

**Delivering  
for you**

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**Network Rail helps bring the country together. We own, operate, maintain and invest in Britain's rail network. Increasingly we are delivering improved standards of safety, reliability and efficiency. This benefits our customers and society at large.**

**Every day. Everywhere.**





**Britain's rail network is increasingly successful. It is the busiest it has been for 50 years. The number of passengers has increased over 40 per cent in the last 10 years and the amount of freight is up nearly 60 per cent.**

Network Rail is ambitious in its plans for the railway. This year, nearly £600 million of enhancements are being invested in the network aimed at increasing capacity. We have a key part to play, alongside the train operating companies.

We are actively involved in shaping the debate about the future of the railway in Britain to ensure that capacity and funding is sufficient to respond to future demands.

One million people commute into London by train each day. Our plans to develop the capacity of the network include the Thameslink programme and

work at key stations, such as King's Cross, Euston and Victoria.

There has been growth in other key markets such as intercity and regional centres including Birmingham, Manchester and Leeds. We have proposals to provide additional capacity in these markets through, for example, the Birmingham Gateway project.

This Business Plan looks at the next two years but Network Rail remains focused on delivering a long term strategy for Britain's railways.

We will publish our detailed plans for the period to 2014 in the autumn.



# Who we are

Network Rail owns and operates Britain's rail network.

We are a 'not for dividend' company directly accountable to our Members and regulated by the Office of Rail Regulation. The profits we make go straight back into improving the railway.

Our aim is to provide a safe, reliable, efficient and sustainable railway, fit for the 21st century.

We employ around 33,000 people who operate, maintain, renew and upgrade the network.

## We own around

- 20,000 miles of track
- 40,000 bridges and tunnels
- 1,000 signal boxes
- 9,000 level crossings
- 2,500 stations
  - leased to train operators
- 17 major stations
  - operated directly
- 8,200 commercial properties

We don't run the trains themselves. That is the business of the 24 passenger and four freight train operating companies who are our main customers. In a complex and entirely interdependent system, both we and the train operating companies share the responsibility of delivering train services to the travelling public and to the nation.

# What we do – safety, reliability, efficiency

Our purpose is clear: to deliver a safe, reliable and efficient rail network at a price that the country can afford.

Every day we carry three million passengers, including nearly 80 per cent of those travelling into London where almost 18 per cent of the UK's gross domestic product is generated.

Twenty billion tonne kilometres of freight are transported every year, including nearly 80 per cent of the coal and coke used by the UK's power stations and over a third of all metal transported for our industries.

## **Safety remains our number one priority**

The incident in Cumbria on 23 February 2007 was tragic. However, we must not lose sight of the fact that the railway is safer than it has ever been and is the safest form of transport in Britain.

The risk from signals passed at danger is down 90 per cent since 2001, thanks to the introduction of TPWS and TPWS+ while the number of broken rails is at an all time low.

Working on the railways is also getting safer, thanks to campaigns such as Safety 365 and improved working practices. The workforce accident rate has declined markedly over the last two years and is now down to less than 0.3 reportable accidents per 100,000 hours worked.

## **Reliability**

Train punctuality is at its highest for seven years.

The improvements in performance to date are the result of the hard work of everybody involved in the operation of the railway – its infrastructure and the trains that use it. A key part of this has been the success of the joint planning and delivery process between us and the train operators.

## **Efficiency**

We have been successful in delivering efficiencies over the past few years despite the rising cost of materials and labour. We will increasingly look to apply new technology, or existing technology in new ways, to improve how we do things and to deliver efficiencies while maintaining and, where possible, improving safety standards.

**Every day we carry around three million passengers, including nearly 80 per cent of those travelling into London where almost 18 per cent of the UK's gross domestic product is generated.**

# Becoming a world class company

This year's Business Plan is different from previous years. Like previous Business Plans, it still reflects upon the progress we have made since the company took over the network. We set out what we intend to deliver to the end of this control period in two years time. But this year's plan also sets out the development of a transformation programme on a scale that will change the whole company over the next decade. This plan explains the activities we are undertaking over the next two years as part of this transformation programme, the impact of which will not be felt until the next control period and beyond.

We hope that the Business Plan, and the challenging ambitions it sets out, will stimulate the industry, our funders and our stakeholders to engage with us, and inform us, on how to take forward this programme.

We have always said that the early years of Network Rail were about stabilising the company. We have substantially achieved this but recognise there are still challenges ahead. We must now push ourselves to become the best at what we do. We will not become world class quickly or easily. Our transformation programme seeks to put in place the right building blocks by the start of the next control period. To become world class at what we do in all areas of the business, and for our customers and stakeholders to see the benefits of this, will take significantly longer.

## Becoming world class

**In this plan you will read about our ambition to become a world class company. The programme that we are developing will seek to address the needs of our stakeholders by creating a vision of the railway necessary to deliver these needs, and the kind of industry and organisation we believe is capable of delivering this vision. We will develop this vision by talking to, and learning from, our stakeholders and by understanding the needs of our customers and end users.**

**This vision can only be delivered by Network Rail in partnership and co-operation with our customers, funders and suppliers. This transformation programme will require a commitment from everyone in the industry to work towards a common vision.**

**We will be developing a balanced scorecard of key performance indicators to facilitate the strategic leadership of the company towards its aims of delivering a world class service and outstanding value. This scorecard will monitor the progress we make towards meeting the needs of all our stakeholders. Our stakeholders' satisfaction with our progress will be monitored through regular surveys of their views.**

## Our programme has three core elements:

- world class infrastructure and operations;
- supported by the right processes; and
- delivered by great people.

## World class infrastructure and operations

Our strategic objectives are to deliver a world class service and provide outstanding value delivered responsibly. To achieve this, our ambition is to create a railway for the future that is:

- available seven days a week;
- easily maintained;
- right time;
- sustainable; and
- affordable.

We will work with customers, funders and suppliers to develop a vision of the railway that delivers this and a strategy for delivering it that represents value for money. The vision can then be turned into a clear specification that allows everyone in the company to understand what is needed to achieve our aims. Continued improvements in safety for passengers and employees will be fundamental to this vision and specification.

We are also developing a number of key strategies to deliver these outputs in collaboration with our funders and customers. This includes the ongoing work on our asset management policies, an operations strategy underpinned by

an appropriate engineering access framework, the ongoing development of our route strategies and stations strategy.

## The right processes

To support delivery of world class infrastructure and operations, we aim to achieve a step change in business capability by systematically re-building our key business processes. We will do this by creating more joined up processes, by doing things right the first time and by providing the right systems and tools to support the processes.

## Delivered by great people

To become world class, we have to address not only what we do but also the way we do it. The most important challenge is to provide the right leadership and management for the company and for all our people to share the same values and behaviours. Our people have demonstrated that they can deliver and we must now create the right environment for them to achieve the very best they can.



# Performance in 2006/07

We continue to make progress in sorting out the basics in the company's operational and financial performance although we must remain focused on the basics of a safe railway.

## Improved safety

Despite the tragic incident in Cumbria on 23 February 2007, we must not lose sight of the fact that the railway is safer than it has ever been and is the safest form of transport in Britain.

The railway is not just a safer place to travel but is also a safer place to work and we have delivered a step change in our workforce safety performance.

## Improved reliability and capacity

Punctuality on the railway is at a seven year high. The average punctuality over the last 12 months is 88 per cent. We are now predicting to hit our long term target of 90 per cent before the end of the control period, at least three years earlier than forecast in our Initial Strategic Business Plan.

In parallel with this improvement in reliability, the railway has seen ongoing growth in demand and traffic, reflecting the strong growth over the last 10 years for both passenger and freight services. This trend is expected to continue. This partly reflects increasing public confidence in the railway and its environmental advantages.

This performance is the result of the hard work of everybody involved in the operation, maintenance and management of the railway – its infrastructure and the trains that use it.

## Improved business performance

This year we have declared a profit for the first time. In the six months to September 2006 we made a profit before tax of £747 million, and because we are a not for dividend company, that profit is being ploughed back into the railway.

**This year we have declared a profit for the first time. That profit is being ploughed back into the railway.**

We have received 20 awards in the last couple of years for investment on the railway. On time and on budget is a consistent achievement of our projects. We are investing significantly in our people to continue this progress, for example through the apprenticeship programme.

We have been successful in delivering efficiencies over the past few years despite the rising cost of materials and labour. Operating and maintenance costs are below the levels assumed by the ORR and we made substantial improvements in the unit cost of renewals. The delivery of efficiencies will become increasingly challenging through the rest of this control period and beyond.

These achievements demonstrate that the organisational and process improvements we have made have stabilised the business.

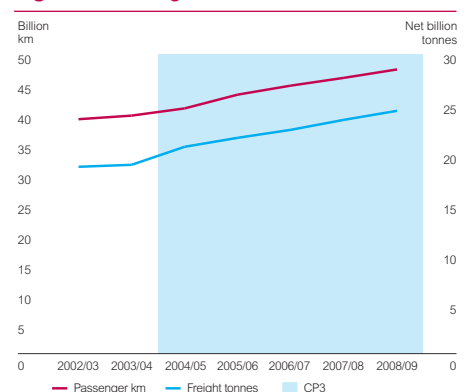
Not all the problems have been solved and we will not relax in our pursuit of continued improvement in everything we do. But our focus has been on fixing the problems of the past. We can now focus on the challenges of the future and this year will be a pivotal one for Network Rail.

We will increasingly look to apply new technology, or existing technology in new ways, to improve how we do things and to deliver efficiencies. We have achieved significant efficiencies over the last few years in this way and will explore future opportunities that new technologies can deliver.

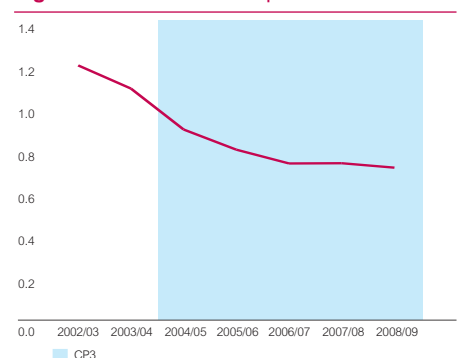
**Figure 1 Train performance**



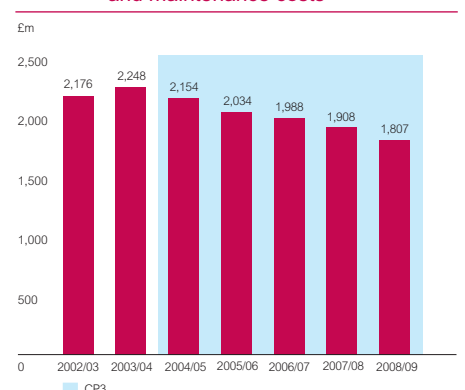
**Figure 2 Traffic growth**



**Figure 3 Asset stewardship incentive index**



**Figure 4 Controllable operating and maintenance costs**



# Our plan for the next two years

**We will continue the transformation of the business – increasing efficiency and making further investments.**

Compared to the targets for the control period as a whole, we are continuing to forecast outperformance across the business when compared to the 2003 Access Charges Review (ACR2003). ACR2003 determined our revenue and operational targets for the current control period. The outperformance is despite pressures on input prices in terms of labour and other resource costs. The areas of outperformance include:

- income which is projected to be higher than ACR2003 mainly due to improved performance;
- an increase in the Regulatory Asset Base due to outperformance of the Asset Stewardship Incentive Index and the volume of traffic on the network; and
- greater than expected reductions in our controllable operating and maintenance expenditure.

Over the last two years, we have delivered investments that were not included in the last regulatory review, including the acquisition of Westwood, our leadership development centre, and the development of integrated control centres. Our plan for the next two years includes further investments in projects that will continue the transformation of the business, including development of integrated control centres, investment in our maintenance delivery units and construction of new maintenance and safety training centres.

In addition to the efficiencies identified above, we are planning to spend less than was assumed in the last regulatory review on telecoms, signalling and IT. However, we have identified further investment opportunities of up to £185 million which could be delivered in this control period. The focus of these potential investments is on reducing the longer term cost of the railway, and we are further examining the feasibility of these schemes to decide which of them should be progressed to implementation.

As described in last year's plan the savings are also partially offset by additional expenditure in the following areas:

- increases in non-controllable expenditure mainly due to an increase in electricity for traction costs and British Transport Police;
- increased track renewals costs; and
- the impact of the allowance we have made for the risk of increased costs on the West Coast Route Modernisation project.

