator under Schedule 4A of the Railways Act 1993. Such a review establishes not only the levels of charges that Network Rail is permitted to levy on franchised passenger train operators, but also the outputs - including performance - which it is required to deliver for these charges, its required levels of efficiency and the allowed rate of return, as well as the contractual and regulatory incentives and penalties required to encourage it to achieve these targets.
Administration	Period from 7 October 2001 to 3 October 2002, during which time Railtrack plc was handled by administrators (Ernst & Young) appointed by the High Court.
Asset Stewardship Index (ASI)	This index covers a range of activities and is being introduced following the 2003 access charges review.
Bonds	Method of raising finance whereby bonds are sold to holders who are guaranteed a fixed or floating index-linked return on the face value of the bond each year.
Broken rails incentive	Financial reward set by the Regulator, in 2000 whereby repair of broken rails in excess of a certain target resulted in additions to Network Rail's Regulatory Asset Base.
Business Plan	Document setting out an organisation's financial and operational plans for future years. In the case of Railtrack, required annually, in a form prescribed by the Regulator under Condition 7 of the company's network licence.
Combined Code	Regulations (see London Stock Exchange Listing Rules) that aim to enhance the effectiveness of the Board and improve confidence in management by raising the standards of corporate governance.
Commercial paper	Debt issued to finance short term needs. The interest charge generally reflects the low risk.
Company limited by guarantee (CLG)	A CLG has no shareholders but Members who offer a nominal guarantee as the limit of their liability. All profits generated are reinvested in the company as there no dividends to pay.
Concordat	An agreement of 25 February 2002 between the Regulator and SRA to clarify their jurisdictions and aid cooperation.
Contingency funds	Funds held in reserve to meet higher than expected costs.
Corporate governance	The processes by which companies ensure Directors are acting in the best interest of the company.
Corporate incentive schemes	Incentive schemes set by the Regulator which affect the finances of Network Rail rather than the salaries of its directors and managers.
Credit rating	Rating given by various private agencies to give an indication of the creditworthiness of a company.

Department for Transport (DfT)	The Department for Transport's objective is to oversee the delivery of a reliable, safe and secure transport system that responds efficiently to the needs of individuals and business whilst safeguarding our environment. As part of this overall objective, the Department aims to improve rail punctuality and reliability and meet rising demand. The Department provides funding to the Strategic Rail Authority and is responsible for transposing the European rail interoperability Directives into UK law.
Enhancement	Development of new or existing assets to improve the performance of the rail network. Network Rail has ongoing responsibility for major new enhancement projects but is no longer expected to take them all forward in-house.
Equity cushion	The SRA standby credit facility of £4bn that provides long-term contingency funds for 50 years.
Extraordinary General Meeting	A meeting of the Board and Members that may be called at any time by at least one tenth of the Members (or the SRA) and which must be held within 7 weeks of such request.
Freight operating companies	Companies operating freight trains on the rail network.
Health and Safety Executive (HSE)	The Health and Safety Executive (HSE) is a statutory Non-Departmental Public Body (NDPB) with Crown status set up under the 1974 Health and Safety at Work Act. It receives funding via the Health and Safety Commission (HSC) from the Department for Work and Pensions, and is effectively the operational arm of the Commission. The HSE advises the HSC on policy and general operational issues to ensure that risks to people's health and safety from work activities are properly controlled.
Hedging	Entering into arrangements in order to reduce the risk of fluctuations in interest rates that would affect existing liabilities.
Her Majesty's Railway Inspectorate (HMRI)	HM Railway Inspectorate (HMRI) is part of the Health and Safety Executive. Its operational and technical inspectors focus on the railway industry and offer guidance, manage the railway permissioning regimes and ensure compliance with the law by inspecting and investigating accidents and complaints. HMRI has been involved in approvals work on the railways since 1840, as an independent authority aiming to ensure public confidence.
Infrastructure	The underlying physical assets of the rail system such as track, signals, sleepers and (stations).
Interim review	Review by the Regulator of Network Rail's charges, income, expenditure, incentives or some other aspect of its business, which takes place in the five year period between his periodic reviews. The 2003 interim review was a full review brought forward from 2006.
Key Performance indicator (KPI)	Targets in the management incentive plan against which directors' and managers' performance is measured.
LIBOR	The London InterBank Offered Rate.

