

## Foreword



This Business Plan is Network Rail's first since taking responsibility for Britain's rail network. It sets out in detail how we intend to apply engineering excellence to make the railway fit for the long-term and capable of meeting the increasing demands which are forecast.

We are clearly focused on the operation, maintenance and renewal of the railway. We have a clear mission: to apply engineering excellence to make the network safe, efficient, reliable and affordable.

Demand from passenger and freight operators has increased by 30% and 46% respectively in the past seven years. Increases of up to 20% are forecast in the next seven. The railway has an increasingly tough job to do. But, as is well recognised, it has not received the investment it requires and recently costs have increased substantially. So today we have a fragile network, prone to regular failure, struggling to meet the demands placed upon it and costing in excess of that previously allowed. The conclusion is inescapable: we must improve the effectiveness of maintenance in the short-term, determine the required level of renewals over the longer term and improve our efficiency to match that of the best in the world.

Whilst unit costs can be reduced, the network will require significant continuing investment. During the next few months we will be explaining our Business Plan in detail to the Rail Regulator and the Strategic Rail Authority (SRA) so that they can understand and review the funding required to deliver a sustainable railway quickly and cost-effectively.

We have already put in place some significant changes. The Business Plan sets out the initiatives we are taking in all areas of our operations, how we will identify what needs to be done, when it must be done and how best to accomplish the multitude of tasks in a cost effective manner.

All our work is carried out on a live and busy network. We need to reconcile the train operators' requirements with our need for access to the railway to carry out inspection, repairs and renewals safely, to time and at minimum cost. This is not easy. It will require flexibility and co-operation between Network Rail, the passenger and freight operators. It will require our contractors to be willing to work with us to drive down cost. But, led by the SRA, there is a new spirit of interdependence in the industry – an increasing recognition that this is a challenge we all share and can best overcome through partnership and trust.

We are investing in new technology and equipment to give us faster and more accurate information. This will ensure that our work on the railway is more timely and efficient. But there is a great deal to be done, and there is no quick fix. Our expenditure forecasts will be revised in the light of our better understanding of the real state of the network, the application of our new decision support tools and further action to reduce costs through improved efficiency.

In addition to hard work, we will need time and patience. Sustained improvements will take several years. However, we now have clear plans and know the direction we must take. We know the scale of the task and the changes needed to transform the company so that we can deliver a fit-for-purpose, safe and reliable railway at an acceptable cost. In the following pages we set out our plan for applying the expertise and dedication of our staff – and all our colleagues in the industry – to deliver that railway.

A handwritten signature in blue ink that reads "Ian McAllister". The signature is written in a cursive, flowing style.

Ian McAllister (Chairman)

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# Overview

## Where we are now

### Steeply growing demand

Demand for rail transport has been growing fast – up 30% between 1995/96 and 2001/02. Over the next 10 years it is expected to rise from around 39 billion passenger km a year to around 52 billion. Over the same period, freight demand is forecast to rise from 19 billion net tonne km a year to 24 billion.

### A fragile and stretched network

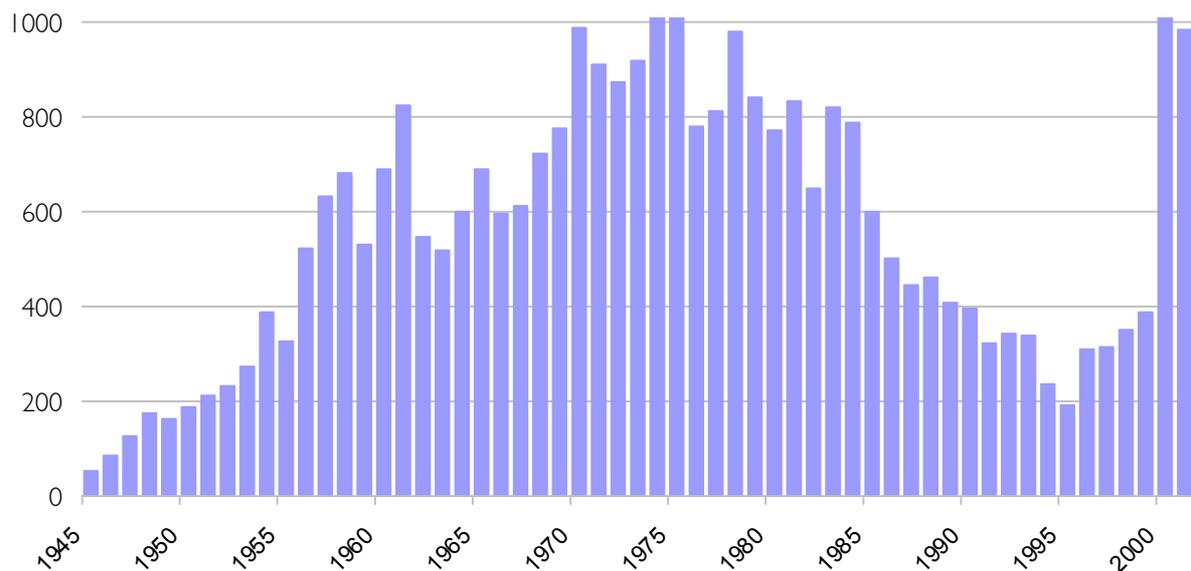
We have to recognise the realities about the network that will carry this growth.

Our ageing infrastructure is fragile and capacity is stretched. The accidents at Ladbroke Grove, Hatfield and Potters Bar have raised issues about the safety of rail. Performance has suffered considerably in the aftermath of these accidents and as a result of under-investment.

The network consists of around 30,000km (20,000 miles) of track and signalling, 2,500 stations, and 65,000 bridges and tunnels. The majority of stations, structures and tunnels are over 100 years old, as are the underlying earthworks and cuttings. Although tracks and signalling have been replaced and upgraded over time, we are now paying the price for many decades of under-investment. Today, for example, we still have 325 manually operated signal boxes with Victorian iron interlock frames that need the same maintenance and adjustment as the day they were built. The profile of track relaying since 1940 is illustrated in the figure below and the pattern for other asset categories is very similar.

**Figure 1 Profile of rail relaying post 1945**

Rail population by installation year (km of track)



This impacts directly on our operational performance. An ageing network is more susceptible to failures. While we can contain these through improved preventative maintenance, increasing traffic volumes have reduced the railway's resilience.

Our track faces three distinct problems. The average age of our track is increasing, it is ageing faster because it is carrying heavier traffic and the boom in tracklaying in the '60s and '70s shown in Figure 1 means we are now facing a 'bow wave' of assets that are about to become life-expired.

At privatisation in 1996, the average track life expectancy was around 40 years – so around 2½% (500 miles) of the track should have been replaced every year. In the six years before privatisation, the rate of replacement was less than 1½% (300 miles); after privatisation, it dropped further. In simple terms, this implies a backlog of up to 4,000 miles from the last 12 years. As a result, the average age of our track assets has continued to grow – while usage levels have risen by around 30% since privatisation. Today, just to stand still, we should be replacing around 3% of our track each year.

On signals, many of the systems were designed and built in the '50s and '60s. Many rely on parts and technology that are increasingly hard to find.

When budgets are tight, structures tend to be a soft target for savings. However, earthworks continue to deteriorate, drainage systems are overwhelmed and bridges continue to be hit by road vehicles – at a rate of several a day.

## A new network operator

After a year in administration, Railtrack was acquired by Network Rail in October 2002. The hiatus enabled the role and style of the infrastructure operator to be reconsidered. As a result, Network Rail and the industry now recognise more clearly the importance of asset stewardship.

Network Rail is a 'not for dividend' company limited by guarantee and run on commercial business lines. We have Members instead of shareholders, to ensure accountability to our stakeholders and the public. This innovative structure ensures that investment is funded at relatively low cost and pre-empts any suggestion of putting profit before safety.

We own and maintain Britain's railway infrastructure, signals and stations. We provide access to the tracks and stations for passenger and freight trains, timetable their movements and operate the signalling. Our focus is clear – operations, maintenance and renewal. Major enhancements will be specified by the Strategic Rail Authority (SRA). We will support the SRA as agreed and required in delivering enhancements, sometimes using third parties including special purpose financing vehicles.

## A new mission and vision

Network Rail's mission is to deliver safe, efficient and reliable infrastructure for the nation's rail industry and the public. Our vision for the railway network is one of engineering and operating excellence, where all contributing individuals and organisations work together to deliver the best possible service to our passenger and freight customers within the prevailing constraints. By engineering excellence we do not mean gold plated standards. We mean fit for purpose at the lowest possible cost.

Following years of uncertainty and inconsistency about priorities, we are determined to provide clarity and purpose throughout the organisation so that our people can deliver what our stakeholders expect from them. We intend to move from a culture of "find and fix" to one of "predict and prevent" incorporating controlled risk assessment and appropriate use of tried and tested technology. In particular, we are reversing the trend of outsourcing and taking greater control of work done on the network with improved local accountability through area managers, and an overall objective to ensure that the organisation is customer focused.

## New objectives

We have set ourselves seven corporate goals:

- **Improve safety.** To reduce the number of accidents;
- **Improve service performance.** To enable greater punctuality and reliability of train services;
- **Increase system capability.** To facilitate achievement of the SRA's Strategic Plan and increase passenger and freight capacity;
- **Improve customer and stakeholder relationships.** To increase the satisfaction of passenger and freight rail users and other stakeholders;
- **Improve financial control.** To increase our financial efficiency and maximise what we can deliver for each pound spent;
- **Improve asset stewardship.** To take better care of the infrastructure and deliver greater value for money; and
- **Improve business performance.** To make the most of our people's skills and effort.

Our performance against these objectives will be measured against publicly reported Key Performance Indicators (KPIs).

## New action plans

Prior to the acquisition of Railtrack, Network Rail developed action plans as the means by which we will deliver the corporate goals. They are the way in which the company will address key weaknesses and deliver our commitments to our customers, funders and other stakeholders. They do not detract from the need to continue with the day job of operations, maintenance, renewals, enhancement and support services. However, they will result in changes in processes, approaches, systems, tools and organisation so that we are able to do this day job more effectively. Progress with these action plans is good and four of the original plans have been finished or embedded into the day job.

## A new accountability to stakeholders

Our Board is accountable to Members representing our stakeholders. One of the challenges for Network Rail is the sheer diversity of these stakeholders – and the need to balance their sometimes conflicting interests. They include:

- the Government and our regulators. We are accountable to the Strategic Rail Authority (SRA), the Office of the Rail Regulator (ORR) and Her Majesty's Rail Inspectorate (HMRI). The SRA is our main funder and is responsible for providing strategic direction and leadership to the industry. The ORR is our economic regulator and it is currently reviewing the level of our charges to train operators. HMRI is our safety regulator;
- our customers. The Train Operating Companies (TOCs) and passengers; and Freight Operating Companies (FOCs) and users;
- our employees;
- our contractors and suppliers;
- regional and local agencies;
- the European Union;
- developers and landowners; and
- our lenders.

## The realities we have to address

Ageing assets require more frequent inspection. We need more intensive maintenance to maintain reliability and safety. We need to step up the rate of renewals to reduce or stop the decline. And to do all this work we have a constrained supply market which was expected at privatisation to deliver a considerably smaller work programme. Growing passenger and freight demand has heightened the tension between increased rail traffic, the need for more maintenance activity and the desire to enhance network capability.

Costs are also too high. The organisation has grown from under 11,500 employees at privatisation to over 14,000 today and most of this increase has been additional managers and engineers. The organisation has also been characterised by ambiguous roles and responsibilities, including a lack of clarity of the role of the regions and the centre. There has been a multiplicity of different ways of doing things which makes it difficult to reduce costs by adopting more production line techniques and procedures. There has also been a lack of proper financial control with inadequate business case analysis and irregular challenge of overspend against budget.

Simple inefficiencies can, and will, be addressed directly by changing the organisation structure and processes. But the excessive costs arise partly from structural, behavioural or procedural factors where we need to work with our regulators and the industry to achieve further cost savings, for example, by gaining better access to the network to undertake necessary engineering work, by avoiding unnecessarily prescriptive standards, or by engaging with our contractors to improve our overall efficiency.

To ensure continued public support for the existing rail network we need to be able to provide a safe and reliable network as efficiently as the best in the world so that this represents good value to our customers and ultimately the taxpayer. This Business Plan identifies the actions we intend to take to achieve this. We've already launched action plans to deliver these changes and are making good progress. But we can't reverse decades of neglect or organisational inefficiencies overnight: it will take years, not months, to achieve what has to be done.

These are the realities we have to address. We are confident that we can succeed.

## Where we are heading

Our Business Plan sets out our strategic direction for the next 10 years, with published expenditure projections for the first three. The aim: a safe, reliable, efficient and affordable network. Here's how we plan to get there.

## Improving safety

Despite some extremely disturbing incidents – notably at Potters Bar – our safety record has been improving. Our objective is to make further improvements in 2003/04.

Our current action plans include:

- using new risk assessment techniques to set better priorities for safety spending;
- completing the Train Protection and Warning System (TPWS), which stops trains at risk of passing a red signal at up to 75mph. We are on schedule to complete installation across the network in 2004 at a cost of some £525 million;
- implementing a safety leadership and culture change programme across the whole organisation to ensure that all our staff know what's expected of them and how to achieve it; and
- introducing proven quality management improvement techniques to tell us exactly how well our organisation and processes are working. This programme will develop an improvement framework and give our managers the skills they need to deliver future improvements.

## Maintaining a reliable network

Performance in 2002/03 was disappointing and unacceptable. It has not improved significantly in the last two years and will not return to pre-Hatfield levels for some time. This is partly due to the continued fragility of the network, the continuing level of speed restrictions and the high volume of renewals works on the network. However, the cumulative effect of past traffic growth and changes in behaviour have also contributed to the level of performance. Passenger kilometres have grown by 30% since 1995/96 and freight net tonne kilometres by 46%, without a significant increase in network capacity – as a result some sections of the network are operating at or near full capacity, which aggravates the impact of incidents.

We have to do better. Improving the infrastructure is a large part of the solution but in addition reductions in service delays require a realistic train timetable and the ability to respond more rapidly when services are disrupted.