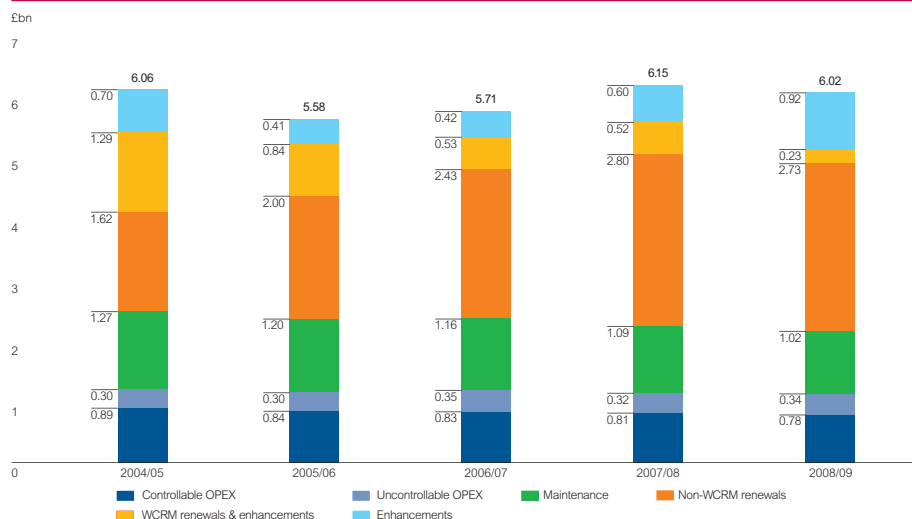
The increase in track expenditure is primarily due to our re-assessment of the efficiency savings we believe can be delivered. However, we have announced that we will be reducing the number of main renewals contractors and improving our processes to enable us and our suppliers to plan work with greater confidence and promote innovation and investment in order to deliver further efficiencies, particularly in the next control period.

The West Coast Route Modernisation programme is focused on providing increased capacity through a number of major remodelling schemes. Last year's plan noted that there was no remaining contingency. We have not increased our projection for this programme. However, we have included a general provision for risk across the business as a whole.

In last year's plan, we committed to create an additional £200 million fund for further investment in the network. We explain in this plan how we intend to use this fund. In addition, having reviewed our overall performance, we can confirm that we remain confident that our outperformance will significantly exceed the amount allocated to this fund even excluding the benefit of interest rates that are lower than assumed during the last regulatory review.



**Figure 5 Summary of expenditure**



### Enhancements

There are a number of enhancement projects in the implementation stage including the National Telecoms programme, the Access for All programme, King's Cross station and the St Pancras Box schemes. The European Rail Traffic Management System (ERTMS) will be piloted on the Cambrian lines in 2008.

We are working jointly with Transport Scotland to deliver its programme of enhancement schemes including Edinburgh Waverley station, Airdrie to Bathgate and the Borders Rail link.

We are making excellent progress on the development of schemes under the Network Rail Discretionary Fund.

There are a number of projects in development aimed at addressing the future needs of the railway. The most important of these is the Thameslink programme.

We are working on a number of projects where we are supporting the main promoter for the 2012 Olympic Games and Paralympic Games.

We will also be doing further work over the next year on candidate schemes for Transport Innovation Funding.

### Overall expenditure

The resulting profile of expenditure over the current control period is illustrated in the chart above. This level of expenditure over the period is above that assumed at the last review largely because of the impact of traffic growth and potential investments to reduce the longer term cost of the railway and to enhance its capacity. This is therefore consistent with the overall financial outperformance of the business compared to the assumptions in the last review.

**We are making excellent progress on the development of schemes under the Network Rail Discretionary Fund.**

# Challenges we face

The key challenges we face are:

- maintaining and improving the safety of the railway system;
- developing the railway to accommodate the continued growth in demand for rail;
- understanding and meeting customer and stakeholder expectations;
- transforming Network Rail into a world class company;
- contributing to a more sustainable railway, in both environmental and financial terms, by delivering further efficiencies and exploiting technological innovation;
- creating a longer term plan for the railway in response to the High Level Output Specifications from governments; and
- agreeing and obtaining the financial resources necessary to fulfil our vision.

We cannot succeed on our own. To be successful we must work in close partnership with train and freight operators and the rest of industry. Our plans also need to inform and reflect the requirements of government, both in England and Wales and in Scotland, as well as passenger and freight user groups and local funders. This Business Plan sets out how we intend to work with the industry and our other key stakeholders to meet these challenges.



## World class people delivering world class service

Network Rail employs over 33,000 people. Every year we recruit some 4,500, with half of all jobs filled by external candidates.

The skills of our people are fundamental to the success of the company. That's why we are investing heavily in our Advanced Apprenticeship Scheme, Europe's largest apprenticeship programme – increasing intake by 25 per cent this year.

And it's why over 7,000 of our employees will have completed courses at Westwood leadership development centre by the end of 2007.

We are aiming for world class leadership, world class management and world class working practices. Delivering a world class railway to you.



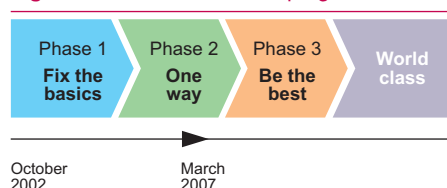
# The strategic context

This document is Network Rail's 2007 Business Plan. It sets out our plans for the next two years, covering the remainder of the current control period (CP3). Our plans for the next control period (CP4) will be developed through the 2008 Periodic Review (PR08) process, with the publication of our Strategic Business Plan for CP4 in October of this year. Further detail on the PR08 process is provided later in this document.

Our primary function is to deliver a safe and reliable railway at a price that passengers, freight users and taxpayers can afford. In doing this, we have set ourselves the ambition of becoming world class and being the best at what we do. We will not become world class quickly or easily. Our transformation programme seeks to put in place the right building blocks by the start of the next control period. To become the best at what we do in all areas of the business, and for our customers and stakeholders to see the benefits of this, will take longer.

Our plan articulates the priorities over the next two years for the company and our people. It provides our customers and stakeholders with a plan of the outputs we intend to deliver and how we intend to deliver them. This is underpinned by our Route Plans which provide further detail for each of our 26 Strategic Routes. We also provide disaggregated information on our plans for Scotland, and England and Wales. Our plans have been informed by discussion with our stakeholders and we will continue to seek their views as we refine our plans.

**Figure 6** The transformation programme



## Where we are now

### The transformation programme

When Network Rail took over responsibility for the national rail network, we said it would take 18 months to show major improvements and three to five years to achieve a sustainable level of efficiency and performance. We have completed the first phase – we have a stable company with an appropriate organisational structure and financial security. We are now approaching the end of the second phase, which has focused on reducing safety risks, standardising processes and delivering efficiencies by removing unnecessary costs. Our focus on these issues will continue. The third phase will also aim to increase our effectiveness by improving our processes and further developing our people, such that we become world class in everything that we do.

While we are proud of the success we have achieved so far there is clearly much to be done. The performance and safety of travelling and working on Britain's railway are improved and costs have been brought under control. We have now begun to consolidate around standard processes, systems and technology. However, unless we continue to transform the company, the railway and the whole industry, the service to rail users will plateau. We must work more in partnership with other organisations in the industry to deliver the next phase of improvement. Our plans involve changes to both what we do and how we do it in order to create a company, an industry and a railway which is fit for tomorrow's passengers, freight users, communities and the economy. This will require the right leadership, vision and passion from the people of Network Rail.



### **Improved safety**

The industry's Annual Safety Performance Report was published last May. This identified the railway as the safest form of transport in Britain. The recent incident in Cumbria demonstrates the need for constant vigilance in maintaining the safety of the railway.

The improvement in safety has been delivered by achievements such as the reduction in the incidence of broken rails to the lowest on record and the introduction of TPWS and TPWS+ which dramatically reduces the risks if trains go through red signals.

The biggest risk on the railway is now at level crossings and last year we implemented a national level crossings awareness campaign. We also lobbied successfully for new provisions to be included in new road safety legislation.

We must constantly scrutinise everything that we do and learn from any accidents or near misses that occur on our network, consistent with our aim to continue to improve our capability to learn as an organisation.

The railway is not just a safer place to travel but is also a safer place to work. We have achieved a step change in our workforce safety performance. The accident frequency rate has dropped by a quarter in the last year and there are now many parts of our business that have safety performance records that compare favourably with the best in the world.

We have now achieved an accident frequency rate for the company of 0.27 accidents per 100,000 hours worked. In other words, on average, an employee would only have a reportable accident every 185 years. The task now is to make sure we avoid complacency and we continue to maintain and improve upon these high standards.

There is still more to do and we will not drop our intolerance of unsafe working practices. We must never forget that working on the railways is not without

risk. There have been no workforce fatalities over the past year.

### **Improved reliability and capacity**

Punctuality on the railway is at a seven year high. The average punctuality over the last 12 months is 88 per cent. We are now predicting to hit our long term target of 90 per cent before the end of the control period, at least three years earlier than forecast in our Initial Strategic Business Plan. However, this remains a challenge.

The improvements in performance to date are the result of the hard work of everybody involved in the operation and management of the railway – its infrastructure and the trains that use it. There are some very obvious big impacts that have contributed to this, such as the success of the joint planning and delivery processes between us and the train operators, the introduction of integrated control centres and bringing maintenance in-house. It is also down to the thousands of little things that staff on the railway do every day to keep the railway running at such high levels of performance.

The improvement in performance has come about despite continuous increases in the number of train services using the network. The demand for rail has grown strongly over the last 10 years for both passenger and freight services. This trend in passenger demand has continued over the last year with 10 sectors showing a growth in total passenger kilometres, total passenger journeys and revenue compared to last year. This demand for rail travel has been reflected in the continued increase in timetabled train kilometres operated on the network. Likewise, both freight moved and freight lifted have reflected past trends and grown over the last year.

### **Improved business performance**

This year we have declared a profit for the first time. In the six months to September 2006 we made a profit before tax of £747 million, and because we are a not for dividend company, that profit is ploughed back into the railway. The profit

was not a surprise. Our business plan assumes this level of profitability given that we have achieved challenging targets set by the regulator.

We have used the profits to renew the network in line with the assumptions made by the regulator at the last review. However, since we have done better than some of these assumptions we have also been able to fund investments in small and medium sized enhancements on the railway. This improved performance plus the Network Rail Discretionary Fund means that we are already committed to invest around £400 million on enhancements to the network over the next few years. The term outperformance is used to describe our ability to better the targets set us by the ORR as part of the periodic review process. This plan outlines our proposals for the use of outperformance monies over the remainder of the control period.

The 20 awards that we have received in the last couple of years include, for example, in October 2006 two projects which received Saltire awards for civil engineering excellence in Scotland; Jamestown Viaduct which won the accolade for conservation and the Montfode Bridge replacement project for construction. In February 2007 the Leven Viaduct won the Merit Award for Engineering Excellence from the Institution of Civil Engineers. On time and on budget is a consistent achievement of our projects.

The first intake of apprentices based at Gosport completed the residential section of the three year scheme in August. This Advanced Apprenticeship Scheme provides people with the skills and experience to become a maintenance engineering technician. Over the next two years this intake will be working on location with experienced teams. By the end of this period they will have qualified, the first step of their careers with Network Rail.

## Punctuality on the railway is at a seven year high.

## This year we have declared a profit for the first time.

We have been successful in delivering efficiencies over the past few years despite the rising cost of materials and labour. The delivery of efficiencies will become increasingly difficult through the rest of this control period and beyond.

We will increasingly look to apply new technology, or existing technology in new ways, to improve how we do things and to deliver efficiencies. For example, we have had significant success in using road-rail vehicles to facilitate safe working under the live overhead line wire on parts of the network. This has significantly improved our productivity, firstly, by allowing access to the track under the wire without the need for the wire to be isolated before starting work. Previously a minimum of two hours out of every possession was being lost while staff waited for the isolation to be arranged. Secondly, the vehicles are more productive and cost-effective than the use of the usual 20 sub-contractors to remove scrap from the work site by hand. There is also a safety benefit. For example, handling rail used to be a primary cause of accidents for the Anglia area, but in the past year, the area has not had a single accident while moving rail.

The progress we have made has enabled us to consider the possibility of raising debt at low cost without using the government indemnity. Such a rapid rehabilitation would have been difficult to imagine just a few years ago when Network Rail took over responsibility for the network. In our view this change would further underpin the progress we have made by placing the company more clearly on an independent financial footing.