Maintenance	Routine preventative repair and maintenance of Network Rail assets.
Management incentive plan	Scheme whereby Network Rail directors and managers can receive bonuses for meeting or exceeding targets.
Members	A body of people selected or entitled to hold the Board of Network Rail to account over their stewardship of the company. To enable them to do this more effectively members have access to some company information and to Board members.
Model contracts	The Regulator has exercised his powers under section 21 of the Railways Act 1993 to publish a new model track access contract now being put into place as the first generation contracts come to an end.
Network Code	The network code is the central industry-wide commercial and regulatory code for the railways, defining the relationships in matters of timetabling, performance monitoring, network change, changes to rolling stock, the handling of operational disruption and the establishment of local output commitments.
Network Licence	The licence from the Secretary of State for Transport, issued under the Railways Act 1993, which authorises Network Rail to operate the rail network. A seperate license authorises operation of certain stations.
Network Rail Ltd	Network Rail is the owner and, through its subsidiary Network Rail Infrastructure Limited, operator of the railway infrastructure. It maintains, renews and upgrades every aspect of the infrastructure including the track, signalling systems, bridges, viaducts, tunnels, level crossings and stations. Network Rail is a company limited by guarantee. It has no shareholders, but is accountable to members, who do not receive dividends or share capital. All of Network Rail's profits are reinvested into the rail infrastructure.
New Maintenance Programme	Programme introduced by Network Rail, aimed at increasing the efficiency of its asset maintenance.
Not for dividend	Companies such as Network Rail have no shareholders, and do not pay out any dividends.
Office of National Statistics	Body responsible for (amongst other things) classification of organisations as public or private sector bodies.
Office of the Rail Regulator	The Office of the Rail Regulator is a small, non-ministerial government department staffed by civil servants, including a team of experienced railway operational and engineering staff, and headed by the Rail Regulator. The Rail Regulator is an independent statutory office holder appointed by government under the Railways Act 1993. The Regulator receives general guidance from the Secretary of State for Transport under the 1993 Act. The Regulator aims, through independent, fair and effective regulation, to achieve the continuous improvement of a safe, well maintained and efficient railway which meets the needs of its users and to facilitate investment in capacity to satisfy the demands of growth in passenger and freight traffic at the time it is needed. The Regulator's principal function is to regulate Network Rail's stewardship of the national rail network infrastructure.
Operating expenditure	Expenditure incurred in the day to day running of Network Rail, such as staff salaries and administration costs.
Operating risk	The risk a company is exposed to by virtue of undertaking its day to day activities. For example, for Network Rail this would include the risk of incurring penalties under the Regulator's incentive schemes.