We're equipping ourselves with new tools to improve planning and response. From this year on, our performance forecasting will be much more realistic and deliverable. And over the next five years we're revising our rules for timetable construction to reflect real operational conditions more accurately.

We're working to gain better access to the network for inspection, maintenance and renewals activities and to improve the way in which we use this access to deliver a reliable network at the least possible cost. As we step up our maintenance and renewal activity, this will become even more important.

We've introduced a new cross-industry code of practice to deal with incidents faster. By January 2005, we'll also have installed simulators so that signallers can practise dealing with emergency situations and improve their ability to respond in a real-life incident.

We will continue to work closely with the SRA on its Capacity Utilisation Policy (CUP) which aims to provide a comprehensive planning process for the use of capacity to achieve more efficient capacity utilisation and reduced delays. The SRA has recognised that in parts of the country passengers are suffering from poor performance because the network is too congested and it is therefore removing some under-used trains that cause delays for the more popular ones.

## Restoring the assets

To run a safe, reliable and efficient railway, we have to take better care of the assets, understand how they wear over time and find ways of minimising their whole-life costs. At the same time, we need to step up expenditure to reverse the impact of past underspending. Planned spend on maintenance and renewals has risen significantly over the past three years and, whilst we need to ensure that future spend is efficient and represents value for money, our current plans indicate the need for further increases in renewals over the coming years.

After privatisation, fixed-price maintenance contracts gave the contractors control of inspection and maintenance – badly impairing Railtrack's view of the true condition of its assets and the action required to maintain them. This cannot be allowed to go on. New contracts introduced in April 2000 have made some improvement, and we've launched four further initiatives:

***The New Maintenance Programme (NMP)*** sets out new maintenance processes, organisation and contracts and incorporates recommendations from the Hatfield report. It gives back to our own engineers the vital elements of asset information and setting work priorities and verifying that it has been done properly, while still contracting out the actual delivery of the work. It will enable us to manage our assets more consistently and effectively – reducing the need for repeat work, improving performance and cutting unit costs.

**Our asset and work management system (MIMS)** will provide reliable and accessible information on the age and condition of our assets which is essential for cost-effective stewardship of the network. This will replace contractors' systems, allowing us to rebuild our knowledge of the operational risk, condition, and life expectancy of our assets and keep proper records of maintenance history.

**Selective insourcing of maintenance of the network** will enable us to better understand the maintenance process. We have announced the intention to take control of three areas of the network and to manage directly the maintenance of these areas. This will also give us the information to be a more intelligent client for the areas where we continue to use contractors.

**Area delivery groups** within each Region will reinforce these changes by giving better local control and accountability for work on the network. Responsibility for the day to day delivery will now be placed squarely at area level under the control of General Managers.

## Controlling the costs

The level of expenditure has risen dramatically in the last three years and these higher cost levels are reflected in the plan. We recognise that these levels of cost are unacceptable and unaffordable in the longer term. It is our responsibility to bring them down to the lowest possible level consistent with safety and reliability to provide better value for money to our customers and ultimately the taxpayer. This will require a robust attitude to questioning existing processes. Targeted annual incremental savings will not achieve the fundamental shift necessary to control costs. A step change is required.

Although there remains a major question about the value we obtain from some of the work we do, we are now bringing costs under control and improving our ability to manage within budget. Changes to processes and procedures introduced in 2002/03 include the introduction of monthly reviews for each business unit with a constant challenge on costs and value for money as well as new controls on headcount, consultants and contract labour. Further action in 2003/04 will improve risk management, identify controllable cost factors and reduce the cost of operations, maintenance and renewals.

We've already made significant savings, although the full impact has so far been masked by the cost of action plans that will bring longer term savings. The investment in asset management systems and the New Maintenance Programme will allow us to manage costs much more closely. We're replacing short-term, often adversarial, contractual relationships with longer-term framework contracts that encourage a partnership approach. And by taking three maintenance areas in-house we will learn more about costs and cost drivers at first hand, enabling us to become more astute buyers of contractors' services.

The projections in the Business Plan take account of potential cost savings from planned efficiency initiatives where the impact of these changes can be quantified. They also involve us making some inroads into the backlog of renewals from past under-investment in the network.

However, further savings will need to be achieved. We have therefore set ourselves a target of achieving overall efficiencies equivalent to 20% of costs by March 2006 (implying additional savings in annual expenditure of almost £1 billion), and further savings thereafter, while achieving the outputs and renewal rates set out in this plan. We are planning further work over the next few months to develop a detailed plan for achieving these improvements.

Action to improve efficiency and control costs must also be a continuous process. Towards the latter end of 2003/04, a new planning phase will be initiated when the results of the interim review are starting to emerge and the context for the next phase of improvement is clearer. At that point it will become clear how the organisation and its relationships will need to change in order to reflect the likely outcome of the interim review.

Clearly the impact on our overall expenditure requirements will also depend on the outputs which we are expected to deliver including the speed with which the current backlog is addressed. However, the improvements we are making will help provide the information to enable more informed choices to be made about these issues.

## Making it happen

It is our people who will turn this Business Plan into reality. Railtrack's troubles and its year in administration took an inevitable toll on staff morale and engagement. So we've begun an organisational transformation programme to rekindle enthusiasm and boost personal development.

We've also moved quickly to address issues that were holding back our effectiveness as an organisation.

For the first time in the history of the railway, we're introducing a standard regional organisation structure that gives all Regions identical structures, job titles and job descriptions. This will ensure that everyone's roles, responsibilities and accountabilities are clearly identified and enable us to introduce consistent and efficient processes throughout the business. These changes are further reinforced by the creation of Area Delivery Groups to provide greater local accountability for the performance of the network.

Eastern Region was too large and unwieldy, so we've divided it into two smaller, more manageable regions. On the West, where the West Coast Route Modernisation is such a key project, there were interface problems arising from the project team taking responsibility for renewals and enhancements while the region had responsibility for maintenance; to resolve these we have created an overarching West Coast Management Unit.

Conflicting objectives meant that Railtrack's relationships with its TOC and FOC customers were too often adversarial. Relationships with our regulators were also strained. This was aggravated by the recent poor record on train performance. We're working for more transparent and effective relationships with our customers and regulators. For example, the creation of regional boards is resulting in more effective local management of joint initiatives and progress is being made on the adoption of joint control rooms on a pilot basis.

A significant proportion of our information systems dates from British Rail days and is overdue for replacement. There's little integration between key systems, and exchanging data is difficult. So while we possess a great deal of information, we're unable to use much of it to support decision-making. To help us change all this, we've appointed SchlumbergerSema as our strategic information partners, to develop our information strategy and provide systems that will enable us to meet our corporate objectives.

Our long-term information strategy will simplify and standardise the current patchwork of bespoke, disjointed applications, technology, data and processes. Its principal goals are to reduce over 1,000 applications to just 40 key business services, replace 125 suppliers with five business partners, meld 20,000 separate local databases into a single virtual corporate database under central control, and cut the number of control centres from 150 to at most 18.

## Conclusion

Prior to the transfer of Railtrack to Network Rail, we developed a clear plan for transforming the business to meet the requirements of our stakeholders. We are now delivering that plan and are on track to succeed. We said that it would take eighteen months to change the internal processes and we are one third of the way through this process. We also said that it would take three to five years to achieve a sustainable level of efficiency and performance and, although there is a long way to go, we are on track to make the changes necessary to achieve this as well.

Many of the decisions now being taken forward have previously been discussed as possible solutions. The difference now is that Network Rail has taken action and implemented them and will continue to implement change where we see it delivers a sustained long-term improvement.

There is no quick fix to the problems the company faces and progress will be seen little by little. Much of what we have already started will take time to deliver tangible benefits but we are committed to seeing these changes through to delivery.

The issue for us is to ensure that we are addressing the core problems we face. Too much time and effort in the past has been wasted on short-term thinking and solutions which have not produced the desired long-term result.

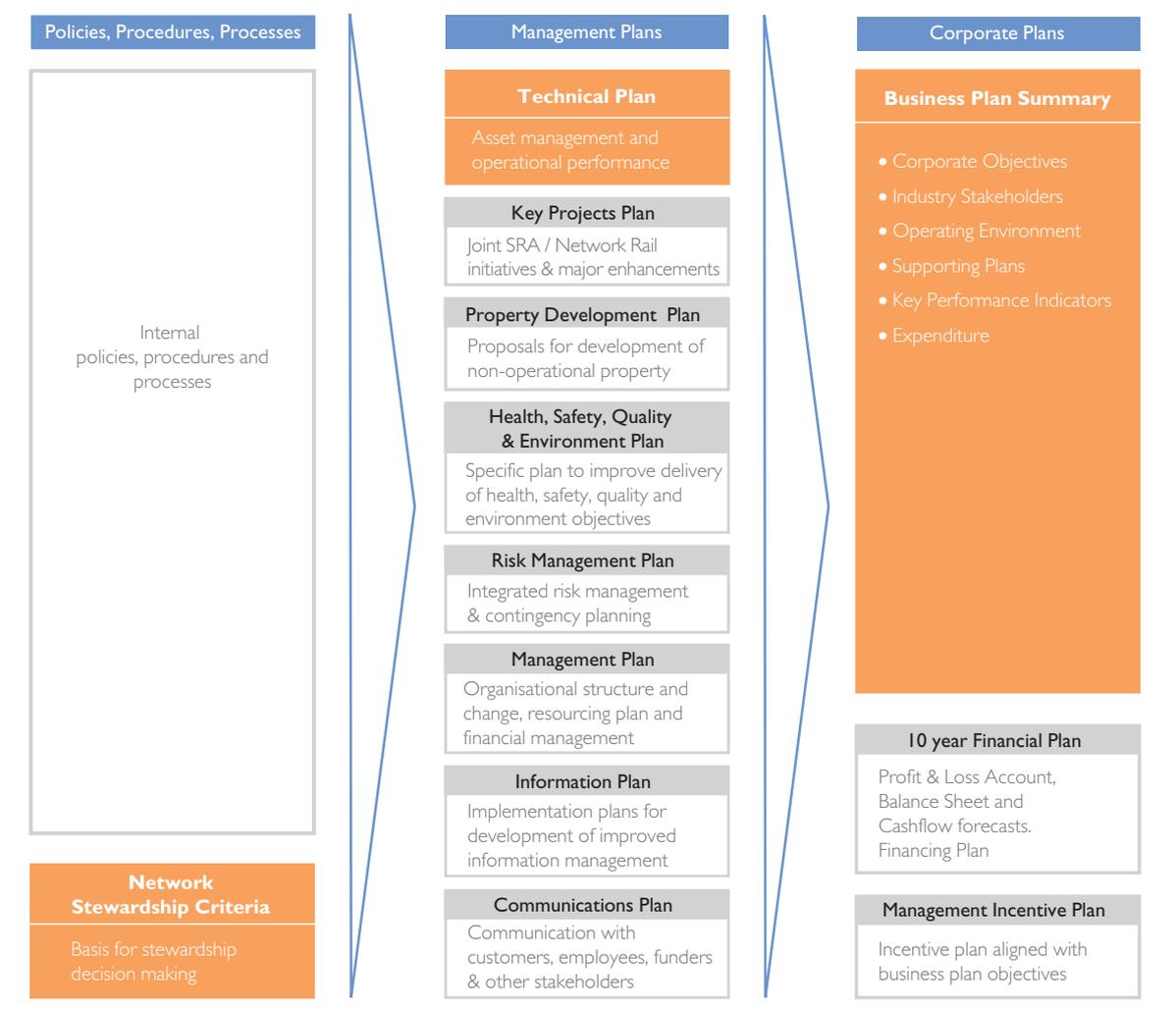
By addressing the core problems and implementing long-term solutions we are creating the right environment for our people to deliver. They will be offered support, tools, time and skills to help them. We must not burden them with unrealistic targets or timescales but we must not allow progress to be slowed by over caution or a reluctance to change.

The Business Plan is our assessment of the challenges ahead and the routes to address them, to achieve sustained success. Network Rail must focus on the delivery of the safe, efficient and reliable railway. The Business Plan reflects the strength of that focus.

# Introduction

This document summarises Network Rail’s Business Plan for the period from April 2003 to March 2006, including its corporate objectives and its plans for delivering them. The 2003 Business Plan Summary forms part of a comprehensive suite of documents which contain Network Rail’s plans, policies and processes, as shown in the figure below. Together with the Technical Plan and the Financial Plan, the Business Plan Summary fulfils the requirements of Network Licence Condition 7, which was modified in November 2002 by the Regulator. The Business Plan replaces the previous requirement for publication of a “Network Management Statement” (NMS).

**Figure 2 2003 Business Plan – Suite of documents**



Published documents

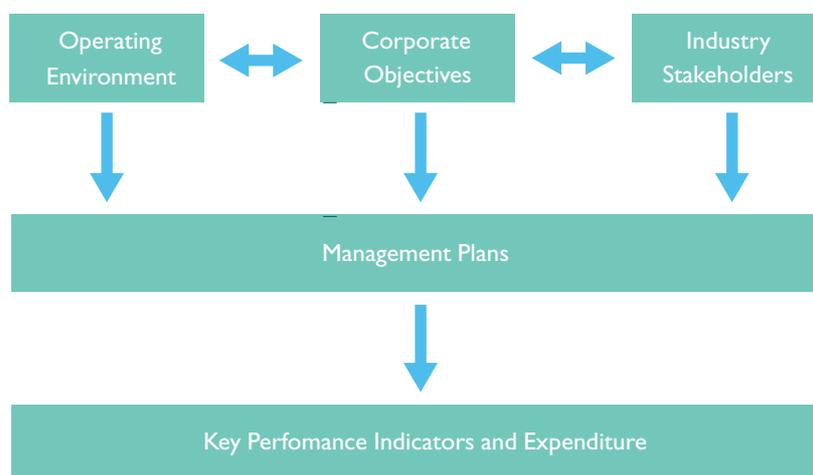
The Regulator has agreed that our Financial Plan and our current projections of expenditure beyond March 2006 do not need to be published. The other supporting plans are internal to the business. However, we have also agreed with the Regulator that ten year expenditure projections should be published later in the year as an input to the interim review process. Although further work is required to improve the robustness of these longer term projections, the level of activity which would be required to maintain existing outputs is not expected to diminish in these later years.