These achievements demonstrate that the organisational and process improvements we have made have stabilised the business. Not all the problems have been solved and we will not relax in our pursuit of continued improvement in everything we do. Our focus has been on fixing the problems of the past. We can now focus on the challenges of the future and this year will be a pivotal one for Network Rail.

## Where we want to be

We want to build a railway and an organisation fit for tomorrow's passengers, communities and the economy. The provision of an integrated, national transport system is a key enabler of sustained productivity and competitiveness. Good transport systems support the productivity of urban areas, supporting deep and productive labour markets, allowing businesses to reap the benefits of agglomeration. Transport corridors are the arteries of domestic and international trade, boosting the competitiveness of the UK economy. This is reflected in the advice given to government by Sir Rod Eddington and Professor Sir Nicholas Stern and we recognise that the rail system has a key part to play in the sustainable development of the economy.

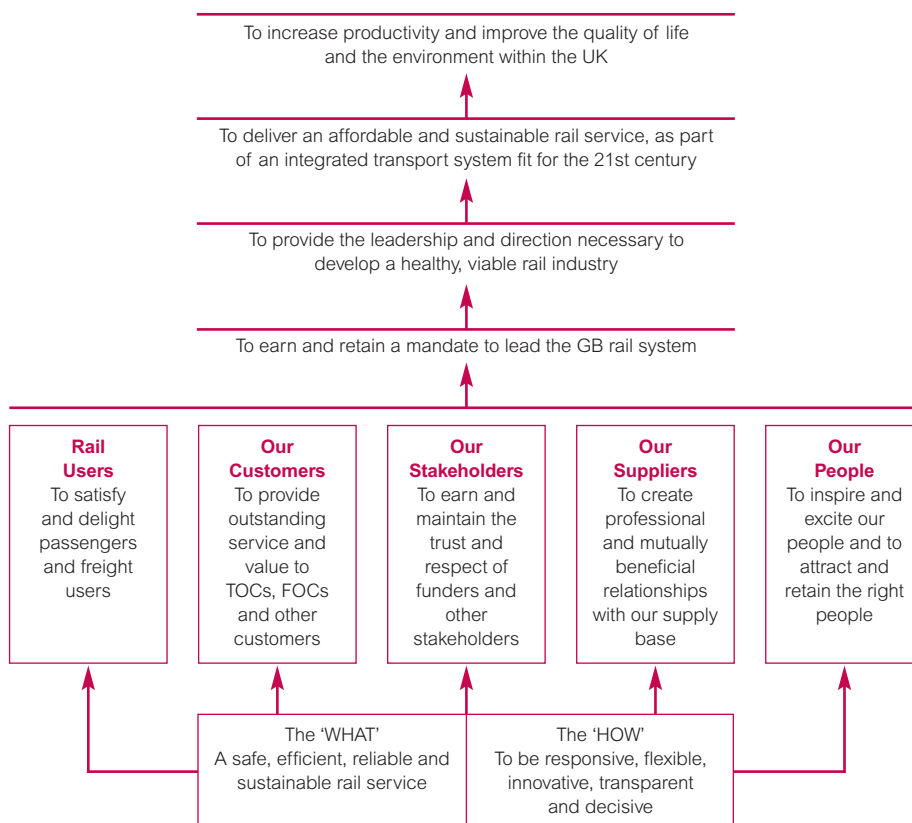
We have therefore developed a framework of aims that recognises the contribution to the economic, social and environmental welfare of the UK that transport, and particularly rail, can make. This framework is shown in Figure 7 opposite, which highlights how all our employees can contribute to these wider aims.

The framework indicates that only by meeting the aspirations of all our stakeholders will we earn and maintain a mandate to lead the railway industry and to work closely with our other industry partners. We do not have an automatic right to do this – rather we need to earn the right.

We also need to continue discussions with our stakeholders to ensure that we have correctly understood their aspirations. We believe that understanding and meeting these aspirations will help achieve a healthy and viable railway in which we share common objectives and benefit from each other's successes. Ultimately, this will enhance productivity, quality of life and the environment in which we live.

**Our ambition is for passengers and customers to rate rail as the best form of transport overall for safety, reliability, accessibility, convenience, sustainability and value for money.**

**Figure 7 Network Rail aims**



**Our focus has been on fixing the problems of the past. We can now focus on the challenges of the future.**

### **The railway we want**

Our ambition is for passengers and customers to rate rail as the best form of transport overall for safety, reliability, accessibility, convenience, sustainability and value for money. Our ambition for taxpayers is that they regard Britain's railway as among the best in the world for safety, reliability and affordability. To achieve this, our ambition is to create a railway that is:

- available seven days a week to cope with the demand for more trains;
- easily maintained – we need a reliable infrastructure that is efficiently maintained;
- a right time railway – we need better punctuality – trains should not have the leeway of arriving within five or 10 minutes of timetable;
- sustainable – we need to optimise the rail system, both the infrastructure and the trains, to reduce overall industry costs; and
- affordable – we have to demonstrate good value for money to passengers, our customers and government.

We are developing a longer term vision aimed at delivering this railway. We will develop this vision by talking to, and learning from, our stakeholders and by understanding the needs of our customers and the end users.

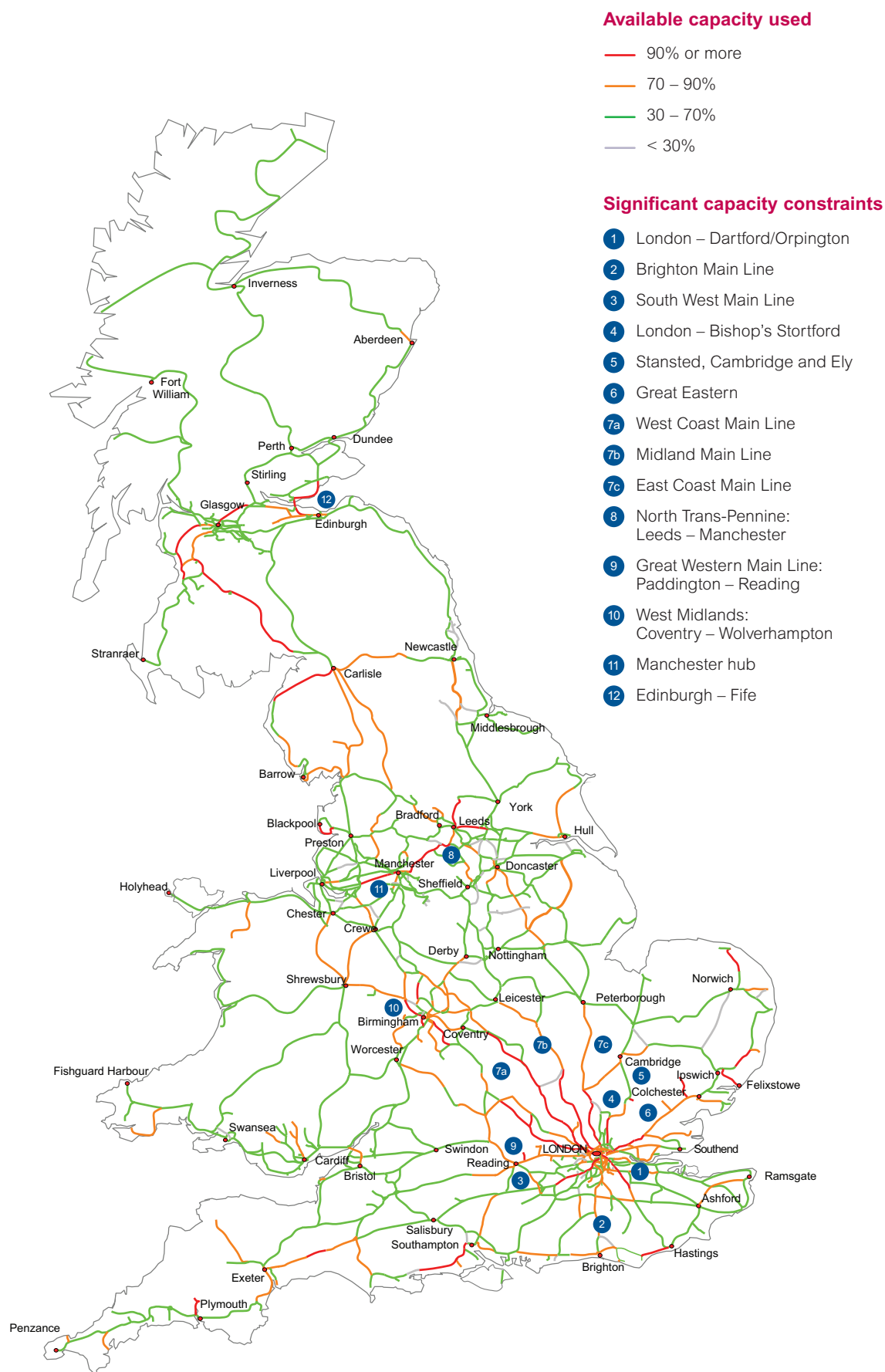
We are engaging and debating with our customers and funders as part of the periodic review process in order to obtain common agreement to this vision. In particular, we are discussing with operators how best to prioritise investment in the network to meet the growing requirements of passengers and freight users. We also aim to work more closely with Passenger Focus to understand the requirements of passengers and to make greater use of its passenger surveys. We are also working closely with government to inform the High Level Output Specifications and to ensure that our Strategic Business Plan reflects its requirements. Through the periodic review we aim to agree a determination that represents a value for money, affordable and sustainable strategy that takes steps towards delivering the vision.

### **Our vision for Network Rail**

We want to work proactively with customers, suppliers, funders and other stakeholders to deliver the industry's needs with speed, simplicity, flexibility, consistency and transparency. We want to be recognised as one of the top 20 companies to work for in the UK.

To achieve our goals and deliver the vision, we have developed a corporate change programme aimed at transforming the organisation into one that begins to feel and act world class by the start of the next control period in two years time. There are three over-arching components to the transformation programme focused on: world class infrastructure and operations; supported by the right processes; and delivered by great people. In support of this, each function has its own transformation programme.

**Figure 8** Capacity utilisation index map





## **We cannot address these challenges on our own, we must work with our industry partners.**

### **The challenges we face** **Maintaining and improving safety**

Safety remains our highest priority. The incident in Cumbria was tragic. However, the railway remains safer than it has ever been and is the safest form of transport in Britain. We will continue to improve the safety of the railway system, focusing on the biggest areas of risk, especially level crossings with the continuation of our public awareness campaign. Likewise, we will continue to maintain and improve our high standards of workforce safety.

### **Understanding and meeting stakeholders' expectations**

In the last couple of years we have built much better relationships with all our stakeholders, especially the train operators with whom we aim to work in close partnership. In the longer term, we recognise the need to strengthen the relationships with everyone we engage with:

- rail users: we need to satisfy and delight passengers and freight users;
- our customers: we need to provide outstanding service and value to our immediate customers – the passenger and freight train operators;
- our stakeholders: we have many stakeholders – including government, other funders and taxpayers – and we must earn the trust and respect of them all;
- our suppliers: we need to establish professional and mutually beneficial relationships with our suppliers; and
- our people: we need to inspire and excite our employees and attract the right people to join the organisation.

Only by delivering our goal of an affordable and sustainable railway will we achieve these aims. We recognise that delivering these aims will not happen quickly and will require our stakeholders' support and cooperation to achieve them.

### **The company**

To deliver the vision and achieve our aims for our stakeholders, we must have the right organisational processes, provide the right leadership and management for the company and have people who share the same values and behaviours.

As we look to the future we do so with some changes at the top of the

organisation. John Armit is to retire after the Annual General Meeting in July. His contribution to the achievements of this company has been enormous.

Iain Coucher will take over as Chief Executive. With the rest of the Executive, he provides the company with continued stability, certainty and direction at this crucial time in its development.

The transformation programme required to create a world class organisation will require a significant cultural change for the company. We have to learn from the very best from other industries and other railways. Our people have shown they have the ability to deliver and we now have to create the right environment for them to achieve the best they can.

This change will not happen overnight and will not be easy. We will need to maintain the commitment of our people to delivering the railway today and the vision for tomorrow during a time of significant change.

### **Accommodating growth**

The rail industry in Britain is a success story in terms of the demand for rail services over the last decade. This is increasingly recognised in the railways elsewhere in the world. However, this success brings with it challenges to accommodate further traffic on the network given the potential effect of higher levels of capacity utilisation and rising load factors on performance.