Outputs	Specific targets across a range of measures, based on performance and asset stewardship, that Network Rail is incentivised to achieve. These are set by the Regulator with reference to the SRA's targets for the network.
Possessions	Closure of a stretch of track by Network Rail in order to carry out maintenance, renewal or enhancement work.
Railtrack Group plc	A company listed on the London Stock Exchange and the previous owner of Railtrack and other business interests.
Railtrack plc ("Railtrack")	The business acquired from Railtrack Group by Network Rail.
Rail Regulator	See office of the Rail Regulator.
Rail Standards and Safety Board (RSSB)	The Rail Safety and Standards Board (RSSB) was established on 1 April 2003, implementing one of the core sets of recommendations from the second part of Lord Cullen's public inquiry into the Ladbroke Grove train accident. Its prime objective is to lead and facilitate the railway industry's work to achieve continuous improvement in the health and safety performance of the railways in Great Britain, and thus to facilitate the reduction of risk to passengers, employees and the affected public. As part of its role the RSSB establishes and maintains Railway Group Standards. The RSSB is a not-for-profit company owned by major industry stakeholders. The company is limited by guarantee and is governed by its members, a board and an advisory committee. It is independent of any single railway company and of their commercial interests.
Rate of return	The annual return on a capital investment expressed as a percentage of the investment. In the case of Network Rail this is the return on the RAB.
Regulatory asset base (RAB)	The Regulator's valuation of the economic value of the assets owned by Network Rail. The track access charges are set by the Regulator with reference to the RAB.
Regulatory incentive schemes	Schemes put in place by the Regulator and designed to encourage Network Rail to meet defined outputs by offering rewards for improved performance. There are several such schemes; volume incentive, delay incentive, efficient engineer access and the ASI.
Remuneration Committee	The Committee is responsible for determining the remuneration of the executive directors of the Company. It also decides upon the form and content of the executive directors and senior managers' management incentive plan for each financial year with advice from New Bridge Street Consultancy.
Renewals	Replacing and renewing infrastructure assets that are life expired or expected to become life expired.
Ring-fenced enhancements	Budgets for improving aspects of the network that cannot be used for any other purpose.
Risk management	The process of anticipating, quantifying and minimising the likelihood of key risks to the business.
Securitisation	Obtaining debt by guaranteeing, or securing, it against an asset of the company, in the case of Network Rail the future revenue from track access charges.
Standby facilities	The SRA provides a standby credit facility of £3bn for overruns on legacy costs, and a standby credit facility of £4bn to act as a long term contingency buffer (see Equity Cushion).

Strategic Rail Authority (SRA)	The Strategic Rail Authority (SRA) was created under the Transport Act 2000 as a body corporate to provide a single organisation for strategic planning, co-ordinating and supervising the activities of the rail industry, and for the disbursement of public funds. It formally came into being on 1 February 2001. As well as providing overall strategic direction and leadership for Britain's railway, the SRA lets and manages passenger franchises, develops and sponsors major infrastructure projects, manages freight grants, publishes an annual Strategic Plan, and is responsible for some aspects of consumer protection. The SRA operates under Directions and Guidance (D&G) from the Secretary of State for Transport. In Scotland it is also subject to Directions and Guidance from the Scottish Minister for Transport, and is subject to Directions and Guidance from the Mayor of London in respect of services operating within London.
Temporary speed restrictions	Imposing a maximum speed limit by Network Rail on a stretch of track pending possible maintenance work.
Track access agreements and track access charges	Charges paid under track access agreements by the train operating companies to Network Rail to be allowed to use the network. These are set by the Rail Regulator in his periodic reviews. The SRA also pays grants that are equivalent to such charges and the SRA does not have the right to attach additional conditions to such grants.
Train operating companies	The 25 Train Operating Companies (TOCs) are responsible for providing passenger rail services in the UK. The TOCs operate under franchise agreements with the Strategic Rail Authority.
Value for money	Economy - minimising the cost of resources used for an activity, while having regard to appropriate quality; Efficiency - the relationship between outputs (variously expressed) and the resources used to produce them; and Effectiveness - the extent to which objectives have been achieved and the relationship between intended impacts and actual impacts of an activity.
Value per preventable fatality	A theoretical value attributed to a life in order that safety related expenditure can be adjusted where its benefit is not proportional to its cost.
Volume incentive	A reward based target, measured on both the increase in freight and passenger traffic, for increasing traffic on the railways.
West Coast Route Modernisation Project (WCRM)	The project to renew, enhance and upgrade the high speed main line from London to Glasgow.
Working capital	The resources available for day to day management of the company.

Appendix 1 Study Scope and Methodology

Objectives and Scope

- The objective of this study, which follows on from previous NAO reports on the rail network[12], was to examine whether Network Rail has been set up and resourced in a way that is likely to lead to the effective management of the network. In the light of the Government's rail review, announced in January 2004, it looks closely at the challenges inherent in Network Rail's governance and financing framework and whether any changes could incentivise improved management of the network. It also examines the early progress made by Network Rail. We used an issue analysis approach to design the scope of the examination and nature of the evidence required. That is, we set a series of high level audit questions that we considered necessary to answer to assess whether Network Rail is fit for purpose. For each of these questions, we developed a subsidiary group of questions to direct our work and analysis. The high level questions we set were:
  - Did the Department for Transport identify the factors that contributed to Railtrack's problems and the drivers of value for money? (addressed in Part One)
  - Are there early signs that Network Rail can deliver results that meet the Department's objectives? (addressed in Part Two)
  - Will Network Rail's corporate governance structure and its resourcing work effectively? (addressed in Part Three)
- The role of Government policy in the decision to put Railtrack into administration is not examined and to do so would be unlikely to improve insight into the current situation. Performance on major infrastructure projects such as the West Coast Mainline is also outside of the scope of this report.