The 2003 Business Plan significantly updates and revises the plan prepared in October 2002, which focused primarily on an assessment of the situation at the point of transfer of ownership of Railtrack to Network Rail, together with those action plans essential to start the process of building a more effective and efficient organisation. The additional material reflects the more detailed understanding acquired since transfer, together with early results from implementation of the action plans.

This Business Plan constitutes the first formal expenditure submission to the Office of the Rail Regulator (ORR) under the current interim review of access charges. The plans and expenditure projections contained in this document will continue to be refined and updated as further actions are implemented to improve key processes and, critically, obtain a more robust understanding of underlying business data.

The structure of this summary document is aligned with the Business Plan process, summarised in the figure below.

**Figure 3 2003 Summary Business Plan – Process**



The document is organised into the following sections:

<b>Corporate Objectives</b>	Articulates the company's vision, mission and values together with the seven key objectives through which they will be delivered
<b>Industry Stakeholders</b>	Reviews the aspirations of the industry's stakeholders and sets the context for Network Rail's objectives
<b>Operating Environment</b>	Discusses the current operating environment and assesses the future factors which shape the plan
<b>Management Plans</b>	Summarises supporting management plans, identifying the key issues in each area and the planned actions to address them
<b>Key Performance Indicators and Expenditure</b>	Forecast for the current year and planned outputs and expenditure to March 2006

# Corporate Objectives

## Vision

Network Rail's vision for the railway network is one of engineering and operating excellence, where all contributing individuals and organisations work together to deliver the best possible service to our passenger and freight customers within the prevailing constraints.

This vision is supported by key corporate governance policies. Network Rail is a private sector entity, run along commercial lines with no shareholders. It is managed by a Board of executive and non-executive directors, which reports to and is held accountable by 'Members'. Members represent the industry stakeholders and the public. Network Rail is also accountable to its customers (through access contracts), the SRA (strategic specifier and funder), the ORR (economic regulator) and HMRI (safety regulator).

## Mission

Network Rail's mission is "to deliver safe, efficient and reliable infrastructure for the nation's rail industry and the public".

## Objectives

Network Rail's mission has been related to a series of outputs, each of which has measurable objectives as shown in the figure below.

<b>Figure 4 Outputs, objectives and measures</b>		
<b>Outputs</b>	<b>Objectives</b>	<b>Measures</b>
Improved Safety	Reduced number of accidents	Public Safety Index
Higher Performance	Better punctuality and reliability	Public Performance Measure (PPM)
Increased System Capability	Facilitate SRA's Strategic Plan to increase passenger and freight usage	RAB adjustment for passenger and freight volume incentives
Improved Customer & Stakeholder Relationships	Increased passenger and Freight Operating Company (FOC) satisfaction	Passenger Complaints per 100,000 journeys; and FOC satisfaction rating
Improved Financial Control	Improved financial efficiency	Financial Efficiency Index
Improved Asset Stewardship	Improved and better value stewardship of the infrastructure	Asset Stewardship Index
Improved Business Performance	Greater employee engagement	Employee Engagement Measure

Although Network Rail is in control of only a proportion of the factors that contribute to the industry-wide objectives relating to safety, performance, capability and relationships, this approach reflects the need to co-ordinate and align the interests of all industry participants in working together towards the delivery of a better service.

Achievement against the objectives will be measured through the use of a cascade of key performance indicators (KPIs). This plan sets targets for improvement for each of the next three years, to March 2006.

Numerical targets, together with associated expenditure projections, are set out later in the plan. Appropriate definitions and associated targets will be reviewed each year as part of the annual business planning process.

## Values and behaviours

Network Rail has identified the set of values which supports its vision:

- safety;
- integrity;
- excellence;
- confidence; and
- dependability.

These values help guide our behaviours:

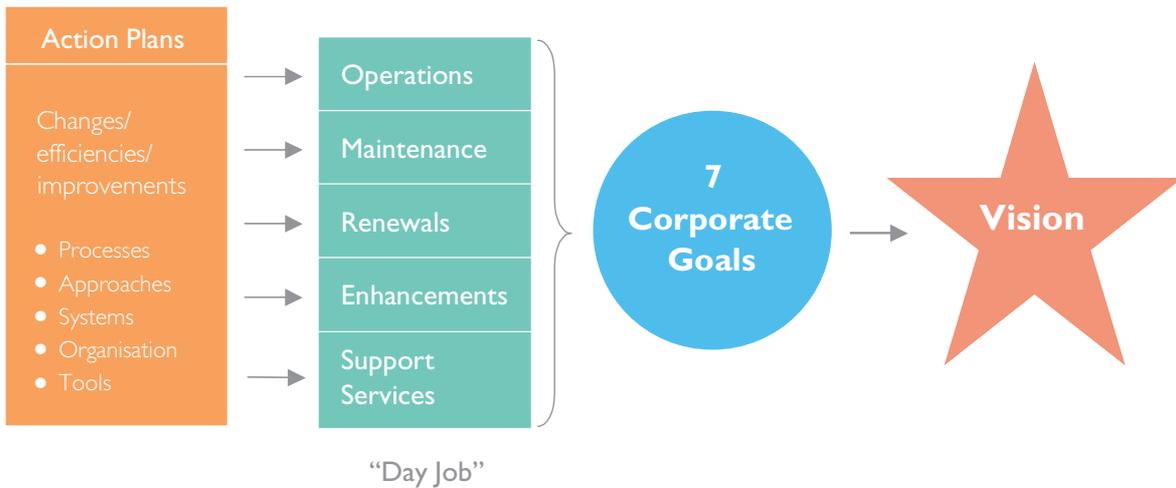
- enthusiasm - an infectious and positive approach to work. Always trying to accentuate the positive in people and situations;
- pride - displaying a sense of ownership. Having real pride in the railway industry and the way in which an improved infrastructure can ease the country's transport problems safely;
- teamwork – acting as one team in an open and honest way, responding positively to others and being adaptable; and
- can do/will do – displaying a positive attitude. Both able and willing to grasp opportunities and implement them effectively.

## Action plans

Network Rail is undertaking a number of action plans to deliver the improvements to which we have committed. Each action plan is clearly linked to the KPIs and the objectives and has an “owner” who is responsible for development and implementation. The costs and benefits of action plans have been identified and quantified, where possible, in order to assess the value for money case for making the change. In the case of enabling action plans, however, the justification for any additional expenditure is based on introducing changes that we believe are fundamental to our approach to managing the business, and have not generally been subject to detailed cost causation analysis.

Since the acquisition, four of the action plans have been completed and one new action plan has been added to improve the focus on performance improvements. The way in which the action plans interact with the day job to deliver the seven corporate goals is illustrated in Figure 5 below and the current list of action plans is shown in Figure 6.

**Figure 5 Action plans strategy**



**Figure 6 Current action plans**

Implement organisational structure change (ORG1)	Establish strategic safety management leadership team (SAF1)	Improve the processes for introducing technology and rolling stock (TS2)	Completion of roll-out of joint boards (CR1)	Introduce new investment appraisal processes and techniques (FR1)	Review and improve real time train performance monitoring and management reporting system (IS1)	Develop better operational & engineering planning processes (PL2)	Complete the asset register (AS1)	Complete the definition of the KPI and output performance targets (BP1)
Implement culture transformation (ORG2)	Undertake safety baseline assessment (SAF2)		Establishment of Regional Councils (CR2)	Introduce improved budgeting and financial control processes (FR2)	Implementation of the information plan (IS2)	Develop quality framework & undertake quality improvement (PL4)	Define strategy for asset management and develop decision support tools (AS2)	Contribute to tri-party interim review (BP2)
Performance management (ORG3)	Review, propose and oversee revisions to safety, operating and engineering standards (SAF3)		Actioning the requirements to implement the Facilitation Agreement (CR3)	Improve revenues through the Railway Estates directorate (FR3)			Revise maintenance and renewals (M&R) contracts (AS6)	
Develop manpower resourcing plan (ORG4)			Establish membership communications function (CR4)	Develop and implement an integrated, system-wide risk management process (including business continuity assurance) (FR4)		Performance Enhancement (PF1)		
			Improve effectiveness of the communications function (CR5)	Define and understand the cost base and cost causation information (FR5)				
			Improve external (public) perception (CR6)					
			Engage with stakeholders to improve the performance regime and highlight internal inconsistencies that arise as a result of the performance regimes (CR7)					

### Progress monitoring

Progress in delivering the action plans is monitored by a programme management team reporting to the Deputy Chief Executive. Responsibility for delivering the plans remains with the identified action plan owner, usually a member of the Network Rail Executive.

Progress towards delivering the outputs and objectives is reported using a number of internal KPIs on a periodic basis, usually 4 weekly. Business reviews with operating units, led by the Deputy Chief Executive, are held four-weekly and the Chief Executive leads quarterly reviews of all business units. Post-cause analysis will, on a continuous basis, shape both remedial actions and the following year's Business Plan. Annual performance will be reviewed through publication of the Annual Return to the Regulator in July.

# Industry Stakeholders

## Introduction

Transport demand has increased rapidly over the last ten years. Rail passenger kilometres increased by 30% from 1995/96 to 2001/02. Growth has slowed in recent months but is expected to rise from around 39 billion passenger kilometres per annum to around 52 billion per annum in the next 10 years. Over the same period, freight demand is assumed to rise from 19 billion to 24 billion net tonne kilometres per annum.

Key influences on future passenger demand are:

- despite a recent slowdown in the rate of economic growth, the Treasury expects the economy to grow at a steady rate over the next decade thereby generating an additional requirement for travel, both passenger and freight, and generating additional leisure travel as disposable incomes rise;
- punctuality;
- increasing road congestion and road pricing are expected to increase rail's competitive position in its major markets; and
- rapid change in the aviation market has seen a significant decrease in short haul fares. However, aviation competition is largely restricted to a small number of routes and does not have an impact on the core medium distance and suburban passenger market.

The demand for rail freight services is not only driven by economic conditions but by its competitive position with road. Changing levels of congestion as well as the road transport cost base will generate a range of uncertainty when assessing potential rail freight capture. The freight growth assumption includes a long-term decline in coal traffic, further recovery in the Channel Tunnel market and significant growth in construction materials and non-bulk traffic.

This section reviews the aspirations of Network Rail's stakeholders and sets in context our plans to deliver key industry and stakeholder objectives.

Key stakeholders include:

- the Strategic Rail Authority (SRA) and the Government;
- the Office of the Rail Regulator (ORR);
- safety regulators including Her Majesty's Railway Inspectorate (HMRI);
- Train Operating Companies (TOCs) and passengers;
- Freight Operating Companies (FOCs) and users;
- regional and local agencies;
- European Union;
- contractors and suppliers;
- labour market;
- developers and landowners; and
- lenders

All of these stakeholders have the ability to influence the future direction of the company. In addition to this, the SRA, ORR and HMRI have statutory, regulatory and contractual powers which impact on Network Rail's activities and relationships with other stakeholders.

## SRA and Government

The Government's Ten Year Transport Plan, as subsequently amplified through the SRA's Strategic Plan, sets out its objectives for the industry. The SRA is Network Rail's major funder, either directly or indirectly, through access charges paid by operators which are subsidised by the SRA.

It is also responsible for:

- providing strategic direction and leadership to the railway industry;
- letting and managing passenger franchises and freight grants;
- developing and sponsoring major infrastructure projects; and
- some aspects of customer protection.

The SRA has emphasised that its new role as funder and strategic specifier goes hand-in-hand with private sector management and risk taking and that Network Rail operates at arm's length from the SRA under an incentive scheme designed to reflect private sector practices.

The SRA Strategic Plan outlines its goals over a 10 year period:

- growth in passenger and freight traffic;
- reducing overcrowding on services within the London area to meet standards set by the SRA; and
- performance - in the form of train service punctuality and reliability – is to be improved.

Network Rail plays a key role in this, with its contribution quantified by the KPIs outlined later in the plan. To support delivery of the plan, Network Rail's Management Incentive Plan is aligned with these targets.

## Office of the Rail Regulator

The Office of the Rail Regulator (ORR) is Network Rail's economic regulator. It is responsible for ensuring fair and equitable treatment, and for protecting the public interest in holding Network Rail to account for its performance and stewardship of the network. It is required to determine Network Rail's income for meeting the reasonable requirements of customers and funders. ORR has stressed that it is not its job to micro-manage the business or to determine the individual asset strategies Network Rail should pursue since these are matters for Network Rail to decide upon within a clear, robust and predictable regulatory framework.

The costs of operating, maintaining and renewing the railway infrastructure have risen significantly over the past two years, exceeding the assumptions underlying the last periodic review. The Regulator has therefore initiated an interim review of access charges. We are working closely with the SRA and the ORR to ensure that funding available for the foreseeable future is optimised between sustaining the current level of activity and providing increased capability. Options under review include improving the effectiveness of capacity utilisation and driving down costs through improved engineering access to the network. This plan represents a baseline against which these alternative strategic options will be explored and is therefore subject to change, in line with the ultimate conclusions.

## Safety regulators

Network Rail is regulated for safety purposes by the Health and Safety Executive, through Her Majesty's Railway Inspectorate (HMRI) to secure the proper control of risks to the health and safety of employees, passengers and others who might be affected by the operation of the railway.

Specific areas targeted by HMRI for improvement over the next three years include:

- installation of the Train Protection and Warning System (TPWS) equipment, and measures to reduce the number of signals passed at danger;
- maintenance of the infrastructure including track, signalling, earthworks, tunnels and structures;
- improvements to the arrangements for managing contractors and reducing the risks to workers from trackside working;
- prevention of vandalism, tackling the widespread problem of trespassing and reducing the numbers of assaults on rail workers; and
- improvements to recognition and understanding of occupational health issues.

The Railway Safety and Standards Board (RSSB) is the new body which will take on the mantle of safety leadership in the rail industry, responsible for developing and maintaining Railway Group Standards.

The Railway Group Safety Plan is an annually reviewed over-arching industry plan and Network Rail therefore makes a significant contribution towards its delivery.