The rail industry has witnessed strong growth in demand over the last 10 years. The industry has responded by running 30 per cent more passenger train kilometres. Growth in freight traffic has been even stronger, with a 60 per cent increase in total net freight tonne kilometres. As a consequence, the network is increasingly congested and at peak times of the day there is no spare capacity on certain sections of the network. This is particularly the case on the approaches to London in the morning peak but other sections also experience high levels of utilisation. These include the main north south routes and the approaches to other major conurbations such as Birmingham and Manchester.

Levels of crowding are worsening as a consequence of this increase in demand. This varies enormously across the network by time of day. It is most severe in London and the south east, where a significant proportion of peak time passengers now travel on trains with loads at or above their capacity. Our stations are also increasingly congested on platforms and concourses as they handle higher volumes of passengers.

The forecast growth in demand for passenger and freight services will exacerbate this situation and place further strain on the ability of the network to operate efficiently unless mitigation measures are implemented.

We are developing plans with customers and funders to develop the capacity of the network. Key to understanding the options to address these issues is the programme of Route Utilisation Strategies which we are taking forward in conjunction with our industry partners.

Implementing the necessary enhancements to cope with rising demand will require the industry to achieve a consensus on the right solutions. These solutions must offer good value for money and be affordable to funders. We will set out these proposals in our Strategic Business Plan in October 2007.

### **Sustainability and environment**

The purpose of sustainable development is defined in the government's 2005 strategy as being "to enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life, without compromising future generations". The Stern Review has further highlighted the growing concern over climate change.

Transport has a major role to play in supporting economic, environmental and social objectives. To contribute to a more sustainable world, we believe the rail industry must promote rail usage by improving the rail product and its affordability since the product itself is more sustainable than alternative modes for many transport needs. This recognises that in some markets rail will not be the most appropriate solution.

## Change will not happen overnight and will not be easy.

However, we cannot be complacent. As well as promoting the environment through growth in rail use, rail must improve the sustainability of its production processes to enhance the sustainability of its product. The industry must also remain environmentally attractive and adapt to environmental, social and economic changes such as more severe and variable weather conditions.

### Efficiency and innovation

We have made excellent progress in driving out unnecessary cost from the business. We have stripped £1.2 billion from our cost base in the last few years and we have achieved substantial reductions in the unit cost of investment in the railway.

There is clearly a challenge to delivering the further savings which are required in this control period. Beyond this, however, we need to set our sights on what can be achieved in the next control period. We need to reach a challenging but realistic view for ourselves and we must provide evidence to justify this view to help inform the ORR's review process.

Improving today's railway and creating tomorrow's railway requires significant technological innovation as an integral part of whole business improvement. We are approaching this challenge by engaging with our European rail colleagues to examine long term asset strategies, working with suppliers and academia to explore climate change and sustainability improvements, examination of the opportunities afforded by improved communication technology and exploring the application of innovations in other industries to the railway.

### Creating a longer term plan

We cannot address these challenges on our own. Neither can we produce nor deliver on our own a plan for the whole industry.

We will work with our industry partners to develop the right framework and culture in order to create and deliver the right solutions for the whole industry which represent the best value, most cost-effective and sustainable strategies for the industry. Our plans must inform and take account of the high level specifications from government and the requirements of our other stakeholders. They must also inform and take account of the views of our industry partners on how best to deliver these requirements.

The planning process must be continuous and it must look well beyond the period covered by the current periodic review. Importantly, however, the review should provide a more useful baseline to enable effective local input into the development of our plans as they evolve over time.

We are working with DfT and Transport Scotland to support the development of their High Level Output Specifications and associated funding. And we are working with our immediate customers to develop the appropriate whole industry strategies to deliver the required outputs at an affordable price. We look forward to sharing the longer term plans which we are developing with our partners when we publish our October 2007 Strategic Business Plan.



## We cannot succeed on our own – we must work in partnership

To be successful we must work in close partnership with the passenger and freight train operators and the rest of industry. The integrated control centres that we have established with the train and freight operating companies on all major routes are just one example of this attitude in action.

Our plans must reflect what the nation wants its transport system to provide – and what the governments of England, Scotland and Wales require.

We must engage with our five million lineside neighbours and their local communities.

And we must deliver the service that all our passengers and customers rightly demand and expect.

Network Rail is uniquely positioned to help the industry deliver a 21st century transport system.



# The two year plan

We are continuing to deliver savings in our controllable operating costs.

This section outlines our plans for the next two years, including our expenditure and income projections and the outputs that we are planning to deliver. Our projections are summarised in the appendices, including separate information for Scotland, and England and Wales. More detailed information is included in our Route Plans, including a high level overview of our plans in Scotland, Wales and London.

## Expenditure and activity

The projected cost of maintaining, renewing and enhancing the network over the current control period is illustrated in the chart below. This level of expenditure over the period is above that assumed at the last review because of proposed investments to reduce the longer term cost of the railway and to enhance its capacity, increased maintenance and renewal due to traffic growth and higher track renewals and West Coast Route Modernisation programme costs.

### Operating costs

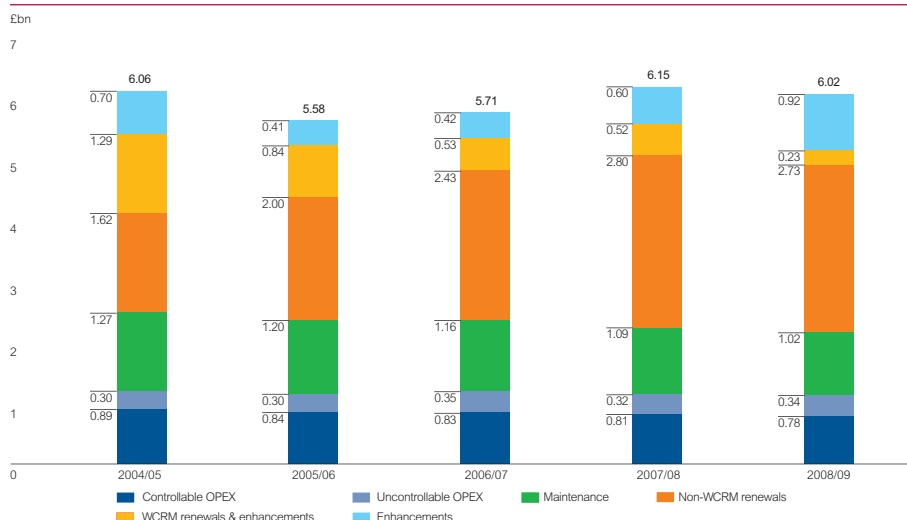
We are continuing to deliver savings in our controllable operating costs. Our plan, which is consistent with the 2006 Business Plan, will reduce controllable operating costs by a further £43 million by the end of the control period. This is in spite of wage settlements above general inflation. More fundamentally, we have continued to strengthen key capabilities, for example through increased training and development of our people.

As a result, our total controllable operating costs for the control period are expected to be around £325 million less than the amount allowed for in the last regulatory review. While we have developed plans to deliver savings over the next year, the achievement of further savings is dependent on the development of plans for more radical

changes. These will be developed as part of each function's world class action plans.

There will be a small increase in 'non-controllable' operating costs over the next two years. This is principally due to the increasing cost of our contribution to the running costs of British Transport Police as well as higher electricity for traction charges and economic and safety regulation costs. As we outlined in the 2006 Business Plan, we expect the total non-controllable costs to be significantly greater than the amount allowed in ACR2003. However, we note that the increase in electricity for traction is not as large as was forecast in the 2006 Initial Strategic Business Plan due to reductions in market electricity prices. In addition, the increase is broadly offset by an increase in revenue from electric traction. As a result, non-controllable

Figure 9 Summary of expenditure





operating costs (net of electricity for traction income) are expected to be more than £200 million greater than assumed in ACR2003.

## Maintenance

We are also continuing to drive further improvements in our maintenance costs whilst maintaining safety standards. We expect to reduce our maintenance costs by a further £140 million by the end of the control period. This reflects savings of around eight per cent per annum offset by an allowance for the further impact of increased traffic of around £15 million and £20 million each in the next two years. This is consistent with the 2006 Business Plan. At the same time we have delivered continuous improvement in asset condition.

These savings will be achieved by the full year impact of the amalgamation of maintenance delivery units earlier this year and the roll out of Six Sigma techniques to improve the productivity of our front line staff. Achieving these savings will result in our total maintenance costs for the control period (excluding the additional expenditure for increased traffic) being over £60 million less than the amount allowed in ACR2003.

## Renewals (excluding West Coast Route Modernisation)

Our planned renewals expenditure, excluding the West Coast Route Modernisation (WCRM), is illustrated in the figure below.

The increased renewals expenditure plans reflect further development of our plans for the next two years and the level of activity being delivered in 2006/07. Our plan also includes increased investment in projects to deliver benefits

beyond this control period. Excluding these potential investments, our projected renewals expenditure over CP3 as a whole is £580 million higher than assumed in ACR2003. Including these investments would increase the difference to £765 million. However, this is offset by gains elsewhere in the business and this investment would deliver further savings in CP4. We will discuss with the ORR the regulatory treatment of these proposed items.

For most asset categories, the plan assumes that we will achieve efficiency savings that are broadly consistent with ACR2003. While we have developed a range of initiatives to deliver further efficiency savings, we still face significant challenges to identify how to achieve all of these savings, particularly for track and operational property.

We have increased our track expenditure projections by around £140 million over the next two years. This is primarily due to a reassessment of the efficiency savings that we believe can be achieved by the end of the control period. We are now forecasting that we will be able to achieve unit cost reductions for track renewal of 23 per cent by the end of the control period compared to the ACR2003 efficiency target of 30 per cent. We are continuing to drive improvements in efficiency while maintaining quality. Over CP3 as a whole expenditure on track is projected to be £300 million higher than assumed in ACR2003.

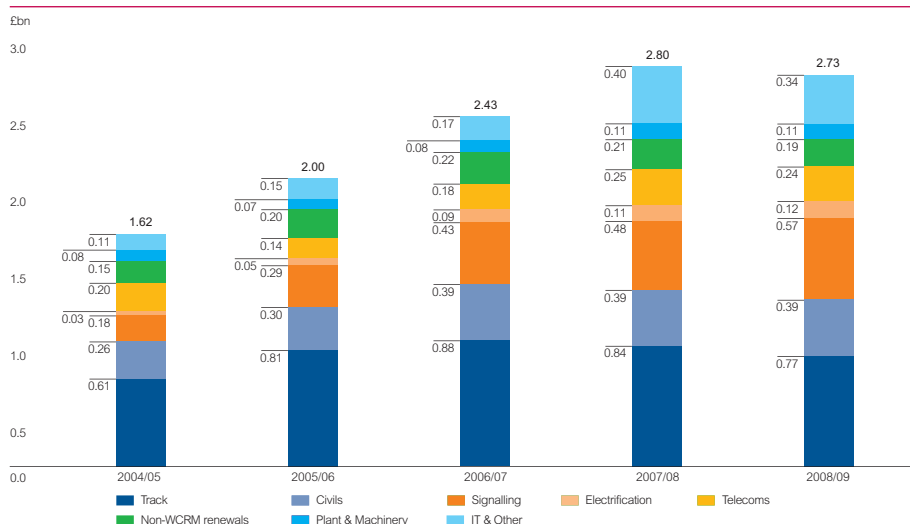
Given the significant challenge to reduce the cost of track renewals, last year we announced that we will make some changes to the way track renewals are delivered. We will be reducing the number of main renewals contractors

from six to four and improving our end to end processes for track renewals. These changes will enable earlier definition and planning of work to create an environment that enables both Network Rail and our contractors to plan work with confidence, and promote innovation and investment in equipment and people. We also need to make changes within Network Rail and are therefore working to improve the end-to-end process from Maintenance through Engineering to Major Projects and Investment so we can deliver track renewals right first time, every time.

We are continuing to forecast a reduction in the CP3 forecasts for IT expenditure compared to that assumed in ACR2003 but we are developing plans to enable further efficiencies in the next control period. In addition, our CP3 projections for the Global System for Mobile Communication for Railways and Fixed Telecom Network (GSM-R/FTN) programme are around £70 million less than assumed in ACR2003. The overall anticipated final cost of the programme remains at £1.3 billion. We have also deferred signalling renewals totalling around £25 million to CP4.

Over the last two years, we have delivered investments that were not included in ACR2003, including the acquisition of Westwood (our leadership development centre) and the development of integrated control centres. Our plan for the next two years includes further investments in projects that will continue the transformation of the business, including continued development of integrated control centres, investment in our maintenance depots, and construction of new maintenance and safety training centres.