Methodology

- We collected information and data from a number of sources in order to obtain evidence that would allow us to answer the above questions. In particular, we examined a wide range of documentary evidence. This included reviews of:
  - Network Rail's Business Plans and Updates, Annual Report and Accounts, Network Management Statements;
  - Documents provided by the Department for Transport, including bidding instructions, bid evaluation documents, commissioned reports;
  - Documents provided or published by the SRA including strategy papers, reports, national rail trend data; and
  - Documents provided or published by the ORR including interim review results, consultation papers, and regulatory instruments.

15 Interviews undertaken by the National Audit Office and its consultants

Organisation	Roles consulted
Department for Transport	Head of Network Rail Division and her staff
Strategic Rail Authority	Director Network Regulation
	Corporate Finance Manager
Office of the Rail Regulator	Rail Regulator
	Chief Economist and his staff
Network Rail	Group Company Secretary
	Safety and Compliance Director
	Corporate Planning and Regulatory Affairs
	Change Programme Manager
Health and Safety Executive	Operational Inspector for Network Rail

- We complemented our document review with interviews with key stakeholders. **Figure 15** provides details of the organisations and individuals we consulted:
- We engaged two consultancy firms on the study. Indeco, a team of consultants specialising in strategic management, were employed to examine Network Rail's costs control and funding framework. Vantage Point (then a division of High Point Rendel, business management and engineering consultants) examined:
  - Network Rail's incentivisation schemes;
  - Network Rail's approach to risk management;
  - Corporate governance; and

12 *The Flotation of Railtrack, HC25, 1998-99; Ensuring that Railtrack maintain and renew the railway network, HC397, 1999-2000.*

- Network Rail's plans to change the organisation's culture;

- We set up an external reference panel to advise us on our approach to the study and to ensure that our conclusions were reasoned, balanced and relevant. We consulted the panel on three occasions. At the first meeting we discussed the key issues facing management of the rail network and the overall direction of the study. At the second meeting we reported back on progress and at the final meeting we discussed our field work findings with the panel. The members of the panel were:
  - Lord Berkeley, Chairman, Rail Freight Group
  - Max Brooker, former Technical Director, High-Point Rendel (consultant to NAO)
  - Tony Grayling, Associate Director, Institute of Public Policy Research
  - George Muir, Director General, Association of Train Operating Companies
  - Vinita Nawathe, Policy & Research Manager, Rail Passengers Council
  - John Preston, Director, Transport Studies Unit, Oxford University
  - George Steel, Managing Director, INDECO (consultant to NAO)
  - Chris Stokes, former Director of OPRAF (1993-99) and SRA (1999-2000)