The 2003 Plan aims to achieve objectives across five key areas:

- risk management;
- catastrophic risk;
- passenger safety and security;
- public safety; and
- workforce safety.

## Train Operating Companies and passengers

Our customers' needs are key to our business. These will be driven by increasing rail demand and by the SRA's aspirations. There is intense competition for rail paths, particularly in the southeast, and managing the use of available capacity will, but only in part, relieve some of the pressure.

Optimising capacity usage is obviously a challenge, especially when attempting to reconcile different needs and operating patterns. Passenger operators require regular and reliable timetabled services, while freight operators want maximum timetable flexibility in order to reliably meet their customers' requirements. In addition, greater volumes of maintenance and renewal activity are increasing pressure for engineering access to maintain the network. A balance must be struck between these competing needs, through better planning, enhanced co-operation and improved asset management.

The SRA will undertake a review of franchise agreements over the course of the next two years. This is likely to consolidate the number of franchises and significantly adjust the franchise arrangements, with operators taking fewer risks and having franchise agreements of relatively short duration.

Model access contracts, provided by the ORR, are intended to strengthen, streamline and simplify access contracts and to align incentives. By doing so, both Network Rail and the operators will have a much clearer joint understanding of their contribution to delivering an improved railway service to passengers.

Because of their direct relationship with the travelling public, TOCs are well placed to identify and advise on ways in which Network Rail can improve the travelling experience. Station improvements are a key factor in delivering increased passenger demand and integrated transport facilities.

## Freight Operating Companies and users

Freight operators require maximum timetable flexibility, with high reliability levels, in order to meet their customers' needs for sophisticated 'just-in-time' operations, essential if rail is to compete with the road freight sector. Demand patterns will be driven by cost, the level of SRA subsidy and the level and pattern of imports.

Changes in freight traffic patterns can have a significant impact on maintenance and renewals activity. Understanding and anticipating our customers' needs is therefore essential to effective management of the network.

## Regional and local agencies

By meeting the reasonable requirements of regional and local agencies we have a key role in helping them to meet regional and local economic, environmental or transport aspirations. These stakeholders are potential partners for development projects, where joint sources of funding can be applied towards the delivery of integration and economic regeneration objectives, and where Network Rail can act as a catalyst for improvements.

## European Union

European legislation is increasingly defining the standards that apply to the network. The EU Directive on High Speed, and the associated High Speed Technical Specifications for Interoperability (TSI) came into domestic law in 2002. These define additional requirements for new high speed trains and for upgrades to the fast lines on the West Coast, East Coast, Great Western and Channel Tunnel Rail Link. A further EU Directive on Conventional Interoperability is expected to come into domestic law late in 2003. It encompasses all rail vehicles and just over half of the rail network.

Further proposed legislation currently working its way through Brussels will, as currently drafted, extend the scope of interoperability to embrace renewals on high speed lines and the remainder of the network. This is expected to become EU law at the earliest around the end of 2003 and to be factored into UK law two years later. The SRA is leading a programme of work to evaluate the effects of the proposed specifications for conventional interoperability, and to form a view on the most appropriate stance to take in leading the industry input to the development of the standards.

## Contractors and suppliers

There is a relatively small number of large service suppliers in the key niche markets of maintenance, track renewals, and signalling design and equipment. Effective and equitable collaborative arrangements will be essential if Network Rail is to maximise market capacity and secure cost-effective services. Barriers to entry into this market are high, and despite substantial growth in activity levels, only one supplier in maintenance and two significant suppliers in track renewals have entered the market since privatisation. If anything, the signal engineering market has consolidated, constraining activity in this area. The market for civil engineering and building work on the network is open to a much larger pool of suppliers, but still demands skills and techniques specific to the railway environment.

Suppliers have not invested consistently in the plant and human resources necessary to improve efficiency of delivery due largely to the absence of clarity on long-term workload. Whilst this plan addresses these needs to some extent, significant external strategic decisions are required before the industry can proceed with reasonable certainty.

In the case of materials suppliers, significant work has been done to negotiate framework contracts, resulting in high volume materials such as ballast, sleepers and rail being purchased nationally and issued to the contractors. There is a short-term risk that these arrangements, made to secure value, may preclude innovation or the ability to negotiate with alternative suppliers, but the risk is outweighed by the commercial benefits.

In order to reduce maintenance and renewal costs we intend to enter into a concordat with our suppliers and contractors with the agreed goal of reducing the costs of delivering the railway.

## Labour market

The rail industry is, and will continue to be, a constrained labour market, due to the specialist nature of the skills and competencies required to work on the operational infrastructure. With the key exception of safety competence, the industry has been heavily reliant on development through experience, rather than structured training. Delivery resources in the industry divide broadly into signalling operations staff and engineering staff. The former are exclusively employed by Network Rail.

At privatisation, engineering staff were split between approximately 15 employers. Since then, there has been only a modest level of recruitment at junior level, and the skill shortage and wage inflation has been exacerbated by a proliferation of small and medium-sized competitors who have grown by recruitment rather than training, resulting in a sellers' market for railway technical skills. A further significant cause of skill shortage has been the lack of workload certainty, which has prevented investment in staff and caused a major increase in the casual workforce. The key initiatives in progress to address this are:

- jointly working with contractors to increase the proportion of directly employed labour to 85% by the end of 2003; and
- recruiting engineers from other industries, such as highway engineering, and providing them with appropriate skills through conversion programmes.

This situation has recently been acknowledged by the industry, with the SRA undertaking research on the skills gap and providing funds for the establishment of a "national rail academy".

Attracting and retaining non-rail specific staff will continue to be a challenge in the context of current media and public perception of the railway. This is mitigated to some extent by the relatively low level of current job vacancies and the cautious economic outlook.

## Developers and landowners

Developers and adjoining landowners provide opportunities to exploit the network portfolio and their desire to do so will be driven by the economic and environmental factors and the quality of our relationship with them. At the same time, however, they have the ability to frustrate or enable successful developments. Understanding who they are, and how they can be persuaded to participate in a manner which will release optimum value at minimal risk to Network Rail, is a key objective. It is important, not only to encourage these parties to bring forward proposals, but also to negotiate terms, financial and non-financial, to best advantage. A reputation for being “firm but fair” will be essential if the market is to take Network Rail seriously.

## Lenders

Network Rail's lenders, whether public or private, will require evidence of improved financial control, through more efficient delivery and more robust financial management. This requirement relates both to Network Rail directly and the rail industry as a whole, where enhanced value for passengers and freight companies is essential.

Significant debt financing will be required to deliver stakeholders' objectives over the medium to long-term. Following the events leading up to and during Railtrack's administration, lenders' confidence and willingness to participate with us will be critically dependent on:

- the expectation of an appropriate outcome from the interim review;
- evidence that risk is allocated within the industry in line with the ability of participants to manage and/or bear it; and
- the perceived competence of Network Rail's management.

# Operating Environment

## Introduction

The national rail network has not delivered the expectations created at privatisation. There is a need to re-structure the finances and organisation of the railway infrastructure controller in order to provide the passenger and freight train operating companies with safe and reliable infrastructure. At the same time there are other problems that must be addressed. Recent accidents at Ladbroke Grove, Hatfield and Potters Bar have raised issues about the safety of rail. Performance has suffered considerably in the aftermath of these accidents and also as a result of chronic under-investment in an ageing asset base.

The demand for increased passenger and freight journeys has exacerbated this situation and increased the tension that exists between increased rail traffic, the need to undertake more maintenance on the network and the desire to enhance network capability.

For the year prior to acquisition by Network Rail, Railtrack was in Railway Administration. The industry has now been steadied. The role and style of the infrastructure controller and way in which it discharges its responsibilities have been reconsidered. Network Rail and the industry now focus more clearly on the importance of asset stewardship and morale in the industry is improving.

This section reviews the current operating environment in relation to each of the corporate objectives and assesses the future factors which will guide and constrain the way Network Rail develops the business to meet its obligations and responsibilities.

## Safety

In 2001/02 there were 307 people fatally injured on Britain's railways. Of these, 275 were killed trespassing, 5 were railway employees, 10 were passengers and 17 other members of the public. In the past year there has been the major accident at Potters Bar. Major train crashes have occurred approximately every two years which represents a small percentage of the 80 million train movements each year. Rail travel remains a much safer means of travel than the private car.

In September 2001 HSE published the Part 2 report of Lord Cullen's Ladbroke Grove Rail Inquiry. In his report Lord Cullen considered the management of safety and the regulatory structure. In particular, the report recommended:

- the need for change in safety culture, management and leadership across the industry (including the management of contractors);
- that HSE should remain the safety regulator;
- the setting up of a new Rail Safety and Standards Board (RSSB) to undertake the development of railway standards, provide safety leadership in the industry, sponsor research and development and several other functions;
- the setting up of a new rail accident investigation body (RAIB) to carry out 'no blame' investigations to determine the causes of rail incidents (HSE will continue to investigate for enforcement purposes);
- a new system of accreditation for contractors and suppliers; and
- new arrangements for the licensing of drivers and signallers.

Adoption of these recommendations will bring major benefits for the rail industry and the manner in which it conducts its business. Network Rail will continue to play an active part in this.

## Train performance

The effects of Hatfield overshadowed performance in 2000/01, when a total of 17 million delay minutes were attributed to Railtrack, compared to around 8 million for the previous twelve months. Performance has not improved significantly in the last two years and it will be some time before it returns an acceptable level.

The poor performance is partly due to the continued fragility of the network, the continuing level of speed restrictions, the high volume of renewals works on the network and the increase in delay per incident. The cumulative effect of past traffic growth and changes in behaviour have also contributed to this. Passenger kilometres have grown by 30% since 1995/96 and freight tonnage by 46% over the same period, without a significant increase in network capacity. As a result certain sections of the network are operating at or near full capacity, exacerbating the impact of incidents on the network.

A recent study for the SRA has indicated that whilst network congestion is a significant factor in recent train performance decline, it is not the primary factor. Furthermore, it also suggested that the main causes of train delay may vary from route to route, with temporary speed restrictions being the principal factor in one study area and train operator driving policy in another. Overall, this work highlights the multiplicity and complex interaction of factors which impact adversely on train performance and that a number of these are not within the network operator's control. Nonetheless, Network Rail has a very significant responsibility to improve network reliability and operational effectiveness.

The existing procedures for the operation of the network are well established. Network Rail will continue to review these procedures in the light of emerging good industry practice and ensure the procedures are complied with consistently across the network, by staff with the appropriate competency levels.

The industry effort devoted to delay attribution (working out who is responsible for delays) is substantial and improving its effectiveness could enable the industry to manage performance more effectively. The system that currently records train delays for the entire network (TRUST) is comprehensive, but ageing. Delays are captured through a combination of manual and automatic systems. The reasons for the delays are reported manually, and rely on interpretation from the Delay Attribution Guide. Operators also monitor the system and often dispute the attribution of the fault reports.

## Network capability

Some information is available on the theoretical capacity and practical availability of the network to accommodate the traffic demand placed upon it. Locations and routes with spare train path capability are known to planning staff, but are not fully understood at a system-wide level. The availability of knowledge relating to other parameters, such as route availability, loading gauge and electric traction power supply, is variable.

Similarly, Network Rail's information in regard to rolling stock, including its current condition and capability, is often incomplete or outdated. Consequently, the provision of a timely response to requests for new train services, particularly where vehicles are proposed for introduction on new routes, is slow and may not adequately assess the impact of such new services on other outputs such as performance.

The delivery of recent major enhancement projects has encountered a series of major problems. The West Coast Route Modernisation (WCRM) is a well-documented example of this. The original concept and scope of works was agreed with a fixed out-turn cost for the enhancement element. It is now certain that the project will not be delivered as originally conceived. Analysis of this and other enhancement projects which have failed to deliver on time, or to budget, have identified the following common causes:

- customer requirements have not always been well specified, with resilient budgets and risk management plans;
- unreliable asset condition and capability knowledge, both current and projected; and
- difficult access and possessions regime.

To address this, we have recently introduced the “Guide to Railway Investment Projects” which sets out new and improved procedures for project management.

The work led by SRA in conjunction with Railtrack/Network Rail and the train operators has demonstrated how even a project in as deep a crisis as the WCRM can be turned around with clear leadership and co-operation between the parties. On the ground, strengthened and improved management techniques are now delivering scheduled work to programme. Cost levels are the next challenge to be tackled.

## Customers and stakeholders

Historically, Railtrack’s relationships with its customers, principally the train and freight operating companies, have been described as being adversarial and suffering from poor alignment of objectives, supporting contracts and incentive mechanisms. Whilst there have been significant efforts to improve relationships over the past few years, this has been offset by the recent poor record on train performance.

The acquisition of Railtrack by Network Rail has provided an opportunity for more transparent and effective relationships with the ORR and the SRA. The new relationship is best illustrated by the open and transparent approach which Network Rail is adopting towards the interim review where the company is working closely with ORR and SRA to help them assess the scope for improved efficiency and to understand the implications of alternative levels of expenditure.

## Financial management processes

The cost of operating, maintaining and renewing the railway network have increased significantly in the last two years. One cause, as highlighted in the last ORR periodic review, is considered to be a lack of knowledge and understanding of cost causation and drivers with the result that the cost submissions were too conservative to deliver the required network outputs. Major project cost over-runs and continued or varied funding requests are symptomatic of the need for greater financial control.

At privatisation, many of the contractual interfaces were established on a transactional basis, rather than adopting a strategic longer-term view, and a highly competitive procurement strategy was adopted, resulting in high bid costs for suppliers, aggressive pricing and adversarial relationships. This, together with the short-term nature of the contracts, has also limited initiatives that require supplier investment. New longer-term framework contracts encouraging a partnership approach are currently being introduced, where appropriate, to address these issues.

The company has previously promoted a network-wide culture of risk management to ensure that it is a day-to-day activity. Some individual business areas use sophisticated techniques to manage risk, but this is variable and can occur in isolation from other departments. During administration the company adopted an extremely risk averse approach to the management of financial risks and it now needs to adopt a more realistic approach to the management of risks within its control.

Since privatisation there has been significant success in developing and selling property sites not required by the operational railway. Many of the prime sites have now been disposed of and the potential for revenue in the future is therefore considerably reduced.