**Figure 10 Renewals expenditure by asset (excluding WCRM)**



For the remaining asset categories, our plans for the control period as a whole continue to be consistent with the assumptions underpinning ACR2003. We will continue to increase the level of signalling renewals reflecting the development and implementation of major signalling schemes. We have increased the level of expenditure on plant and machinery to the levels assumed in ACR2003 reflecting the development of specific plans both to replace equipment that cannot be economically maintained and to develop new technology. Our plans for investment in plant and machinery remain under review as we develop our plans for the next control period and beyond.

The increased renewals expenditure plans reflect further development of our plans for the next two years.

In last year’s plan, we reduced our projections by £100 million in recognition of the risk that we would not achieve the planned increase in activity. While there remains a risk that we will not deliver the planned activity levels in the next two years, we have not made a similar adjustment this year given the progress that we are making in successfully increasing activity levels.

In addition to the activities funded through ACR2003, we are now investing in schemes to facilitate our vision to become a world class company. We are developing a number of projects which will enable delivery of efficiency savings in CP4 and beyond. These include developing a facility for production of modular switches and crossings, accelerating the renewal of overhead line on the Great Eastern Main Line from future control periods, and investments to reduce the future cost of signalling. We have included £185 million for these schemes in the plan and are developing them further to decide which should be progressed to implementation.

West Coast Route Modernisation

The West Coast Route Modernisation programme is focused on providing increased capacity through a number of major remodelling schemes. A significant amount of infrastructure work has been completed. Enlargement of Milton

Keynes and Rugby stations, widening of the Trent Valley route, along with changes at Nuneaton and between Crewe and Weaver Junction are scheduled for completion by December 2008 in readiness for the introduction of a revised timetable structure. This timetable will increase the frequency of services to Birmingham and Manchester to three per hour and there will be extra peak time services to Liverpool.

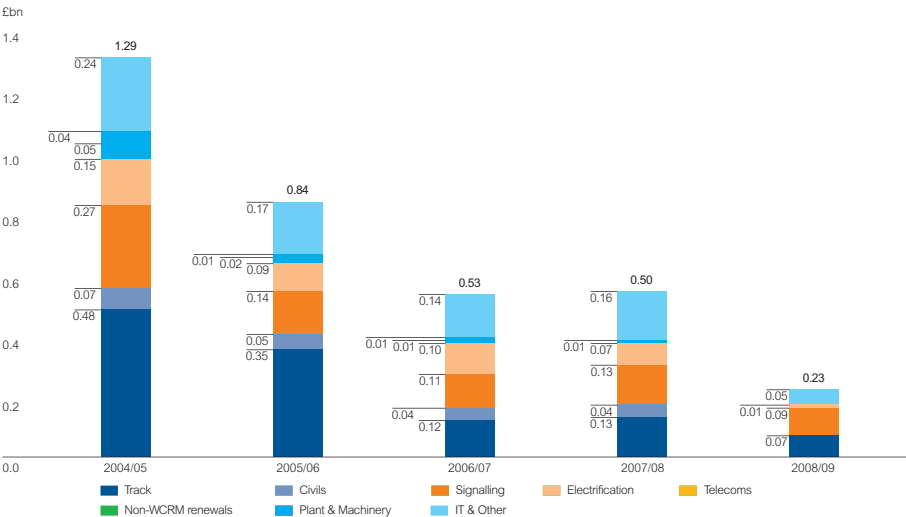
Beyond CP3, and this programme’s remit, there will continue to be substantial ongoing renewals on the West Coast Main Line. There will also be ongoing enhancement at Bletchley, Stafford, and further power supply upgrades. It is also likely that additional capacity will be provided on the route by increasing train lengths from nine cars to 11 cars.

As stated in previous business plans, the very substantial efficiencies assumed in ACR2003 remain a challenge and, as last year’s Business Plan noted, there is no remaining contingency.

Contingency

Given the ongoing uncertainties in the overall renewal programme and the lack of contingency in the West Coast Route Modernisation programme, we have included a general provision for risk across the business as a whole.

Figure 11 West Coast Route Modernisation expenditure



## Enhancements

There are a number of significant enhancement projects in the implementation stage. In addition to the GSM-R/FTN programme discussed earlier, a separate enhancement project has been established to develop, design and fit GSM-R cab mobile radios. Final testing of the cab mobile radios and integration of this element with the overall system is underway in preparation for the trial to commence, following HMRI approval, in the latter half of 2007.

We are currently leading on the implementation of the 10-year Access for All programme to improve station access. Our plan is to improve those stations on a priority list to allow for step-free and unobstructed access whilst providing the flexibility and opportunity to deliver specific improvements to meet local needs.

At King's Cross station, we will deliver a new concourse at ground and mezzanine level, retail accommodation, the refurbishment of the western and eastern range buildings, and a new footbridge in the main train shed. The planning application for the western range, concourse and additional platform is expected to be approved in 2007. The programme will move into the major construction phase towards the end of 2008 with works commencing on the main train shed roof, footbridge and escalators. The western concourse, suburban train shed façade and western range reconstruction will also commence within this period.

All works will be undertaken this year on the St Pancras Box scheme which is aimed to be completed and operational by December 2007.

We are leading the ERTMS cross industry team, working closely with key stakeholders and Europe. ERTMS will be piloted on the Cambrian lines. We propose to develop two additional migration schemes. The first migration scheme will see the completion of single option development in 2009/10 and the second would start single option development in that year.

We are working jointly with Transport Scotland to deliver its programme of enhancement schemes which will improve the rail network. At Edinburgh Waverley, the project has progressed to deal with track and signalling capacity issues. Works are anticipated to be on site until the end of November 2007.

The Airdrie to Bathgate project is currently entering into its detailed design phase. Construction is planned to start in 2008 with the railway being fully operational in late 2010.

The Bill for the Borders Rail link received Royal Assent in July 2006. The project involves the construction of 35 miles of new track and seven new stations. The project is due for completion in late 2011.

For the purposes of this Business Plan we have assumed that a number of projects sponsored by Transport Scotland will be funded through our Regulatory Asset Base.

### Network Rail Discretionary Fund

The Network Rail Discretionary Fund (NRDF) exists to provide us with the necessary funding to exploit synergies with our renewal schemes particularly for track and signalling works as well as funding small scale enhancements.

Now that the process is becoming well established excellent progress is being made on the development of schemes under this fund to be delivered over the next few years. A full list of schemes under consideration for NRDF funding is provided in the Route Plans document.

Through these schemes we aim to make small but significant changes to renewals to ease congestion, improve reliability, increase performance and safety on the rail network. Equally it can deliver key stand alone enhancements such as the third platform at Manchester Airport and the turnback facility at Tunbridge Wells.

### Network Rail Outperformance Fund

A number of important schemes are being developed through the use of outperformance funds. In most cases, contributions from third parties would be required to enable these schemes to be implemented in the immediate future. Alternatively, the developed schemes could be implemented following funding as part of the periodic review.

As part of the programme of works to improve capacity for Anglo-Scottish coal, work is already underway on structures and formation works on the Gretna-Annan doubling scheme, due for completion in early 2008. The Glasgow & South Western and Settle-Carlisle signalling capacity enhancement scheme will facilitate increased coal flows from Hunterston port and Ayrshire collieries to power stations in England.

As part of the overall King's Cross development programme, we are funding an additional platform at King's Cross

through the Outperformance Fund. The key benefit is the potential to operate more 12 car trains into the station, particularly peak period services to Cambridge.

Throughout 2007/08 we will be looking at the options to increase passenger and train capacity at Gatwick Airport and examining a scheme to reduce journey times on the Midland Main Line route.

### Projects in development

The most important project in development is the Thameslink programme which is key to tackling crowding and growth in the London commuter market. The Government announced in October 2006 its decision to grant Network Rail the legal powers and planning consents necessary for the scheme to progress. The delivery of the scheme is being planned so as to allow some of the benefits to be realised early.

Planning for the transformation of Birmingham New Street station is now at an advanced stage with pre-construction activities being undertaken in conjunction with Birmingham City Council, Advantage West Midlands, Centro and DfT. Subject to funding, enabling works could commence in March 2008 with planned completion by the middle of 2013.

Redevelopment proposals for Waterloo station and the layout at Reading station are also being examined.

For Crossrail, it is currently expected that the parliamentary process will reach its conclusion in 2007 with the Crossrail Bill receiving Royal Assent. If this is the case, then enabling works on the project are expected to commence in 2008 with tunnelling operations starting in 2009/10.

We have included an overall planning adjustment to reduce the aggregate level of enhancement expenditure as a number of projects are in early stages of development and funding has not yet been agreed.

### 2012 Olympic and Paralympic Games

We are working on a number of projects where we are supporting the main project promoter to meet project deadlines in time for the 2012 Olympic Games and Paralympic Games. The completion of the East London Line extension project is anticipated by 2009, with service operation by 2010.

We are working with TfL and the Olympic Delivery Authority (ODA) to support the development of Stratford station

**Passenger growth will be accommodated through lengthening of trains and improved network utilisation.**

**Industry punctuality has improved steadily.**

to improve the passenger handling capability in and around the station.

We are working with the ODA to deliver a new depot and relocate Thorntons Field carriage sidings with a view to clearing for closure by the end of June 2008. We are also delivering several other projects for the ODA to assist developing the Olympic site at Stratford.

Finally we are working with BAA on the delivery of train services to Heathrow Terminal 5 by March 2008.

#### **The Transport Innovation Fund**

We will be doing further work over the next year on candidate schemes for TIF funding including Southampton to West Coast gauge, Cross London gauge and capacity, Peterborough – Nuneaton gauge, Olive Mount chord and Humber Ports capacity.

#### **Income and financing**

In 2007/08, our income is expected to increase marginally. Our fixed track access charges are expected to increase by nearly £600 million next year, although this is offset by a similar reduction in network grants.

Variable usage charges are around £170 million higher than ACR2003 for the whole control period, as a result of projected traffic increases and changes in the mix of train types that are using the network. As noted above, this increase in variable usage charges is partly offset by additional maintenance and renewal costs resulting from these changes in traffic.

As a result of improving train performance, we are continuing to forecast that we will receive Schedule 8 payments from train operators for the rest of the control period. Our projections for Schedule 4 payments to passenger train operators for possession costs are around £50 million greater than ACR2003 due to changes in payment rates. We are forecasting that income from commercial activities, such as advertising, retailing and land disposals, for the control period will be around £45 million more than ACR2003.

The electricity market has been volatile over the last year, although prices have reduced in recent months. As a result of the recent fall in prices, our forecast for the next two years of electricity for traction income from franchised operators is lower than last year's Plan. However, as noted above, this is offset by the reduction in the cost of procuring electricity. We have recently agreed in

principle with train operators potential changes in the way we charge for electric traction.

We assume that there will be no changes in the Regulatory Asset Base beyond those already established by the ORR. The impact of renewals deferred to CP4 is assumed to be offset by the additional £185 million for further investment opportunities. We have also assumed that the overall outputs of the West Coast Route Modernisation programme are consistent with ACR2003 despite additional outputs being delivered in some areas.

Our net debt is expected to be approximately £18.9 billion at 31 March 2007. It is forecast to increase to £20.4 billion by March 2008 and to £21.9 billion in 2008/09. We have agreed to pay a fee to DfT to reflect the financial benefit to us in terms of lower interest rates from the financial indemnity provided by Government.

We expect to raise around £10 billion of debt over the next two years, through a combination of public and private bonds issued under the debt issuance programme, to cover the refinancing of existing debt as well as funding working capital. We are discussing with Government and the ORR the possibility of raising debt without the benefit of the Government indemnity in the context of our wider CP4 discussions.

#### **Outputs and efficiency**

##### **Safety**

We are currently improving our suite of key performance indicators to monitor the main precursors to train accident and workforce risk. We are also working with the DfT to support the development of the safety risk projections to be included in the High Level Output Specification, which will be published in July 2007.

We will continue to drive improvements in safety risk over the next two years. We will maintain our focus on reducing safety risk at level crossings through the 'Don't Run the Risk' public awareness campaign and development of new technologies, such as low cost bridges, obstacle detection and vehicle activated signs.

Our workforce safety awareness campaign 'Safety 365' continues to focus on investigating all accidents so that we can build on the success during 2006 in reducing our workforce accident frequency rate. We are also continuing to improve safety critical communication within front line staff.



## Performance

Over the last few years, industry punctuality has improved steadily and now exceeds the level prior to the Hatfield accident in 2000. By March 2007, annual Public Performance Measure (PPM) is now around 88.0 per cent compared to 86.4 per cent in March 2006. This exceeds the industry target of 87.6 per cent. This improvement is attributable largely to improved management of delay through our integrated control centres and good progress by operators in reducing their contribution to delay.