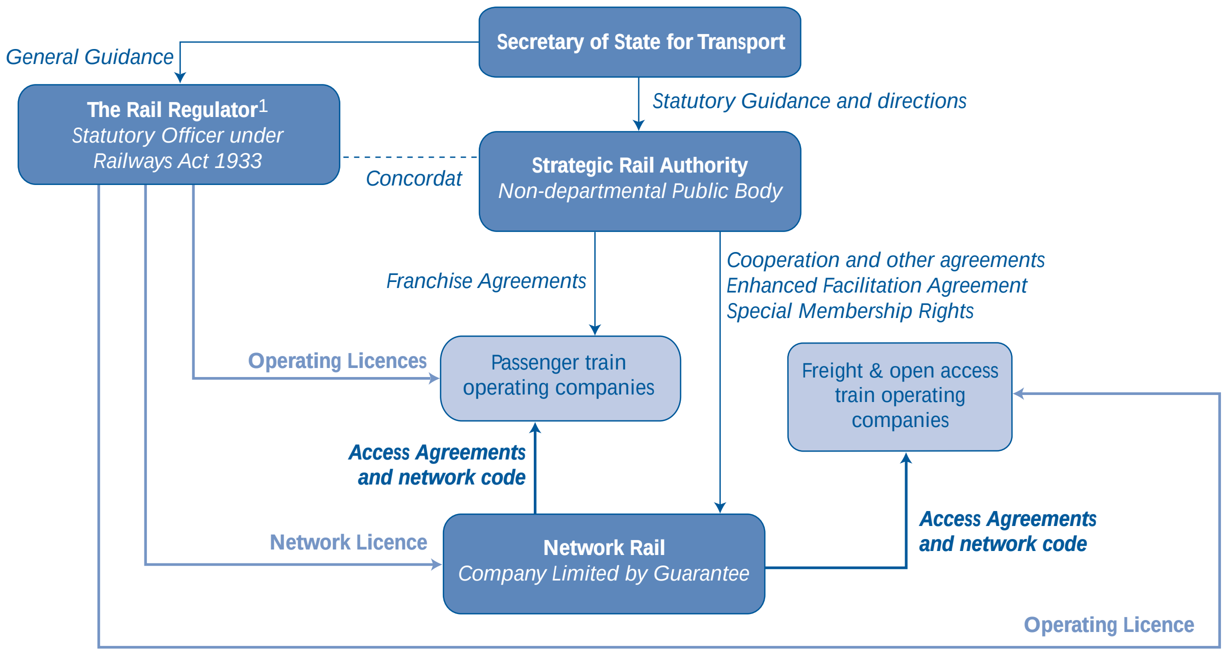
Appendix 2 The structure of the Rail Industry

1 **Figure 16,** in conjunction with the glossary, shows the rail industry structure and the relationships between Network Rail, its customers, the SRA and the Regulator.

2 The Strategic Rail Authority (SRA) was established by the Transport Act 2000, to provide the strategic lead in the development of the railway industry and the prime channel for Government funding of the industry. It is an executive non-departmental public body subject to statutory directions and guidance from the Secretary of State for Transport. Its first Strategic Plan, which sets out the strategic priorities for Britain's railway over the next ten years, was published on 14 January 2002. As well as providing overall strategic direction for the railway, the SRA lets and manages passenger franchises, develops and sponsors major infrastructure projects, manages freight grants and is responsible for some elements of consumer protection.

3 The SRA works closely with the Rail Regulator and a concordat has been drawn up explaining the respective responsibilities and describing how they will work together. The ORR is the economic regulator for the railway industry. It is a non-Ministerial Government Department, headed by the Rail Regulator. He is appointed by the Secretary of State for Transport but is legally independent. He has statutory duties which are his public interest objectives and must inform and guide the exercise of his powers in every respect (except his powers under the Competition Act 1998). In cases of conflict of his statutory duties, he must give weight to each of them and has the discretion to decide in which direction he will go. The Secretary of State cannot issue directions to the ORR but issues general guidance which the Regulator takes into account alongside his other statutory duties.

16 The structure of the Rail Industry



NOTE

1 The Rail Regulator is legally independent of the Secretary of State, approves access agreements and supervises the terms of the network code (see glossary).

2 Her Majesty's Rail Inspectorate and The Rail Safety and Standards Board are not shown on the diagram (see glossary).

Source: National Audit Office

4 Network Rail is a private not-for-dividend company limited by guarantee and, although originally sponsored by them, is not directly controlled by the Department for Transport or by the SRA. Rather, external control of and influence over, Network Rail's activities is exercised by the Regulator through his role as a licensing authority by imposing and enforcing licence conditions, and by the SRA which is a special member of the company and is lender of last resort.

5 Network Rail's main customers are the passenger and freight train operating companies who run train services on the network. These companies pay Network Rail access charges for the right to use the network. Those rights are established by access contracts and the network code, determined by the Regulator. Where Network Rail refuses reasonable terms for access, the Regulator has the power to impose a contract on the company, for the benefit of a train operator. Access charges are set by the Regulator and are Network Rail's main source of income.