Network Rail has no shareholders and pays no dividends. Instead, it has Members and reinvests any operating surplus in the rail network. The principal role of the Public Members is to hold the Board accountable for its performance and contribute to the successful delivery of Network Rail's plans for safe, reliable and efficient rail infrastructure.

## Asset stewardship

Planned expenditure on maintenance and renewals has risen significantly over the past three years.

The primary causes of the increases are:

- chronic underspend on the asset infrastructure, leading to a backlog of renewals expenditure;
- a renewals “bow-wave” caused by life expiry of assets replaced during the 1960s;
- traffic tonnage increases in excess of 24% since 1995/96 which were not matched by appropriate increases in maintenance and renewals;
- increased difficulty in getting access to the track to carry out routine inspection, maintenance and renewals;
- safety legislation and increasingly prescriptive standards; and
- constraints on the supply market's ability to grow rapidly, exacerbated by a short-term approach to planning.

At privatisation maintenance contracts were implemented on a fixed price basis, with control over inspection and maintenance activity in the hands of the contractor. The result was that Railtrack had very limited visibility of either the underlying asset condition, or control over the activity required to maintain it. New contracts were introduced in April 2000.

The relatively limited availability of access, for heavy repair, maintenance and renewal work, places constraints on productivity. Furthermore, working practices and equipment are not always optimised to make best use of the limited time available. In recent years, Railtrack and some of the contractors have made investments in bespoke plant, for example the Track Relaying Train, in order to maximise output within each possession.

At privatisation, British Rail Research was sold off separately, leaving Railtrack with limited technical and R&D capability. This limited resource base, coupled with the short-term approach to operating franchises and maintenance contracting, has led to a reduction in technical direction within the industry, and a reluctance to implement new technologies. Recently, Railtrack has provided some resources for innovation activities and the SRA has allocated a research budget, using Railway Safety as managing agents for priority programmes of work. In addition, a significant amount of technology development is now being conducted and planned by industry suppliers and academic institutions.

## Business performance

After the Ladbroke Grove incident in October 1999, Railtrack was subject to considerable external pressure, which increased significantly following Hatfield. In addition to the workload arising from remedial action, the company was put into administration in October 2001. Inevitably, the impact on employees has been significant and has resulted in lower morale and employee engagement.

A significant proportion of the company's information systems was inherited from British Rail and is overdue for replacement. There is little integration between key systems and an absence of a common data specification across the business. Consequently, whilst there is a very large amount of data available, only a very small proportion is effectively managed to provide quality information to support decision-making.

# Management Plans

## Introduction

The Business Plan is documented in detail through a series of key management plans, which are designed to achieve the corporate objectives. Each plan incorporates actions which aim to deliver the outputs to which we have committed. This section summarises the key issues and our plans to address them. It covers our plans in the following areas:

- Management Plan;
- Technical Plan;
- Key Projects Plan;
- Property Development Plan;
- Health, Safety, Quality and Environment Plan;
- Risk Management Plan;
- Information Plan;
- Communications Plan; and
- Financial Plan.

## Management Plan

Network Rail is six months into an 18-month corporate change programme. The size of the challenge should not be underestimated. Although the organisation has been through various change programmes since privatisation, there is still much to do. The main thrust of the change programme is:

- relationship management;
- corporate governance;
- organisation change;
- cultural transformation;
- performance management;
- resourcing and development;
- asset stewardship; and
- financial management

In each of these, significant change and progress has been made, but further work still has to be done. The asset stewardship programme is covered in the Technical Plan section.

### Relationship management

The renaming of Railtrack PLC to Network Rail Infrastructure Limited, as well as corresponding changes in subsidiary companies, provides one of the visible signs of the changes already underway within the organisation. Our objective for stakeholder relationships continues to be the increase of collaborative working that facilitates 'joined-up-thinking' and the identification of common goals across the industry to ensure performance improvements are achieved as quickly as possible.

We have brought together two previously separate directorates - Corporate Planning and Regulatory Affairs – to ensure that business planning is fully integrated with the external requirements of the SRA and ORR. We are also adopting a more tri-lateral approach to avoid duplication or inconsistency in information provided, and for example, are actively engaged in tri-party interim review liaison groups.

We have completed a mapping of the relationships between Network Rail and the offices of the SRA and the ORR to ensure there is effective management of the interfaces. Meetings with the SRA have been formally structured including the establishment of a fortnightly meeting between the Executives and the establishment of the Joint Programme Board. In a similar way, a formal meeting structure has been established with the ORR.

We have also completed a review of the approach to customer relationship management, part of the work on regional structures, and a revised '3-tier' approach to account management is being adopted as part of the new organisation template, due for implementation in early 2003/04.

## Corporate governance

The Members governance structure has now been put into place, including the appointment of Industry and Public Members, and a Members' communication function has been set-up. The Board of Network Rail was ratified at an Extraordinary General Meeting on the 17<sup>th</sup> December 2002.

The following non-executive Board committees have been established, their terms of reference approved and members appointed: the Audit Committee; the Remuneration Committee; Safety, Health and Environment Committee; Nominations Committee.

We have also established the structure of Executive Director and sub-executive committees in addition to established monthly and quarterly business reviews. These include the following:

- the Executive Committee – reviews matters of financial, operational (of material or policy type in nature), significant financial impact issues and general approvals above Chief Executive delegated authorities and below Board authorities;
- the Operations Committee – reviews operational issues, improving performance and sharing best practice; and
- the Investment Committee – approves investment proposals for projects above Chief Executive delegated authorities and below Board authorities.

We have rationalised the various safety committees and, in addition to the non-exec Safety, Health and Environment Committee, restructured "Safex" into the Strategic Safety Group and the Tactical Safety Group. We have also finalised arrangements for the formation of the Rail Safety and Standards Board (RSSB).

In addition the Network Rail Property Board has been established – it provides a strategic oversight of the activities of the Railway Estates Directorate.

In 2003/04, the actions that still require to be taken include;

- transfer of Railway Safety to the RSSB;
- review of the Membership Selection Policy; and
- establishment of regular updates for Members.

## Organisation change

Our first objective for the organisation was to put in place a structure that defined accountability, allowed clear delineation of responsibility for each role and maximised efficiency in the processes required for running the company. The first stage was the establishment of Network Rail's Executive Group structure on the 18th November. Since November, six key changes were identified and so far we have:

- established a standard regional organisation template including an 'Area Delivery Model,' and the appointment of Area General Managers;
- separated the Eastern Region into two smaller regions – London North Eastern and East Anglia.
- finalised plans for the West Coast Management Unit;
- established the Railways Estates Directorate, in which the previous Property and Major Station units have been integrated;
- committed to take "in-house" two other maintenance units, similar to Reading; and
- initiated work targeted at simplification and clarifying the role of HQ functions.

In the first quarter of 2003/04, the standard regional template organisation will be implemented across all regions of Network Rail, including the separation of Eastern Region and incorporating the Area Delivery Model. The West Coast Management Unit will be rolled-out in the same timescales, with the integration of the first maintenance area – Reading – taking place shortly afterwards.

Other actions still to be taken include further rationalisation of the Railway Estates Directorate following the conclusions and recommendations of its extensive review. In addition, we will continue the work on simplification and the role of HQ, with implementation of the changes to process, organisation and capability being completed by April 2004. This will lead to further work to identify operating cost efficiencies to contribute to the overall target for improved efficiency and to deliver significant savings.

## Cultural transformation

The purpose of the culture transformation is to ensure that the organisation undergoes a cultural shift in which everyone in the organisation adopts the new vision, mission and values. We face severe challenges in implementing a cultural shift and maintaining the energy and focus needed to nurture and sustain the required culture.

The implementation of the various initiatives has already started to make a positive impact and momentum is increasing. This is as a result of:

- completing 12 road-shows, in six locations, in which over 6,000 staff attended;
- completing 124 structured interviews with Network Rail's senior managers;
- over 200 people attending executive team building workshops;
- establishing the "transition monitoring team", in which representatives of the entire organisation provide feedback on the progress of corporate change; and
- appointing the provider and completing the first "Q12 – You make the difference" employee engagement survey.

It was always understood that the task of moving the organisation forward was going to be challenging and after reviewing progress, it is clear that the organisation has started accepting the need to change and adopting some of the actions required to make it happen. The first step in change is always denial and the history of this organisation indicated that change phases were likely to be difficult and possibly extended in timeframe. A number of actions are needed therefore to continue the drive for change and improvement, including:

- continued development of the executive team;
- analysis and agreement of the actions from the feedback from the Q-12 employee engagement survey; and
- further 'roll-out' of the team building workshops.

### Performance management

Performance management is a key contributing factor to improved performance and culture change. The Accountability Matrix links business plans and objectives to the role based accountabilities discharged by individuals and, since October 2002, it has been cascaded through the Board (Level 1) to their direct reports and some level 3 roles. In 2003/04, the cascade will be completed and rolled out into the regional delivery units and remaining parts of the HQ functions.

The Incentive Plan for 2003/04 is currently being developed and will be implemented early in the year. This will be followed by a wider review and roll out of incentive arrangements in respect of other key populations.

### Resourcing and development

A critical success factor is to ensure that we have the right people to deliver engineering and operational excellence and in order to do this it is necessary to have a consolidated view of total manpower requirements, identifying how best to provide them and incorporating succession planning as an integral activity.

We have reviewed the devolution of the authority to recruit and an improved process for ensuring headcount remains under control has now been put in place. Only business critical vacancies can be filled. In 2003/04, we expect some areas of increase for a number of reasons including substitution of permanent staff for agency, in-sourcing contracts and increased project activity, whilst others will benefit from the 'simplification' work programme previously referred to.

Actions that still remain include:

- centralisation of the management of training and development budgets;
- continuation of the drive to remove dependence on temporary agency and contract staff currently filling positions;
- full implementation of the new Oracle based HR system;
- creation of a General Management (GM) Development programme to support newly established GM positions in the regions; and
- implementation of the new "Executive Leadership Development Programme".

## Financial management

We have progressed our goal of improving the effectiveness of financial management. Inevitably, there is a gap between spending sums on the development of efficiency improving ideas and their translation into real cost savings in the operation of the Network. Our present challenge is to identify how this process of development and implementation can be accelerated to become more effective, and bring real financial benefit.

We have improved our financial control framework in many respects including:

- approval and implementation of revised Investment Regulations;
- refinement and issuance of the Guide to Railway Investments Projects (GRIP);
- establishment and implementation of revised delegated authorities;
- implementation of the new reporting pack;
- establishment of Monthly Business Reviews (MBRs) for the regions; and
- changes to reporting lines for regional financial controllers and finance managers.

In 2003/04, we will be embedding the revised investment regulations and delegated authorities. Our plans for continuing areas of action include introducing improved framework contracts and implementing the corporate risk management procedures. In addition, the revised accounting policies will be implemented.

## Business planning

We must ensure that we make the best use of the available resources and most effectively deliver our outputs within the constraints within which we have to work. We intend to move to a more effective and efficient business planning process in the future.

This year we have completed the 2003/04 business and supporting plans and these have been reviewed by the Board. We have also prepared a new set of reporting KPI's. The major task which is underway is preparation for this year's interim review and the agreement of the related milestone timetable with the ORR.

In 2003/04, the actions that remain to be taken include:

- moving to a more effective and efficient business planning process including
  - a long-term approach to activity planning;
  - prioritising activities based on their relative value;
  - progressing towards route based planning;
- making the submission to the interim review in August 2003;
- assessing the various options arising from the interim review; and
- completing the Network Rail financial model.

Action to improve efficiency and control costs must also be a continuous process. Towards the latter end of 2003/04, a new planning phase will be initiated when the results of the current network review are starting to emerge and the context for the next phase of improvement is clearer. At that point it will become clear how the organisation and its relationships will need to change in order to reflect the likely outcome of the interim review.

## Technical Plan

The Technical Plan sets out how we intend to achieve our corporate objectives, through the safe and efficient day-to-day operation of the network, and the asset maintenance and renewal activities which underpin the delivery of the train services.

Whilst we have made substantial progress since the publication of the 2002 NMS, further work is required before the longer term activity levels, and corresponding funding requirements, can be determined with an appropriate degree of confidence. We would therefore expect to publish our longer term expenditure projections later in the year, as an input to the interim review process.

The plan provides a blueprint for the achievement of our vision of delivering “engineering excellence for Britain’s railway” and contains details of many of the initiatives which we have launched since October 2002 that are targeted with helping us achieve this. However, it should be recognised that the relatively recent transfer out of administration and the scale of the challenge we face means that this plan cannot yet be considered complete, but rather reflects a transition from the old to the new. The scale of the problem means it will take some time to deliver significant improvements in asset condition and hence train service reliability, and a number of initiatives are underway to deliver some early benefits. These include:

- an improved asset inspection and remediation regime;
- contract changes to return maintenance and renewal decision making to our engineers;
- tools to better understand asset degradation and train performance; and
- improvements to the development and day-to-day delivery of the timetable.

## Asset stewardship

Effective asset stewardship is at the heart of the delivery of a safe and reliable railway. A good understanding of our assets is also key to the efficiency and affordability of the network.

As has already been stated, the UK rail network has suffered from many years of under-investment leading to a reactive approach to the management of the infrastructure. We are continuing to move to a position where our increased understanding of the likely future behaviour of our assets enables us to develop strategies that minimise whole-life costs. Central to this is the development of asset policies, underpinned by our engineering standards, that define:

- the type and frequency of maintenance that should be carried out on the assets;
- when the asset has reached the end of its life and replacement should be considered; and
- the type of asset that must be used as a replacement.

The shaping of these policies is facilitated by the development of decision support tools, to understand better how our assets degrade and the key factors that cause this degradation. Considerable progress has been made on these tools over the past twelve months, in particular the development of the T-SPA (Track Strategic Planning Application) tool for track assets, enabling us to produce more robust estimates of the activity volumes required to deliver the desired asset outputs. Whilst considerable further work is required to enhance T-SPA and other support tools, the results to date show considerable promise. The next phase of development is scheduled to be complete by the end of 2003.