In ACR2003 we were set a target to improve the reliability of the network by more than 30 per cent by 2008/09. Over the last three years, reliability has improved significantly and total delays caused by Network Rail in 2006/07 are around 10.5 million minutes. While this is broadly the same as last year, it reflects a widely different performance between areas directly in our control and the impact of external events. Delays caused by Network Rail's infrastructure and operations improved by around eight per cent. However, delays caused by adverse weather and external events such as cable theft increased by more than 30 per cent and resulted in an additional 650,000 minutes delay. Although this is a shortfall against our own internal target, we remain ahead of the ACR2003 target of 10.6 million minutes.

Given the continued improvement in the underlying performance of Network Rail infrastructure and operations, we are maintaining the stretch target for delay minutes targets that we set ourselves in the 2005 Business Plan. Our aspiration remains to achieve the ACR2003 target for 2008/09 a year early and we will seek to beat this target. However, we recognise that this target is extremely challenging and we will need to work hard to deliver this.

Adverse weather conditions provide a challenge to our performance and we continue to improve our contingency plans as these events potentially become more frequent and intense.

Our performance plan is based on an assessment of the impact of detailed improvement plans developed by our route-based teams and nationally sponsored initiatives. Our analysis takes into account the effect of expected traffic changes, the potential impact of major events such as adverse weather and other specific improvement plans.

Our projections for PPM are derived from the Joint Performance Process with operators. These are based on the forecasts for Network Rail delay minutes by operator, combined with improvements in train operator performance provided by operators, and additional improvements arising out of joint initiatives. For those operators which are subject to franchise changes during the coming year, we have made assumptions about future improvements. When combined with our current growth assumptions, the impact of these improvements on PPM punctuality by operator is assessed through statistical analysis. When aggregated across operators, PPM is expected to reach 89.5 per cent by March 2008 and 90.2 per cent by March 2009.

There will inevitably be some uncertainty about the level of improvement we can achieve given the complexity of train performance as a dynamic system and the impact of external weather conditions and events, which the experience of recent years has highlighted.

The key elements of our national performance improvement programme are:

- asset reliability improvements, including reductions in the number of temporary speed restrictions and other track defects;
- delay per incident and other operational management improvements;
- mitigation of seasonal weather and external risks such as crime, bridge strikes and fires;
- minimising other performance risks, such as those arising from renewals and major projects;
- improved timetable robustness and train planning; and
- cross-industry improvement initiatives.

## Traffic volumes

Our growth projections are developed based on consultation with train operators. These changes include franchise commitments and other planned changes to the services of current operators, the effect of infrastructure changes, and the introduction of services by new operators. The actual level of growth will depend on market conditions and other factors, such as the impact of re-timetabling work where further opportunities to increase the efficiency of network utilisation may be realised.

We are currently forecasting growth in passenger train kilometres of around 1.3 per cent over the next two years.

The main source of growth is the increase in services on the West Coast Main Line, planned to take place in December 2008. The growth projections reflect the level of congestion on the network, and it is anticipated that passenger growth will be accommodated through lengthening of trains and improved network utilisation.

In the short term, we are forecasting an increase of 3.6 per cent in the number of freight tonne kilometres. This is based on an increase in intermodal traffic and the change in the pattern of coal traffic to power stations. However, we expect freight tonnes lifted to increase by around 30 per cent over the next 10 years.

## Financial efficiency

The Financial Efficiency Index (FEI) is a measure of how efficiently we spend on operations, maintenance and track renewals (normalised to take account of the volume of renewals). As efficiency improves, we should be spending less to deliver the same outputs and therefore our FEI score, which reflects total expenditure, should reduce.

We recognise the limitations of this measure as it currently only covers 60 per cent of total operating, maintenance and renewals expenditure. We are committed to increasing coverage and, as a result, have revised the definition for 2007/08. The FEI will continue to include controllable operating expenditure, maintenance (normalised by equated track miles) and plain line track renewals but will now include switches and crossings renewals and major signalling schemes. It will now cover 68 per cent of our operating, maintenance and renewals expenditure. Work continues to further widen the FEI in the future to include other renewals where there are reliable unit costs and a robust data reporting process.

To make the measure more meaningful over time the FEI has been turned into an index with 2003/04 equal to 1.00. The FEI is forecast to improve throughout the plan period as we reduce the costs of running the railway.

## Asset stewardship

The Asset Stewardship Incentive Index is a basket of measures which are intended to capture the underlying condition of our assets. This index continues to be significantly better than the ORR target and even better than the more challenging targets set in our business plans and management incentive plans. We are forecasting a small but challenging improvement in the index compared to the 2006 Business Plan.

## We will construct new centres to provide technical training for the maintenance workforce and track safety training for all employees.

The scale of planned improvement recognises that we have realised the early opportunities for improvement, such as accelerated re-railing programmes to tackle rolling contact fatigue, and the immediate benefits of bringing maintenance in-house. In addition, we consider that some of the measures are reaching the point where expenditure to drive further improvements may not be economic.

In 2006/07, we have seen a particularly strong performance in the incidence of broken rails which are at their lowest ever level. A major factor is the mild weather experienced this year. Our plan for 2007/08 takes into account the ongoing impact of improvements due to asset renewal and maintenance, but it assumes that the weather will revert to historic averages. We are forecasting a small reduction in the number of broken rails compared to last year's Plan.

We have set more challenging targets for two elements of the index. As a result of significant improvement in the number of Level 2 exceedences and track geometry in 2006/07 and further opportunities to correct underlying causes of track geometry faults, we have improved the targets for the next two years.

Some of the asset failure measures have not improved as we would have liked. Signalling, points and track circuit failures were all affected by the exceptionally hot weather experienced during the summer. We are confident that our delivery plans for next year will recover the lost ground and have retained the same targets for 2007/08 that we set ourselves last year.

We are focusing increasingly on tackling the root causes of long-standing issues that affect asset performance, in particular, components that are not sufficiently reliable will be progressively replaced on a campaign basis. This means that benefits will be harder won, but more sustained. The rate of improvement will inevitably be slow. This year's experience has shown that several of our measures are now at a level where the impact of adverse weather can significantly affect the performance measures. This provides both risk and opportunities. However, we are not simply accepting this position, but are developing strategies to minimise the effects of adverse weather wherever possible.

Recognising that some of the measures may be nearing the end of their usefulness (because they are stabilising at optimum levels), we have started a review of the measures within the Asset Stewardship Incentive Index (ASII) to determine what will be more fit for purpose for CP4. We anticipate that these will measure precursors to failure, rather than failures themselves. This is in line with our strategy of 'predict and prevent' rather than 'find and fix' and will provide consistency with our intention to deliver a more reliable railway.

### Business performance

The level of employee engagement has improved further during 2006/07, although falling short of our target. We have maintained our targets for the next two years. We are looking for a further major improvement in the response rate and continued improvement through action planning as we develop world class teams.

Figure 12 Asset Stewardship Incentive Index

	Weighting	2006/07		2008/09		2008/09 ORR target
		KPI	Index	KPI	Index	
Track geometry	20%	0.813	0.16	0.813	0.16	1.00
Broken rails	15%	200	0.10	270	0.13	300
Level 2 exceedences	15%	0.737	0.12	0.710	0.12	0.9
Signalling failures	20%	23,000	0.16	19,740	0.14	28,750
Points/track circuit failures	10%	17,300	0.09	14,100	0.07	19,360
Structures and earthworks temporary speed restrictions	10%	43	0.04	46	0.05	100
Electrification failures	10%	80	0.06	61	0.05	133
<b>ASII</b>			<b>0.74</b>		<b>0.72</b>	<b>1.00</b>

Note: the index for each measure is based on the projected KPI and the weighting in line with ACR2003.

**Figure 13 Key performance indicators**

	2006/07	2007/08	2008/09
<b>Higher performance</b>			
Reliability index	1.281	1.375	1.421
Train delay minutes (000 mins)	10,464	9,115	8,500
Delay per 100 train km	2.15	1.86	1.72
Public Performance Measure	88.0%	89.5%	90.2%
<b>Increased system capability</b>			
Cumulative passenger train miles growth	1.2%	1.7%	2.5%
Cumulative freight tonne miles growth	0.0%	0.6%	3.6%
Network availability	97.2%	97.2%	97.2%
<b>Improved asset stewardship</b>			
Asset Stewardship Incentive Index	0.74	0.74	0.72
<b>Improved financial control</b>			
Financial Efficiency Index (old definition)	1,877	1,799	1,698
Financial Efficiency Index (new definition)	81.3	77.9	73.0
<b>Improved business performance</b>			
Employee engagement measure	3.53	3.85	4.00

We are developing the key skills and behaviours of first, middle and senior management levels through the accredited 'Stepping Stone' programmes, which are delivered in partnership with Warwick University. The full roll-out of these and other programmes will help to generate highly skilled and capable leaders who can contribute to the success of Network Rail. We are already measuring a significant increase in the employee engagement scores of those managers attending programmes compared to those who have not.

We will also construct new centres to provide technical training for the maintenance workforce and track safety training for all employees. All maintenance, safety and operations trainers have received additional training to improve their delivery competence and we will now improve their capability to provide training through on-site coaching of teams. We are also changing the way that we manage the development and maintenance of the competence of our front line people. This requires people to follow predetermined training and work experience programmes with new processes and PC based knowledge testing tools to assist managers to make decisions on the competence of their people.

Our projections for key performance indicators are summarised above.

## Financial outperformance

We have updated our assessment of expected performance against the targets for the control period as a whole to reflect our performance in 2006/07 and our plan for the next two years. This shows that outperformance totals £390 million. This is after identifying potential investments of up to a further £185 million, which offsets the level of investment deferred to the next control period. We are developing these investments further to decide which of these should be implemented.

We have already allocated £200 million of this to the Outperformance Fund and this would be used to enhance the capacity of the network. As a result of these potential investments, the net saving over the control period would be £190 million. Adding the saving in interest costs to this amount results in a saving of £890 million which we plan to use to reduce the growth in debt arising from other investments in the network.

The overall position is summarised in Figure 14. The key elements of our outperformance analysis are:

- increased variable usage charges due to traffic growth and increased Schedule 8 payments from train operators reflecting improving train performance;
- additions to the Regulatory Asset Base as we are exceeding the ORR's target for the Asset Stewardship Incentive and the volume incentive resulting from incremental traffic growth;
- controllable operating and maintenance costs that are lower than ACR2003;
- increased non-controllable costs and Schedule 4 payments to passenger train operators for possession costs;
- additional costs of the West Coast Route Modernisation programme, which were reflected in the 2006 Business Plan;
- track renewals that are higher than ACR2003 and additional 'other' renewals to support the continued transformation of the business; and
- reductions in signalling, telecoms and IT renewals for which we are spending less than ACR2003 offset by potential investments of up to £185 million, focused on reducing the longer term cost of the railway.

**Figure 14 Financial outperformance**

	BP07 v ACR2003 £m
Income	660
RAB additions	655
Controllable opex and maintenance	340
Non-controllable opex	(200)
Schedule 4 costs	(50)
WCRM	(250)
Renewals	(295)
'Other' renewals	(270)
Investment deferred to CP4	185
Additional investments	(185)
Contingency	(200)
<b>Outperformance</b>	<b>390</b>
Outperformance fund	(200)
<b>Net saving</b>	<b>190</b>
Interest saving	700
<b>Net saving (including interest)</b>	<b>890</b>



# Rail travel is the safest form of transport in Britain



Thanks to the introduction of TPWS and TPWS+, the risk from signals passed at danger is down 90 per cent since 2001. And with better information, planning and maintenance, the number of broken rails is at an all time low.

The greatest remaining area of risk on the railways is now at level crossings. Here, too, Network Rail is playing its part.

Our targeted and hard hitting 'Don't run the risk' campaign has raised awareness of the dangers of incorrect level crossing use by 25 per cent nationally and up to 45 per cent in selected hotspots.

And from March 2007 the new Road Safety Act will enable us to integrate safety measures such as rumble strips and lane dividers into the approaches to level crossings – a joined-up approach to the problem about which we lobbied hard.

Over the next year we will be undertaking a full risk analysis and prioritising level crossings for further traffic and safety measures.

We will continue to analyse and understand the causes of all accidents and near misses in order to improve our systems and processes to reduce risk in the future.





# Delivering the plan

To achieve our goals and deliver our vision we have developed a change programme aimed at transforming the organisation into one that begins to feel and act world class. Every function has its own specific programme but there are three over-arching programmes aimed at delivering world class infrastructure and operations, supported by the right processes and delivered by great people. These elements have specific cross-functional workstreams aimed at delivering the vision.

The ongoing development and reporting of these workstreams have been embedded into the company's existing management reporting structure as these workstreams become part of the core programme for delivering improvements in business performance.

We already have a number of key initiatives underway which are at the heart of Network Rail becoming world class: for example, the development and justification of our asset policies and our establishment of a comprehensive cost analysis framework. These existing initiatives are being integrated into the overall programme.

Our plans have been informed by discussions with our stakeholders. However, we will need to continue this dialogue to ensure that we have properly understood their aspirations. Communication and consultation will therefore be key to the success of this programme in explaining what we are trying to achieve and how our stakeholders can influence the vision, objectives and workstreams. Formal consultation has commenced internally with our people and externally with key stakeholders.

This plan only highlights those initiatives which are aimed at a significant transformation in what we do or how we do it. In addition to these, the business is clearly focused on continuous improvement in all its day-to-day activities. A summary description of the overall transformation programme and corporate and functional workstreams is provided as an appendix to this document.

## Measuring success

We need to ensure we lead, communicate, inform and learn from the right set of measures on the way to becoming world class. The current set of KPIs was chosen to address the 'fix the basics' and 'one way' phases of our recovery programme. We have a workstream underway to develop a performance measurement system that enables senior management to manage the business effectively in line with the company's strategy. This system must

provide a framework for robust decision making, is meaningful throughout the organisation and that demonstrates the satisfaction of stakeholder needs.

This work will result in a balanced scorecard of key performance indicators measuring the four perspectives shown in Figure 16. These relate to the service we provide, the value we deliver, the processes we use and the development of our people. The four perspectives will be combined with external surveys of our stakeholders, such as Passenger Focus, to check whether we are satisfying the needs of our stakeholders and whether they perceive we are doing so.

We will share our proposed KPIs with the industry in our Strategic Business Plan in October 2007. We aim to use these KPIs internally in 2008/09 and to report formally against these measures from the start of the next control period in April 2009.

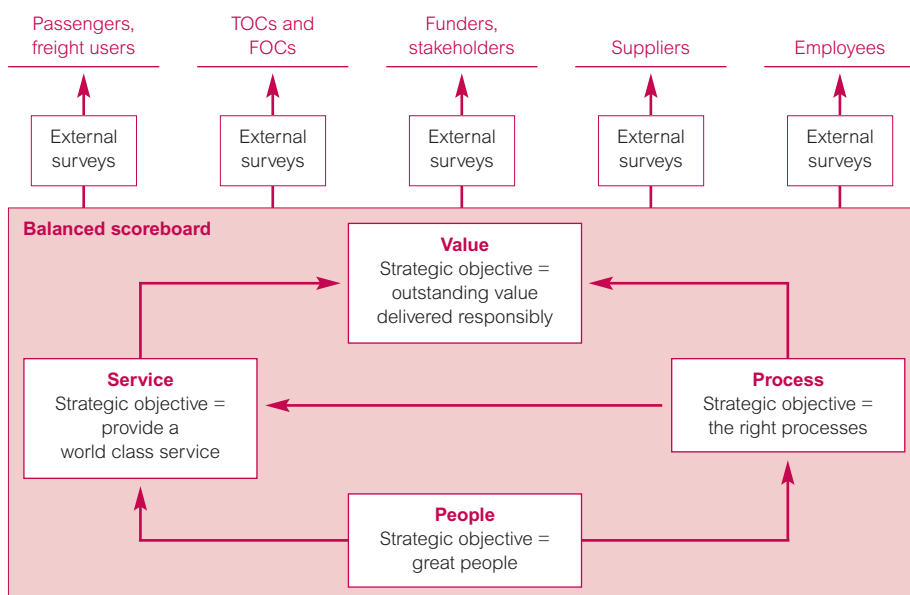
We aim to have completed the delivery of the transformation programme by the end of the current control period in 2009. As we progress into the next control period, the balanced scorecard will provide the signals as to the progress we are making in realising the results of this transformation programme. We will provide further updates on progress with the transformation programme and its expected benefits in our future Business Plans.

**To achieve our goals and deliver our vision we have developed a change programme aimed at transforming the organisation into one that becomes world class.**

**Figure 15** Transformation programme workstreams

World-class infrastructure and operations...		Supported by the right processes...		Delivered by great people...	
<ul style="list-style-type: none"> <li>• Available seven days a week</li> <li>• Right-time</li> <li>• Easily maintained</li> <li>• Sustainable</li> <li>• Affordable</li> </ul>		<ul style="list-style-type: none"> <li>• Higher quality</li> <li>• Speed</li> <li>• Simplicity</li> <li>• Joined-up working across the company</li> <li>• Joined-up working across the industry</li> <li>• Investment in technology</li> </ul>		<ul style="list-style-type: none"> <li>• Living and breathing our values and decisions behaviours</li> <li>• Fact based</li> <li>• Understanding the needs of users, customers and stakeholders</li> <li>• Living the vision</li> </ul>	
Services	Value	Integration	Systems	Values and Behaviours	Leadership and Management
(S1) Setting the goals and piloting the solutions	(V1) Delivering responsibly	(I1) Right first time in half the time	(SY1) Excellent IT systems capability	(VB1) Living and breathing our core values and behaviours	(LM1) Great leaders and managers
(S2) Designing reliable infrastructure	(V2) Affordable construction	(I2) Effective Industry frameworks	(SY2) Smarter tools	(VB2) Strong relationships with customers and stakeholders	(LM2) Understanding the needs of users, customers and stakeholders
(S3) Excellent maintenance	(V3) Affordable maintenance	(I3) Integrated planning	(SY3) Streamlined maintenance systems	(VB3) Rewarding and recruiting the right people	(LM3) Competent people
(S4) Excellent operations	(V4) Flexible and reliable plant and equipment	(I4) Speedy enhancements	(SY4) Automated supply chain	(VB4) Excite and engage for safe working	(LM4) A learning organisation
(S5) 7-day railway	(V5) Lean supply chain	(I5) Excellent programme management	(SY5) Day 1 reporting and real time analysis	(VB5) Service excellence	(LM5) Sustainable knowledge
(S6) Outstanding station services	(V6) Efficient services	(I6) Integrated safety management	(SY6) Efficient information services		
(S7) Modern property facilities		(I7) Working smarter			
		(I8) Outstanding HR services			

**Figure 16** Development of a balanced scorecard



## World class infrastructure and operations

Our strategic objectives are to deliver a world class safe and reliable service, and outstanding value delivered responsibly. To achieve this, our ambition is to create a railway that is:

- available seven days a week;
- easily maintained;
- right time;
- sustainable; and
- affordable.

This vision will not be delivered quickly or easily. Nor will it be delivered by Network Rail without the support and co-operation of our customers and funders. This transformation programme will require a commitment from everyone in the industry to work towards a common vision.

We will develop the vision of the railway in conjunction with customers and funders. The railway must continue to improve safety for its users and employees. We must also create a railway that delivers what the end users, the passengers and freight users, want in order for rail to be their mode of choice. A key challenge in this respect is the issue of track capacity and, for passengers, providing sufficient train capacity for passengers to travel in acceptable levels of comfort and crowding.

To deliver the appropriate capacity cost-effectively will require close working with our customers and funders to determine the most efficient whole-industry solutions. A value for money and affordable railway will always mean choices and trade-offs within finite funds. The challenge for the industry is to deliver a cost-effective railway that maximises the benefits to end users, customers and stakeholders within the funds available.

To deliver the vision, we need to have 'golden' assets that never fail, engineering work that is done in eight hours or less, facilitated by modular assets that can be pre-assembled and tested off-site and right time running to robust timetables. This vision can then be turned into a clear specification that allows everyone in the company to understand what is needed to achieve our aims.

Functional workstreams will underpin this by building capability to deliver the vision right across the network.

## Providing a world class service

The over-arching purpose of this workstream is to set the goals for, and pilot solutions to, providing a world class service. To do this we must understand the needs of our stakeholders and

translate them into meaningful measures that can be underpinned by clear action plans.

We already undertake stakeholder research but we have initiated additional research to provide a comprehensive picture of our stakeholders' needs. We are also reviewing how this information is used within the company including improved analysis and checking to ensure that those that need it get it, and that it is reliably and consistently delivered. We will use regular stakeholder research to underpin our understanding of stakeholder satisfaction with our performance and this will be a key tool to drive our improvement plans.

Obtaining clarity and quantification of outputs allows us to translate these into a disaggregated specification for the railway that provides the company with a clear understanding of what each function needs to deliver to achieve world class infrastructure and operations. From this we can develop the appropriate action plans.

Critical to the success of this programme is the development of a number of key policies and strategies including the ongoing development and justification of our asset policies, the development of our operating strategy including efficient engineering access, the development of our route strategies and our stations strategy.

Considerable progress has been made over the last couple of years in improving our approach to the management of our assets. These efforts have been recognised by the independent reporter for asset management (appointed jointly by Network Rail and the ORR), who expressed the opinion that 'Network Rail's maturity in asset management is at least comparable to that of other major infrastructure owners in the UK'. We have a significant programme of work to develop further our asset management strategy.

Central to the framework for managing our assets are our asset policies. Assets are designed, constructed, inspected, maintained and replaced in accordance with these policies. In June 2006 we produced updates of our policies, reflecting a move to a risk-based methodology. Our Initial Strategic Business Plan set out the programme of improvement initiatives for each asset group, aimed at embedding this risk-based methodology more fully into the management of our assets. Four key

**Considerable progress has been made over the last couple of years in improving our approach to the management of our assets.**

**A key programme is the continued roll out of integrated control centres operated jointly by our staff and train operators.**

tasks form the core of this asset policy development programme:

- policy differentiation by route;
- asset degradation and mitigation;
- whole-life cost reduction initiatives; and
- a radical route-based review to reduce long-term costs and improve reliability.

We are taking this programme forward by focusing initially on alternative 'low cost' and 'high output' scenarios for various routes in order to highlight potential radical options for further consideration as we update our asset policies. The objective is to use this to achieve reductions in the whole-life, whole-system cost of given outputs.

We have also launched a series of initiatives to address a number of improvement opportunities to other components of our asset management framework, designed to continue to improve our capability in this important part of our business. These opportunities were identified by the independent reporter as part of its review of our framework, completed in December 2006, and plans include:

- refinements to the scope and content of our route plans to improve the alignment between route output requirements and the application of the asset policies; and
- improved feedback links between maintenance and engineering to assist in identifying scope for further policy development.

Progress on these initiatives will be incorporated in our updated asset policies and reflected in our October 2007 Strategic Business Plan.

The operations strategy will set out the future operating philosophy for the railway, the operating requirements and the supporting technology. A key component is our future signalling strategy. This includes the development of area signalling control centres, the potential roll out of in-cab signalling technology being developed through the ERTMS project, and the improved communications and data flows enabled by the National Telecommunications project. This strategy needs to be defined and agreed across the whole industry and will have significant implications for train operations and rolling stock as well as for Network Rail.

Allied to the operations strategy are specific performance improvement programmes. A key programme is the continued roll out of integrated control centres operated jointly by our staff and train operators. These control centres

deliver effective real-time management of planned and unplanned disruptive events to minimise the impact on customers and users and enable better anticipation and avoidance of foreseeable disruptions.

In order to deliver a seven day a week railway, we need to develop the appropriate engineering access framework that optimises the whole industry business case. This must reflect the changing demands of our customers and the end users but also take account of our need to deliver cost-effective maintenance and renewals. Key enablers of a more effective regime are the development of improved planning and utilisation of possessions and the development of modular components. As part of this work we will be learning from best practice followed in other countries.

We are developing an improved process for the planning of engineering access that takes account of the whole-industry trade off of costs and revenues in determining the frequency and duration of possessions. In developing engineering access plans, we will introduce more effective prioritisation of different engineering activities and more effective use of single line working. The objectives and targets to support this will be cascaded to all appropriate functions. The overall strategy will be consulted with the industry and agreed at the highest level.

We continue to engage with customers and funders on the development of our plans for the network. There are a number of processes aimed at delivering an industry agreed plan for the development of the network. The route investment review groups are key to developing the shorter term plans. These groups seek to identify opportunities and synergies between our renewals proposals and the delivery of enhanced capacity and capability for each strategic route in consultation with our customers. We have also engaged with our customers on the development of route strategies for CP4, focusing on the anticipated demand for rail and the appropriate response from the industry in terms of train service proposals and infrastructure enhancements. Underpinning the development of these route strategies is the ongoing programme of Route Utilisation Strategies and project-specific development work. These strategies will be a core component of our October 2007 Strategic Business Plan.