We continue to suffer from poor asset information. The introduction of these support tools and the identification of the data they require allows us to focus more closely on the key information that is missing and is enabling us to prioritise our plans for the capture and maintenance of this information. During 2003 we will complete our assessment of missing or duplicated data, which will feed into the new information management strategy.

To address the complex interactions that characterise today's rail industry we have taken a lead role in the management of the interfaces for technical matters with other parts of the industry. This will play an increasingly important role, particularly with regard to wheel rail interface issues and developing plans for the introduction of the European Railway Traffic Management System.

Of equal importance to the development of robust asset policies is the translation of these policies into delivered work on the network. The New Maintenance Programme is designed to return the key elements of asset stewardship decision making to our own engineers, whilst still contracting out the actual delivery of the work. By owning the relevant asset information and the work prioritisation decisions we can ensure a more consistent and effective approach to asset management, leading to improved asset performance and reduced unit costs. Implementation of this initiative will commence in East Anglia region during June 2003 and this will be rolled out across other regions in 2004.

This approach is reinforced by increased use of dedicated in-house maintenance. We have decided to bring the delivery of this work in the Reading contract area under the direct control of Network Rail by July 2003. We have now announced plans to bring two more areas in-house. This initiative is designed to help us understand better the costs associated with maintaining the network and to assist us in redefining the levels of responsibility and risks between ourselves and our maintenance contractors.

The replacement of the maintenance contractors' legacy information systems with the proprietary asset and work management system, MIMS, has greatly facilitated our ability to implement these revised relationships with our maintenance contractors. We have determined that the utilisation of MIMS throughout the company will be maximised and, following completion of the current implementation phase in June 2003, we will consider further development. Stakeholder consultation with our maintenance contractors and other interested parties will play a key part in this.

Restoring track condition through increased proactive maintenance and renewal activities is central to our strategy of improving asset reliability. The two key measures of condition are track geometry and component condition. Our use of the new High Speed Measurement Train (capable of operating at speeds of up to 125 mph), together with our initiative to fit geometry measuring systems to service trains, and the introduction of train borne ultrasonic inspection equipment, allows us to gather significantly more information than in the past on track geometry and component condition. We are also examining the use of train borne techniques to assess sleeper condition and these initiatives should help improve the effectiveness and efficiency of our work on the network.

Having identified the track condition, effective and timely maintenance is required. Four rail grinding trains are now in operation as part of a "preventative grinding" regime to combat Rolling Contact Fatigue. Two additional plain line grinders and five switch and crossing grinders are planned for introduction this year. This will enable us to operate a full preventative maintenance regime, extending rail life substantially and thereby reducing whole life costs significantly. Similarly the use of stone blowing equipment is allowing us to improve the effectiveness of our ballast, critical to maintaining geometry and component condition at least cost. Further stone blowers will be introduced onto the network during 2003, including switch and crossing stone blowers.

## Access to the network

We have launched a number of initiatives to gain better access to the network for inspection, maintenance and renewals activities, and to improve the way in which we use this access to deliver a reliable network at the least possible cost. Increased demand for train services over recent years has led to increasing constraints on access and this has raised the importance of this issue. The forecast increase in the amount of work needed on the network will further exacerbate the problem.

We are working with the SRA on the development of their Capacity Utilisation Policy that in part is designed to improve the way access is apportioned for train services and engineering work. We are also seeking to improve our planning processes, for example to close down the scope of the proposed works at a sufficiently early stage so that possessions can be booked with a considerable degree of certainty. This will reduce the need for late changes to the possession requirements. This on its own is not sufficient to accommodate the scale of additional work that is required. We need to utilise these possessions more effectively and considerable work has been carried out to develop better planning tools to improve our ability to package works.

## Maintenance and renewals planning

Efficient delivery of maintenance and renewals requires effective long-term planning. However, this planning has historically been an event driven process geared towards supporting the five yearly regulatory reviews. We are in the process of overhauling this approach and moving to a position where asset management planning is carried out on an ongoing basis supported by common methods and datasets.

Whilst progress has been made in the introduction of this revised approach there remains considerable work to be done. This is reflected in the varying confidence levels associated with each of the infrastructure asset management plans:

- reliable activity volumes are dependant upon robust decision support tools. As has already been stated, whilst good progress has been made in their development, further enhancements are required. In addition this will serve to improve knowledge of the maintenance renewal interface which is not yet adequately addressed within the plan.
- unit cost information is variable across the asset disciplines leading to lower than desired confidence levels in our current cost forecasts. Significant further work is also required to understand the extent to which unit costs can be reduced through efficiencies.

Plans are in place for each of these issues and we expect to be in a stronger position with regard to the production of a robust ten year plan as an input to the interim review in summer 2003.

## Network planning and operations

Whilst asset reliability has a major role to play in the delivery of a safe and reliable railway, the importance of a robust timetable that adequately reflects the capability of the network to deliver it, is also important. A thorough review of the Rules of the Plan, the rules applicable to the construction of the timetable, is in progress. Ensuring that these rules more accurately reflect real operational conditions will allow a more robust train plan to be developed. The results of this process will be implemented progressively between 2003 and 2008.

We believe significant benefits can be achieved from improvements in the day-to-day delivery of the timetable and a number of initiatives are being progressed to achieve this. The development of our front line operations staff through the production of a standard operations manual, best practice guides, competency assessments and professional development provide a strong platform for delivering improvements. The use of simulators to enable signallers to practise working in a range of emergency situations will significantly improve their ability to respond in a real-life incident. The installation programme will be completed by January 2005.

A new industry code of practice, Service Recovery 2003, was implemented in February of this year to reduce the duration and impacts of incidents. This is a cross-industry initiative and builds upon previous work in this area. A key benefit of this code is clarity on the rules governing service cancellations to facilitate a return to the scheduled timetable. This provides a major opportunity to improve co-operation with train operators.

The opportunities presented by comprehensive real time information on train performance and other system critical factors such as possessions, are considerable. Our current legacy systems, fragmented and built around differing data structures, severely limit our current ability to fully exploit available information. By May 2003 we will have produced a robust plan that is capable of delivering a world class proactive control facility.

## Operational performance

A robust fit for purpose rail infrastructure allied with a realistic train timetable, and an ability to respond rapidly following disruptions to scheduled services, are essential components to deliver a significant reduction in train service delays over the life of this plan. However, without robust and meaningful management information about the performance of the network the effects of these strategies will be diminished. Our Performance Systems Strategy is designed to address this, providing us with both diagnostic and predictive tools to help understand, predict and manage performance more effectively. Implementation will commence during 2003 with the creation of a data warehouse and improved analytical tools.

Two new statistical tools are under development to better analyse the causes and effects of delay. These were used for the first time to derive realistic projections of future delays as part of the 2003 Business Plan. Further work is required to develop these tools and the resulting forecasts, including better understanding of the potentially non-linear relationship between traffic growth and delays.

We have also considered how the company reviews actual train performance in order to ensure that a properly integrated approach is taken to identifying and implementing corrective action. This has led to the creation of performance improvement teams for each region, charged with monitoring actual against planned performance in order to determine where (and what) action is required to address shortfalls. Regional (drawn from both Network Rail and the relevant infrastructure maintenance company) and HQ representatives will be represented on all teams to ensure that we identify issues and solutions which could be implemented on a national basis.

## Key Projects Plan

The Key Projects Plan sets out our roles and responsibilities for enhancing the network, and describes how we plan to discharge them. The arrangements for developing and delivering enhancement projects are set out in the Enhancement Facilitation Agreement (EFA), between Network Rail and the SRA. The Key Projects Plan sets out how this is being implemented to support the objectives set out in the SRA's 10 year Strategic Plan.

Under Condition 7 of the Network Licence, we have obligations to secure the improvement, enhancement and development of the network to satisfy the reasonable requirements of customers and funders. Since 2002, this has included facilitating other parties to undertake enhancement projects through Special Purpose Vehicles (SPVs). Nonetheless, we retain a critical responsibility to ensure the network remains capable of supporting safe, efficient and reliable operations.

The SRA's Strategic Plan, published in January 2003, sets out an improved approach to planning in the rail industry. The SRA will carry the specification and design risk associated with enhancement projects, and contractors will take on the risk associated with design quality, construction and financing through competitive bidding.

Enhancement projects may also arise from customer and stakeholder requirements and mandatory obligations, including changes in legislation. These are developed and implemented in the same way as other enhancement projects, and funding is provided via the regulatory regime or by other third parties.

Work on a number of existing projects in development is now being undertaken under the terms and conditions of the EFA. We are jointly developing with the SRA new processes and procedures to operate this agreement. A Joint Programme Board (JPB) has been established, composed of Board level representatives of both organisations, to oversee the enhancement programme. Individual projects are taken forward within a framework of Project Development Groups (PDGs), which direct, manage and monitor all aspects of their feasibility, development, procurement and delivery.

The EFA also sets out a staged process for project development and delivery, with the objective of achieving consistency of approach across projects, and reducing the risk of unrealistic and premature commitments being made. This is supported by procedures documented in our Guide to Railway Investment Projects, issued recently.

Budgetary constraints and the objective of developing the network in a manner which gives best value for money means that many enhancements will be undertaken when we undertake major renewals of the network, particularly resignalling schemes. We plan to share our renewals plans with SRA on a regular basis, and agree with them those projects where PDGs should be constituted. A clear way forward on schemes of this nature will need to be agreed with the Rail Regulator in the interim review.

Significant projects arising from commitments made by Railtrack are:

- WCRM. The SRA has recently concluded the scope review of this project. However, the translation of that scope into a detailed workplan is not yet fully complete. The Business Plan includes the latest best estimate of the resulting activity, expenditure and output profiles but this will be refined in the next few months;
- IOS/MFAS. We are working with SRA and ORR to determine how the programmes of work will be taken forward for a reduced initial scope of work and have invited tenders for this work; and
- Thameslink 2000. Timescales for completing the project are uncertain, following the decision of the Office of the Deputy Prime Minister to require changes to the design proposed for London Bridge station.

The key projects being progressed under the EFA are:

- Felixstowe to Nuneaton capacity and gauge enhancements;
- Southampton – West Coast capacity and route clearance;
- improvements to East Coast Main Line;
- infrastructure to facilitate replacement of Mark I rolling stock;
- works to facilitate the CTRL blockade of the Thameslink route;
- East London Line extensions; and
- introduction of domestic services on CTRL.

Funding for these schemes is limited over the next two years, and commitments beyond 2005 will be subject to the Government's 2004 spending review.

Enhancement projects for which funding will be reviewed through the forthcoming interim review include:

- capacity increase at Waterloo, London Bridge and Birmingham New Street stations; and
- platform stepping distances.

Our review of potential enhancement projects has identified 190 projects which are expected to be funded entirely from sources outside Network Rail and SRA. The more significant of these include:

- Heathrow Terminal 5 extension;
- Crossrail;
- Chiltern Franchise – Evergreen Phase 2; and
- North London Line upgrade for Eurostar empty stock working.

We are seeking to establish a more stable view of the future workload on enhancement schemes with SRA, and to recruit and develop an appropriate level of Network Rail employed staff to work on these schemes.

## Property Development Plan

We are currently conducting a review of all aspects of our property based businesses to create a strategy for the future development of these activities to maximise their revenue generating capability without compromise to the core business of operating, maintaining, renewing and enhancing the network. At the same time, we will be looking to achieve significant benefit from integration and rationalisation of the newly created Railway Estates Directorate and possible rationalisation of the existing property portfolio. Property issues will be directed by the new Property Board.

The strategy review is due for completion in April 2003, following which the Property Development Plan will be updated to reflect conclusions regarding property related activities, market potentials, revenue generating capabilities, resource requirements, organisational and management arrangements and action plans for the development of our property based businesses.

The key activities currently within the scope of this review include Property Development Sales, Spacia and Major Stations based trading. Whilst there is potential for a number of these current income streams to continue to grow, we believe that long-term revenues from sales activities will decline as the opportunities to realise value from the land and property bank diminish.

A key risk to the sustainability and growth of income from Major Stations based trading income is the forecast growth in passenger numbers which, if not met by commensurate investment to create larger stations, can only be accommodated, in the short-term, by the selective or wholesale removal of retail facilities. The loss of such property revenues from the travelling public and other station users would lead to additional costs for the rail industry through the loss or reduction of the property support for access charges.

## Health, Safety, Quality & Environment Plan

The Health, Safety, Quality and Environment (HSQE) Plan sets out how Network Rail intends to improve systematically its control of key risks, comply with new legislation/directives and fulfil its role as the national mainline rail infrastructure controller. This is underpinned by detailed arrangements set out in our:

- Railway Safety Case and Development Plan;
- 2003-6 Safety and Environment (S&E) Plan; and
- Network Rail Safety and Compliance Action Plans.

Network Rail possesses a mature and robust Railway Safety Case, Safety Management System and Environment Management System. The challenge that faces the company is how to cost effectively improve the control of safety, health and environment risk against a backdrop of ever increasing legislation, industry cost constraints, enforcement action by statutory and regulatory authorities, a fragmented supply chain and inadequately defined rail system interface controls. Network Rail is also having to face up to the increased business continuity and safety risk posed by external factors and the need to reduce internal costs by improving the quality and efficiency of our processes.

The HSQE Plan sets out how Network Rail intends to respond to this challenge. The headlines are set out below:

- all safety, health, environment and business loss precursors are to be identified using our new risk framework, which is under development;
- sustainable long-term control strategies are to be developed for our principal risks;
- the integrated, company wide Business Continuity Management Plan, which will be implemented to manage a wide range of business risks, will strengthen Network Rail's capability to respond to serious accidents or terrorist acts as well as protecting the wider rail industry;
- HMRI is to be consulted on the development and implementation implications of these new risk strategies to ensure that they are supported. In the case of HMRI we will also be seeking agreement that their enforcement policy will be compatible;
- the Environment Agency, English Nature and other key stakeholders are to be consulted on the development and implementation of environment impact control strategies;
- a new company standards and business document control framework is to be developed. This will ensure that frontline staff understand the requirements of mandatory controls and that these controls are robust and cost effective;
- a safety leadership and culture change programme is to be implemented across the whole of Network Rail to ensure that all our staff are aware of their personal responsibilities and contribution to health and safety delivery; and
- proven quality management techniques are to be introduced into Network Rail to measure the efficiency of our organisation and processes. We will also develop an improvement framework and equip our managers with the necessary skills.

Delivery of all the above will significantly improve control of Network Rail risk precursors and help reduce business loss. However, as infrastructure controller, Network Rail is critically dependent upon the positive contribution which comes through working jointly with the following bodies:

- train and freight operating companies to implement more effective internal risk control strategies, particularly in respect of human factors, safety critical communications, wheelset management, fire safety, railway crime and station management;
- SRA, RSSB and Railway Group members to develop effective and efficient commercial and safety controls for all key rail system interfaces;
- SRA, HMRI and Railway Group members to address the long-term future of ERTMS;
- education authorities, local authorities, the judiciary and associated organisations, community groups, British Transport Police (BTP) and constabularies to reduce risk posed by trespass and malicious acts on the railway;
- Highways Agency, local road authorities, police and the judiciary to improve radically road user discipline and behaviour at level crossings, to reduce the risks associated with road vehicle incursions onto the railway, and to reduce the risk that road traffic accidents pose to the railway;
- the Government and planning authorities to consider the impact of commercial and domestic developments on the railway in terms of level crossing risk, road traffic and air accident risk, trespass and malicious acts, lineside premise fires and other such imported hazards on to the railway;
- HMRI to adopt a risk based intervention and enforcement policy which positively assists health and safety improvement rather than distracts from implementation of core improvement strategies, and takes into account the importance of societal risk when considering actions directed at the railway industry compared to other transport modes; and
- co-ordinated Government and SRA support in managing the interface with Europe over development of future directives to ensure the full cost/benefit implications are understood.

The HSQE Plan serves to highlight the importance of rail industry partners working together with other agencies to meet our business requirements. The development and implementation of each main risk control strategy will be the catalyst for working alongside other players to deliver the required improvements.

## Risk Management Plan

Network Rail's risk philosophy is commensurate with its mission to provide an efficient, safe and improving operating environment for all rail network users. We are committed to a corporate-wide approach to risk management that provides a framework that is holistic, workable and quantitative.

We have started a programme to develop, implement and support an integrated, structured risk management framework to identify, evaluate and manage all business risk and also a business continuity management framework to effectively manage the adverse impact of risks should they actually occur. The Board is fully committed to the effective management of risk and is keen to ensure that all other rail network stakeholders aspire to this vision.

Once development is complete, the frameworks will be trialed through a series of pilot projects. After incorporation of lessons learned during the pilots, the approved framework will be implemented across the network.

All risks will be managed within the company's agreed levels of tolerance, defined in protocols, policies and procedures. Uniform criteria are being developed for the measurement of consequence and likelihood, and for identifying and mitigating risks. This will ensure, as far as possible, that risks are identified and evaluated to a consistent standard, across all functions and regions, that effective control measures are identified and that ownership is most appropriately attributed, accepted and acted upon.

Until such time as the integrated risk management framework and business continuity framework have been fully developed, trialed and implemented, risk will be managed in accordance with current practice. However, as soon as is reasonably practicable, all risks, and their associated remedial actions, will be stored to a common format and standard on a risk management database. This database will be used to monitor risk performance, produce a suite of reports and risk profiles, and provide a complete audit trail enabling prioritisation of implementation of management controls. Where appropriate, risks will be assigned against the asset register, providing additional information to help with the prioritisation of investment and to improve operational safety and service efficiency.

The responsibility for enhancing our capacity for identifying, controlling and managing risk will rest with the Director of Safety and Compliance. He will be supported in this role by a centrally managed team of risk specialists, which will provide support to the regions and business units in the identification and management of risks. In addition, a business continuity plan will be implemented.

The lack of an integrated risk management system, inconsistent evaluation criteria and variable risk assessment procedures has hindered our ability to quantify the risks inherent in this plan. As a short-term solution we have undertaken a centrally-led review to quantify the key risks, which will be completed before the interim review. A longer-term solution will be implemented for the 2004 Business Plan.

A business continuity coordination function will be established to develop good practice and ensure it is practised throughout the company. We are actively encouraging and supporting an ethos where information on risk, and the measures implemented to control risk and its effects, are shared through effective two-way communication. We are developing and implementing a training programme to ensure that all our staff are sufficiently trained to effectively manage risk. Our approach to risk and business continuity will also be conveyed to new staff on joining the company through the induction process.

## Information Plan

The Information Plan describes how Network Rail is delivering short-term plans within a long-term strategy to achieve substantial improvements in the way information is managed within the business. The short-term plans establish a stable basis for moving the long-term strategy forward and delivering the urgent Information Management (IM) requirements of the business.

Programmes of work currently in progress include:

- knowledge management planning and implementation;
- data services including a corporate data model and the delivery of information via a dashboard to support KPIs;
- asset systems and knowledge including support for the New Maintenance Programme (NMP), the migration strategy for Mincom Information Management System (MIMS) and the definition, cleansing and profiling of key data within a corporate data repository;
- support services will utilise the significant licence investments that Network Rail has made in the Oracle eBusiness suite by the implementation of standard business services including Human Resources and Supply Chain – iProcurement;
- delivery of an infrastructure programme that ensures a fit for purpose state with previously missing elements such as security, disaster recovery and messaging in place; and
- introduction of clear rules for programme governance.

The long-term strategic vision for IM supports the achievement of the 'One Network Rail Way' of working. The strategy transforms the current bespoke, disjointed applications, technology, silo data and processes through applying principles of stabilisation, simplification, standardisation and rationalisation. Key deliverables over 10 years are:

- over 1,000 applications reduced to 40 key business services;
- reduction and re-positioning of the 125 suppliers down to 5 business partners;
- 20,000 local databases replaced by one virtual corporate database with data under control; and
- reduction in the number of control centres from 150 to 18, and optionally to 2.

Through enhancement of the infrastructure, rationalisation of business functions and introduction of standard processes the vision provides for a minimum set of core business and infrastructure services that can be used across the business. Throughout this process we will continue to meet the KPIs and reporting requirements set out by the ORR and the SRA.

The journey from the current as is position, through the urgent issues and onto the 10-year vision will be a pragmatic one that is guided by economic constraints and business priorities. Migration modelling techniques will be used to orchestrate the prioritised delivery of the programmes of work required to implement the vision. Implementing the Information Plan will require substantial change to the existing organisation, culture and systems and is therefore closely linked with the plans to improve these, as set out in the company's Management Plan.

## Communication Plan

Network Rail is committed to regular and open dialogue with all its stakeholders, including its members, customers, suppliers and employees. We will ensure that they are aware of what we are trying to achieve, how we plan to do it and what progress we are making. Our employees need to be engaged and proud to work for Network Rail. However, we recognise that improved performance and value for money is the key to Network Rail and the industry being perceived in a better light.

Every employee is a part of this team aiming to provide the best project delivery and maintenance service. Every passenger who uses the national rail network is entitled to a safe and reliable journey. We are providing our employees and partners with a clear understanding of what is expected from them and what they can expect from the Network Rail leadership team. Network Rail will become an engineering-focused service company that concentrates on making it happen and uses the heritage of the skills and experience of the existing Network Rail employees.

Our Communication Plan makes explicit the key strategic aims, objectives and measures by which communications activities will be planned and executed and gives an overview of the actions and performance indicators being progressed to facilitate achievement. It articulates the simple but essential strategy of consistent communications based on realistic expectations of what is achievable, and in what timescales, underpinned by a unified and co-operative approach with the company's overall objectives as well as those of the wider industry. In addition to external stakeholder perceptions, a significant influence on Network Rail's performance will be through an enhanced level of employee engagement and this is to be monitored regularly by the Q12 programme.

## Financial Plan

Network Rail's immediate financing needs are met by a range of short-term facilities from commercial banks, finance lessors and international lenders (total £10.4bn). Network Rail's core commercial financing will be completed over the coming months with a further £4bn of short-term facilities, likely to include a commercial paper programme, to meet Network Rail's working capital requirements through to implementation of the interim review in April 2004. This is in line with Network Rail's expectations when it took Railtrack plc out of administration in October 2002.

Network Rail's commercial facilities benefit from a £21bn package of standby support loans from the SRA (of which £7bn is undrawn standby support against future cost overruns).

Over the next year, Network Rail expects (subject to market conditions and the outcome of the interim review) to commence the process of refinancing its existing commercial facilities with long-term debt, including capital markets issues. It also expects to continue working with the SRA to develop SPV financing for enhancements to the rail network.

# Expenditure and Key Performance Indicators

<b>Figure 7 National expenditure projections</b>				
£ m	2002/03	2003/04	2004/05	2005/06
2002/03 prices	(forecast)			
<b>Operating Expenditure</b>				
Controllable	953	1,031	1,029	1,032
Non controllable	246	233	217	217
Total Operating Expenditure	1,199	1,265	1,246	1,249
<b>Maintenance</b>	1,202	1,328	1,313	1,253
<b>WCRM Renewals</b>				
Track	306	556	463	255
Structures	49	76	64	64
Signalling	284	446	391	356
Electrification	119	178	138	151
Plant & Machinery	0	2	0	0
Telecoms	26	26	54	46
Stations	0	1	0	0
Depots	0	0	0	0
Lineside buildings	2	0	0	0
Total WCRM Renewals	786	1,283	1,110	872
<b>Non-WCRM Renewals</b>				
Track	608	650	779	897
Structures	322	364	465	476
Signalling	289	264	361	766
Electrification	29	50	77	100
Plant & Machinery	88	227	202	102
Telecoms	95	384	432	383
Stations	107	86	147	156
Depots	36	31	30	26
Lineside buildings	15	14	22	19
Other	150	110	135	149
Total Non-WCRM Renewals	1,739	2,180	2,650	3,075
<b>Total Renewals</b>	2,525	3,464	3,760	3,947
<b>Total Operating, Maintenance and Renewal</b>	4,926	6,056	6,319	6,449
<b>Enhancements</b>				
West Coast	184	215	189	228
Other committed enhancements	676	994	1,006	306
Total committed enhancements	860	1,209	1,195	534

<b>Figure 8 Key Performance Indicators</b>	2002/03 (forecast)	2003/04	2004/05	2005/06
<b>Key Performance Indicators</b>				
<b>Improved safety</b>				
Public Safety Index	0.48	0.45	0.42	0.39
<b>Higher performance</b>				
Public performance measure	79%	82%	84%	86%
<b>Increased system capability</b>				
RAB Adjustment for Passenger Volume Incentives (£m)	24.6	26.6	46.6	38.6
RAB Adjustment for Freight Volume Incentives (£m)	-8.7	-5.3	1.2	1.2
<b>Improved customer &amp; stakeholder relationships</b>				
Passenger complaints	130	120	110	100
<b>Improved financial control</b>				
Financial efficiency index	2,148	2,446	2,402	2,321
<b>Improved asset stewardship</b>				
Asset stewardship index	1.03	0.96	0.88	0.80
<b>Improved business performance</b>				
Employee engagement	n/m	2.0	2.2	2.5
<b>Supplementary Indicators</b>				
Train delay minutes (000 mins)	14,226	13,250	12,309	11,262
Number of broken rails	477	429	369	291
Level 2 exceedences per track mile	1.4	1.2	1.1	0.9
Level 2 exceedences on lines with speeds > 40mph	n/m	0.8	0.7	0.6
Number of signalling failures	40,500	38,179	36,375	34,660
Number of temporary speed restrictions	584	551	480	417
Poor track geometry	3.7%	3.6%	3.1%	2.6%
Station condition	615	666	697	727

n/m: New measure, not previously collected

# Appendices

## Business plan basis and key assumptions

### Basis of preparation

This Business Plan has been developed on the basis of actions which aim to deliver a safer, more efficient and reliable infrastructure for the nation's rail industry and the public.

On 15<sup>th</sup> November 2002 the Rail Regulator published a consultation document on the forthcoming interim review. For the purposes of the Business Plan he stated that he would be asking Network Rail to produce costings for the following outputs:

- the measures of network capability, asset serviceability and asset condition set out in Chapter 14 of the periodic review final conclusions; and
- the trajectory for operational performance put forward by Railtrack in its 2002 Network Management Statement (broadly envisaging a return to pre-Hatfield levels of performance by 2006).

Accordingly, the plan has been developed to comply with the Network Rail safety case and the Group Safety Plan and to deliver, as far as possible, the following objectives:

- regulatory outputs and performance, as outlined in the ORR consultation document; and
- SRA Strategic Plan.

There are, however, practical constraints on our ability to deliver the objectives, which have been taken into account:

- available financing to 31<sup>st</sup> March 2004;
- delivery and supply chain capacity; and
- overall financeability of the plan.

To the extent it has been necessary to curtail planned activity as a result of these constraints, we have adopted the prioritisation set out in the Network Stewardship Criteria.

In developing the plan, we have also sought to improve efficiency, cost-effectiveness and whole-life cost optimisation. It is recognised, however, that achievement of these goals is constrained by:

- the speed at which the organisation is able to change; and
- the practical constraints on activity identified above.

The following section sets out the key assumptions adopted.

## Key assumptions

### Asset stewardship

Progress on improving our knowledge of the assets, developing decision support tools and understanding input-output relationships has improved significantly over the last year. The Business Plan is essentially based on the knowledge in early 2003 and residual uncertainty in these key areas remains a risk to the robustness of planned activity, expenditure and outputs. Further improvements can therefore be expected over the next year.

### Deliverability

As noted above, the practical constraints on our ability to deliver the corporate objectives have been taken into account in developing this plan. Nonetheless, the planned volumes of work in 2004/05 and 2005/06 represent a significant increase on 2003/04. This will necessitate changes to current industry practices which will require mutual co-operation between us and our key stakeholders:

- additional engineering access to the network;
- increased supply chain capacity; and
- the introduction of new high-output machinery.

### Efficient spend

Planned efficiency initiatives have been included where the impact of changes can be quantified. Further work is planned before the interim review to develop a detailed plan to achieve targeted overall efficiencies of 20% by March 2006.

### WCRM

The SRA has recently concluded the scope review of the WCRM project. However the translation of that scope into a detailed workplan is not yet fully complete. The Business Plan includes the latest best estimate of the resulting activity, expenditure and output profiles but this will be refined in the next few months.

### Enhancements

Enhancements included in the plan are:

- schemes committed by the Railtrack Board;
- schemes which the SRA expects to be delivered by Network Rail; and
- known safety and major station capacity requirements (although the funding for these schemes has not been agreed with SRA).

Safety enhancements to meet the needs of known legislation requirements have been included in the plan. Further expenditure may be required, but cannot yet be fully quantified, for anticipated legislation, including ERTMS. The majority of the financial impact, however, is expected after 2005/06.

All financial figures are at 2002/03 prices unless otherwise stated. Forecasts are as at period 10 (January 2003).

## Key performance indicators

A number of Key Performance Indicators are industry-wide measures to which Network Rail makes a significant, but partial, contribution. Where appropriate, it has been assumed that other key partners will improve at the same rate as Network Rail.

The key assumptions and uncertainties summarised above, together with those outlined elsewhere in the document, represent risks to delivery of the overall plan. We are currently developing a programme to support an integrated risk management framework. An initial assessment of quantified risk to the plan is currently in progress and the results will be available prior to the interim review.

## Material changes since Railtrack 2002 Network Management Statement

The 2002 Network Management Statement (NMS) was published without the inclusion of key financial and output projections. These were separately provided to the ORR via a financial supplement.

This section identifies material changes from the 2002 NMS to this year's Plan. All figures referred to as "2002 NMS" are those contained within the financial supplement and are stated at 2001/02 prices.

## Controllable opex

<b>Figure 9 Controllable opex</b>				
<b>£m</b>	<b>2002/03</b>	<b>2003/04</b>	<b>2004/05</b>	<b>2005/06</b>
	(forecast)			
Railtrack 2002 NMS	962	970	957	951
Inflation to 2002/03 prices	15	16	15	15
Increase in costs to support key action plans		21	20	12
Increase in pensions costs		26	28	28
Increase in insurance costs		19	19	19
Increased leasing costs for telecoms & electrification		4	14	28
Other reductions	(24)	(25)	(24)	(21)
2003 Business Plan	953	1,031	1,029	1,032

A number of our action plans will result in specific cost changes which contribute to efficiencies and savings in maintenance and renewals.

The 2003 Plan includes a significant increase in pensions costs resulting from an actuarial re-evaluation of required employer contributions and has been updated to reflect the latest advice from our advisers on increases in the costs of insurance.

## Maintenance

<b>Figure 10 Maintenance</b>				
<b>£m</b>	<b>2002/03</b>	<b>2003/04</b>	<b>2004/05</b>	<b>2005/06</b>
	(forecast)			
Railtrack 2002 NMS	1,112	1,228	1,214	1,150
Inflation to 2002/03 prices	18	20	20	18
Adjustment for year end forecast (2002/03)	72			
Reduction in anticipated efficiency		28	57	88
New Maintenance Programme and other action plans		19	10	3
Heavy maintenance at key junctions		24	24	
Other		9	(12)	(6)
2003 Business Plan	1,202	1,328	1,313	1,253

As stated in the Technical Plan, the assumptions about maintenance volumes and the scope for delivering efficiency savings was poorly understood when the 2002 plan was produced. Whilst we continue to make significant progress in understanding maintenance requirements this does not yet extend to confirming robust targets for efficiency or a full understanding of volumes and unit costs. This has to some extent hindered our ability to analyse the changes from the 2002 NMS.

Efficiencies included in the 2002 NMS were aspirational and were not supported by a detailed plan for their achievement. The 2003 plan includes efficiencies only to the extent that they can be quantified. We will, however, be seeking to quantify further efficiencies prior to the conclusion of the interim review.

The costs of rolling out the New Maintenance Programme and other maintenance related action plans have been included as an incremental cost as shown above.

Additional heavy maintenance at key junctions will be carried out over the next two years to reduce train delays at critical locations.

In last year's plan, we also included a significant contingency for 2003/04 to 2005/06 to cover a range of potential cost pressures. Increased costs are faced by our contractors from increases in pension funding, increased national insurance contributions, changes in public and employer liability insurance and the additional costs they might face in relation to the implementation of RIMINI. Whilst these cost pressures were not provided for in the bottom-up plan they, and the increased workload volumes achieved in 2002/03, have been met from within the contingency contained in last year's plan.

## Renewals

<b>Figure 11 Non West Coast renewals</b>				
<b>£m</b>	<b>2002/03</b>	<b>2003/04</b>	<b>2004/05</b>	<b>2005/06</b>
	(forecast)			
Railtrack 2002 NMS	1,960	2,534	2,743	2,841
Inflation to 2002/03 prices	31	40	44	46
Adjustment for year end forecast (2002/03)	(252)			
Removal of contingency		(102)	(102)	(102)
Efficiency reduction/(increase)		45	51	(26)
2003/04 renewals reduction		(336)		
Track deliverability reductions			(106)	(54)
Structures deliverability reductions			(106)	(168)
Signalling acceleration from later years				421
Re-development of Kings Cross Concourse				34
Reduced scope of Fixed Telecoms Network		(46)	(37)	(45)
IT plan changes		(12)	70	80
Revisions to purchase of High Output Equipment		(57)	59	24
Procurement of ballast Wagons & Stoneblower		51	34	12
Additional rail grinding equipment		40	12	5
Purchase of MPVs and other Plant & Machinery		21	16	11
Other		2	(28)	(4)
2003 Business Plan	1,739	2,180	2,650	3,075

Key points are:

- the 2002 plan included an unspecified renewals contingency which has been removed from the forward plan;
- the 2002 plan included extensive efficiencies which were based on aspiration. As stated in the 2003 plan assumptions, we have only included efficiencies to the extent that they can be quantified, resulting in reduced efficiencies in the early years of the plan. Further efficiencies will be identified prior to the conclusion of the interim review;
- in October 2002 the company identified that it would have to reduce expenditure in 2003/04 in order to manage within its short-term cash facilities. A risk-based, prioritised approach was adopted to identify renewals which could be deferred or reduced in scope. Whilst certain activities will be deferred, the overall costs have not increased in later years since the plan is constrained by deliverability;
- the track and structures plans for 2002 included significant increases in activity for 2004/05 and 2005/06 over those for 2003/04 and there was some uncertainty over the industry's ability to deliver this. With the reduction in renewals in 2003/04, the delay in introducing high-output machinery and other deliverability concerns, we have concluded that those volumes could not be delivered cost-effectively;
- a review of required signalling activity over the long-term has indicated the need to increase expenditure in 2005/06, bringing it forward from later years. The deliverability of this is under review;
- renewal of the Kings Cross station concourse has been accelerated in order to meet requirements for the Channel Tunnel Rail Link (CTRL);
- information technology spend over the life of the plan has been reviewed and assessed as inadequate to meet the company's and the industry's needs. Expenditure in 2003/04 has been reduced through deferral to ensure it is delivered cost-effectively; and
- the plan also includes the funding of specialist plant and machinery required to support future year workloads.

<b>Figure 12 West Coast renewals</b>				
<b>£m</b>	<b>2002/03</b>	<b>2003/04</b>	<b>2004/05</b>	<b>2005/06</b>
	(forecast)			
Railtrack 2002 NMS	533	557	576	599
Inflation to 2002/03 prices	9	9	9	10
Re-profiling of West Coast renewals programme	244	717	525	263
2003 Business Plan	786	1,283	1,110	872

As noted in the 2002 NMS, the West Coast project was under review at the time that it was prepared. Since then, in discussion with the SRA, the project has been re-profiled with an acceleration of renewals in earlier years, facilitated by the SRA approach to “blockade” access to the network.

### Key Performance Indicators

As discussed in the main body of this document, we have this year developed a new range of measures to assess our performance and not all of the measures published this year have a direct comparison with the 2002 NMS.

For each of the measures common to this document and to the 2002 NMS, we set out below the key reasons for any changes. We have documented the current progress we are making in developing decision support tools to understand the relationship between inputs and outputs. This work was at a very early stage at the point of preparation of the 2002 NMS and our explanation of variances is therefore qualitative rather than quantitative. Actions we are taking to develop decision support tools are set out in the Technical Plan.

<b>Figure 13 Train delay minutes</b>				
<b>'000s</b>	<b>2002/03</b>	<b>2003/04</b>	<b>2004/05</b>	<b>2005/06</b>
	(forecast)			
2002 NMS	11,300	10,400	9,100	8,100
2003 Business Plan	14,226	13,250	12,309	11,262
Variance	2,926	2,850	3,209	3,162

The 2002 NMS was based on the assumption that train performance could be recovered to the level of 1999/00 “best ever” performance by 2005/06. During 2002/03 this assumption has been shown to be over-optimistic. In addition, we now understand the likely future condition of our assets more clearly and are beginning to develop improved train performance forecasting capability. The key differences, therefore, are that the new projections take account of:

- 2002/03 performance;
- revised asset condition assessment; and
- our latest forecasting and modelling capability.

The basis of the projections in the 2003 Business Plan is described within the Technical Plan.

**Figure 14 Broken rails**

	2002/03 (forecast)	2003/04	2004/05	2005/06
2002 NMS	511	480	337	134
2003 Business Plan	477	429	369	291
Variance	(34)	(51)	32	157

The projections included within the 2002 NMS were largely based on an early assessment of the likely outcome of innovative approaches to reducing the number of future rail breaks. Whilst significant progress has been made in understanding the relationship between activity and output measures, we do not yet have the tools to predict the outputs with confidence.

The significant reduction over the last two years is mainly due to targeting rail defect clusters, whereas remaining breaks are often due to discrete causes, requiring different approaches. Improved understanding of break causes, asset condition and preventative action, together with the adoption of new decision support tools and a review of outputs priorities leads us to believe that the revised profile is more realistic.

**Figure 15 Temporary Speed Restrictions (TSRs)**

	2002/03 (forecast)	2003/04	2004/05	2005/06
2002 NMS	517	466	411	346
2003 Business Plan	584	551	480	417
Variance	67	85	69	71

Projections included in the 2002 NMS were based on poor understanding of the underlying assets and without the aid of decision support tools. As a result, the TSR projections were based on a broad set of assumptions.

Good progress has been made over the past year in improving our ability to project the outcomes, although we still do not have a full understanding. Further details on the TSR projections for the 2003 Business Plan, which we believe to be more robust than those for the 2002 NMS, are contained in our Technical Plan.

# Glossary

ALARP	As Low As Reasonably Practicable
BTP	British Transport Police
CTRL	Channel Tunnel Rail Link
CUP	Capacity Utilisation Policy
EFA	Enhancement Facilitation Agreement
ERTMS	European Rail Traffic Management System
EU	European Union
FOC	Freight Operating Company
GM	General Manager
GRIP	Guide to Railway Investments Projects
HMRI	Her Majesty's Railway Inspectorate
HR	Human Resources
HSE	Health and Safety Executive
HSQE	Health, Safety, Quality and Environment
HQ	Headquarters
IM	Information Management
IOS	Incremental Output Statement
JPB	Joint Programme Board
KPI	Key Performance Indicator
MBR	Monthly Business Review
MFAS	Modern Facilities at Stations
MIMS	Mincom Information Management System
n/m	new measure
NMP	New Maintenance Programme
NMS	Network Management Statement
NR	Network Rail
ORR	Office of the Rail Regulator
PDG	Project Development Group
PLC	Public Limited Company
PPM	Public Performance Measure
Q	Quarter
RAB	Regulated Asset Base
RAIB	Rail Accident Investigation Body
R&D	Research and Development
RSSB	Rail Safety and Standards Board
SPV	Special Purpose Vehicle
SRA	Strategic Rail Authority
S&C	Switches and Crossings
S&E	Safety and Environment
TSI	Technical Specifications for Interoperability
TOC	Train Operating Company
TPWS	Train Protection and Warning System
TRUST	Train Running System on TOPS: A computer system which records actual train running times against scheduled times
T-SPA	Track Strategic Planning Application
UK	United Kingdom
WCRM	West Coast Route Modernisation

## Key Performance Indicators:

<b>Public safety index</b>	industry-wide index which reflects the number and severity of accidents on the railway.
<b>Public performance</b>	the percentage of trains arriving less than 5 minutes late at final destination or less than 10 minutes late for inter-city operators.
<b>Passenger capability</b>	a volume based measure dependent on the growth in actual passenger train miles and passenger train operators' revenue from fares as reflected in the Regulator's volume incentive.
<b>Freight capability</b>	a volume based measure dependant on the growth in freight train miles and tonne miles as reflected in the Regulator's volume incentive.
<b>Passenger complaints</b>	industry-wide measure of average quarterly complaints per 100,000 journeys.
<b>Financial efficiency</b>	total expenditure on maintenance, normalised for traffic patterns and network size; track renewals, normalised for the volume of track replaced; operations and other core support costs.
<b>Asset stewardship</b>	an index which reflects the overall status of a number of contributory indicators of the condition of the network. A reduction in the index represents improved overall condition and reliability.
<b>Employee engagement</b>	a measure of the level of employee engagement, on a scale of 1 to 5, with the business of Network Rail across all areas. Good levels of employee engagement are reflected in improved retention of employees, business unit productivity, profitability, customer service and safety performance.
<b>Train delay minutes</b>	the train delays attributable to Network Rail as defined in the contractual performance regimes with operators.
<b>Number of broken rails</b>	a measure of the number of rails which, before removal from the track, have a fracture through the full cross-section, or a piece broken out, rendering them unserviceable.
<b>Level 2 exceedence</b>	a measure of track geometry to identify track that requires remedial action within defined timescales. It is measured by the variance between the actual rail position and the 'ideal' position.
<b>Number of signalling failures</b>	records the number of signalling failures that contribute to train delay minutes.
<b>Number of temporary speed restrictions</b>	the number of speed restrictions at the end of a period which have been in place for more than 48 hours, arising from asset failure or condition.
<b>Poor track geometry</b>	the percentage of track falling outside set parameters, weighted for severity.
<b>Station condition</b>	the number of stations only achieving a grade 3 condition rating, or worse, on a scale of 1 to 5.