In collaboration with our customers and funders we are developing a strategy for all stations on the network aimed at delivering a step change in the product



offered to the travelling public that is safe, secure and accessible and efficiently operated and integrated into the overall journey experience. The workstream will establish the vision, objectives and key success criteria for the delivery of world class station services for customers. It will devise a strategy to deliver that vision, including the delivery of infrastructure and improved operations. This strategy will also set out how we will integrate the various proposals for stations including our renewals and enhancements proposals, Disability Discrimination Act works, commercial development opportunities and customer driven proposals, such as enhanced car parking, into a coherent plan that maximises the benefits and cost-effective delivery of these proposals.

Underpinning the development of these strategies is the exploration and exploitation of technological innovation. Improving today's railway and creating tomorrow's railway requires significant technological innovation as an integral part of whole business improvement. Network Rail is approaching the challenges through four principal routes.

We have engaged in co-operation with our European rail colleagues to drive longer term major change, in projects supported by EU research funding. We are a partner in Innotrack, which is looking at how railways can reduce the whole-life cost of track infrastructure. We have similar partnerships across the range of infrastructure from bridges, through signalling control to electric power, and are influencing the direction of research on the future design of trains.

We are continuing to build relationships with suppliers and academia particularly in the areas of potential impact of changing climate and sustainability. Three examples include ways of equipping our large earthworks asset portfolio to assure real-time security in storm conditions, incorporating ground recycled glass into track foundations to avoid use of high quality graded sand and making structural components from waste plastic material.

We are developing what we see as major opportunities to exploit our new fixed communication network in conjunction with applications of Galileo and other satellite based systems. Early benefits are expected to be in increased condition knowledge to inform continuing improvement of asset management planning and delivery. Another substantial area with slightly longer development timescales is the

development of satellite based train control to manage greater throughput at capacity pinch points whilst reducing traction energy usage.

The fourth area of innovation, working closely with key suppliers, is to exploit technologies maturing in non-rail industries. Current examples include modular station, bridge and trackwork designs to improve quality, and reduce cost and network access time. Similarly, innovative level crossing control systems including obstruction detection and train approach control are about to be piloted; and we continue to develop our train borne infrastructure measurement capability.

We will pilot our approach to fast track delivery of the right time railway, working in a new way with our customers and other stakeholders.

Once we have successfully completed the pilots, we will roll out the approach across the network. This roll out programme will be structured around a definition of the network consistent with the overall vision and built on a segmentation of the network based on customer requirements with outputs and action plans differentiated by intercity, commuter, rural and freight routes.

### **Delivering value**

In delivering these outputs, our aim is to be recognised as world leaders in project and programme management providing good value infrastructure. In doing so, we aim to become the delivery partner of choice for renewals and enhancements to the railway, being invisible to the users of the railway, except in terms of the final result.

We have identified a number of workstreams to improve our delivery of projects in order to minimise the disruption to the network and drive down costs through the development of modular products, and the establishment of standardised and simplified design and construction activities. This will deliver improved efficiency, using off-site testing and assembly and increased productivity during possessions. An increased use of standard specifications and designs will reduce unit costs and minimise whole-life costs. As part of this approach we wish to improve our customer service and stakeholder management to ensure there are no surprises to stakeholders when we undertake disruptive activity. This will also facilitate the achievement of the seven day railway.

Our suppliers are a key element of the value chain in delivering our vision for the railway and the company. The goods and services our suppliers provide represent a significant element of our output and our cost base. Good procurement practice is critical to the success and effectiveness of the company. These goods and services must be safe, efficient and good value for money. Our suppliers must play a key role in helping achieve our objectives. We need our suppliers' help in optimising our supply chain and driving efficiencies over the longer term.

We are in the process of optimising our supply chain, ensuring it is fit-for-purpose, delivering lower operating costs, improving productivity and being more responsive and flexible. This will allow us to provide safe, reliable and high quality delivery across the product range, giving us greater understanding of the cost drivers of the supply chain and eradicating waste. We are currently focusing on the major supply chains in the Maintenance, National Delivery Service and Major Projects functions.

If we are to use the supply chain efficiently we need to improve the resource planning in contractor organisations. Providing stability in the supply chain by improving our own planning will improve contractor efficiency and provide us with a stronger negotiating position to deliver efficiencies.

Allied to this we are examining the supply of materials to the business with the aim of creating a materials service which provides the optimum materials at the optimum time and price and that work is never disrupted by the supply chain. This will be achieved by eliminating waste, simplifying and speeding up the process. This will be delivered through the development of a comprehensive catalogue of materials, a single procurement process and the establishment of framework contracts. This will produce reduced and reliable stock delivery times, stock profiles and the number of stocking points, with greater differentiation of the type of product being procured.

We aim to increase the productivity of our maintenance delivery units through the application of lean techniques to eliminate waste, and simplify and speed up processes. This will be supported by the application of best practices for matching work group size and skills to the activity being planned. As part of this we will be examining the boundaries between the activities undertaken by

**Our aim is to be recognised as world leaders in project and programme management.**

maintenance units and our project delivery function.

We will continue to develop a modern, high performance portfolio of flexible and reliable plant and equipment to underpin our maintenance activities. Opportunities exist to reduce cost and improve performance through continued investment in rail vehicles, on-track machines and other plant and equipment. We will be developing a rail fleet asset management system, transferring maintenance, repair and overhaul of the fleet to a workshop at Beighton, reviewing the use of satellite facilities and developing the business case for further investment.

**The right processes**

Many of the processes and tools we use today for planning, timetabling, managing train movements and operating the infrastructure have their roots buried in the past. The problem is that many were originally designed for a different age.

Since we took over the network, there has been a strong focus on challenging how we do things, their costs and driving efficiency through the business. This challenging behaviour continues as we seek to identify further opportunities for cost savings during the rest of the current control period and into the next. In developing our world class transformation programme and our efficiency plans, there are several closely related areas of work including internal and external benchmarking of our processes and bottom up planning of specific initiatives aimed at delivery of efficiencies to meet our short term targets. The transformation programme allows us to take the delivery of efficiencies further by examining more radical opportunities in the next control period.

We are developing a robust unit cost framework and estimating tool for all significant activities in order to understand the key cost drivers of the business. The development of this model will enable us to set activity driven targets, improve decision-making and forecasting as well as quantify potential efficiencies.

We aim to deliver a step change in business capability to deliver the required outputs through systematically rebuilding our key business processes. We will do this by creating more joined up processes, by doing things right the first time and by providing the right systems and tools to support the processes.

We have created a high level process framework and are populating this with the best 'one way' of doing things. This is driven by a focus on the end user at all levels of the company, identifying the necessary business improvement capability and process orientation.

We will pilot this approach on two key company-wide processes to re-engineer them. Once this approach has been validated by the pilot projects, it will be applied to the larger and more complex business processes. The breadth of processes this applies to is all encompassing, from business and strategic planning, the enhancement development process, project and construction management through to safety management systems and information management systems. Each process has an owner who will be responsible for fixing that specific process within the overall framework.

**Improved integration**

In order to be more efficient, we need to have integrated processes that are effective across the entire organisation and the rest of the rail industry and that these processes deliver effective and timely decision-making, every time, quickly and easily through appropriate and timely management information. This is aimed at significantly reducing the time it takes to do everything, leading to greater empowerment and ability to innovate. This will require greater investment in technology and greater accountability.

We wish to work with the industry and the ORR to improve the industry contractual and regulatory framework to provide the opportunity for Network Rail and our partners to optimise whole-life and whole-industry costs and outputs. The intention is that the framework will improve the alignment of incentives along the value-chain, address major constraints, and provide a basis for informed decision-making. We believe that it is important for the industry itself to own developments in this framework and we aim to discuss and drive these issues through the Industry Steering Group. This also feeds into the ORR's periodic review process.

We are reviewing the cross-industry Joint Performance Improvement Plan (JPIP) process. We use systems to support it which facilitate a new process for managing and reporting on performance improvements. Allied to this will be the development of benchmarking and good practice sharing as part of the JPIP process.

## Improving today's railway and creating tomorrow's railway requires significant technological innovation.

We are also improving our strategic and business planning processes including our budgeting and financial forecasting and our authorisation processes. We will also be improving our underlying planning tools such as our Infrastructure Cost Model (ICM), our demand traffic forecasting processes and tools. This will reduce the cycle times for the production of our annual business plans, the speed at which decisions are made in the authorisation process and improve the quality of those decisions.

The development of the company's ICM has been a key development and was successfully used to underpin our Initial Strategic Business Plan last June. The ICM is designed to estimate the costs of operating, maintaining and renewing the network for different specifications of usage and capability. It produces forecasts of activities, expenditure and network output measures and can disaggregate these forecasts to segments of the network.

The ICM is a key enabler in supporting our asset management framework and improving our strategic planning capability. The model serves a number of purposes, providing a focus for improved understanding of cost drivers and a single definitive source of information that supports more effective decision-making. As the model develops it will provide further support to the development of effective route planning capability, lead to improvements in the prioritisation of activity between routes and assets, and provide a challenge to, and context for, the territory-led short term work banks included in the Business Plan.

The development of the ICM is a long term activity and we are developing version two of the model to support the publication of our Strategic Business Plan in October 2007.

We are reviewing our end-to-end processes to develop and deliver enhancements. The programme will identify the shape and operating processes, skills and procedures required to sustain a higher level of output. This will deliver increased customer satisfaction, lower costs and reduced time to deliver schemes. This review will cover obtaining authority to

invest, templated contracts, compliance with project processes and estimating unit rates.

Our project delivery capability, including the processes, tools systems and methods, is being reviewed to ensure we can repeatedly achieve excellence in this activity. Our project development process will be improved to differentiate between projects with different requirements. The aim is to get the right level of 'overhead' effort in the planning and reporting of projects. This will be achieved by adopting a more flexible approach to the control of projects, including management at the portfolio level rather than project level where appropriate.

A more standardised approach to project management will allow greater mobility of staff between assignments, exploit organisational knowledge more effectively and improve project cycle times. High quality tools and processes will also reduce staff frustrations improving motivation and engagement and increasing customer satisfaction.

Key to the delivery of this improved project management capability is the further development of our existing competency framework. This will deliver less waste, lower recruitment costs and, over the longer term, reduce our reliance on external recruitment into more senior positions by providing a greater pool of more junior grades that can grow and develop within the company.

We are also developing processes to improve our resource planning against increasingly better defined programmes of activity. This includes the creation of a resource utilisation process and model. This will be used to identify critical industry resources and improve our forward planning.

Within our engineering activity we will shift the emphasis away from checking and compliance to providing solutions with a greater focus on customers' needs. As part of this we will also seek to improve our response times to our customers. The aim is to become an area of expertise that customers actively seek out for engineering advice.

We are also seeking to enhance our in-house capability in disciplines such as signalling design with improved design tools. We are already developing world class technical benchmarks for signalling capability within the ERTMS project team.

We will also improve the alignment between maintenance and other corporate processes to improve performance by simplifying processes, making them more easily understood and implemented. We will improve the linkages between functions. The aim is to eliminate local procedures and non-compliance and ensure co-ordination of standards and working practices.

The transformation programme for our Contracts and Procurement function includes the strategic sourcing project. The objective is to deploy a strategic sourcing framework across the company that will deliver a standard way of working for contracts and procurement professionals, leading not only to greater efficiencies but also extracting greater value from our suppliers.

As the company has evolved so must its human resource policies and processes. There is a need for greater effectiveness, fewer areas and more control. The key processes to be improved are payment, recruitment, training, organisation change, performance management and resource planning.

We are reviewing our health and safety management system including developing the appropriate key performance indicators and supporting processes. This system will be based on recognised best practice and will be designed on easy to understand risk models and controls. We will be reviewing existing information systems to ensure that our safety management review processes and learning mechanisms are appropriately integrated with our business planning processes.

We will continue to work with our suppliers to define occupational health and safety systems and processes most likely to safeguard their employees and others while working on our infrastructure or providing services to us. This industry wide initiative is supported by our suppliers (through the Project Safety

Leadership Group) and will continue to be supported in pursuit of an industry wide best practice culture for health and safety.

#### **Better systems**

A key element of the right processes is having the right tools and data to inform decision-making. This is true whether it be the development of long term volume and cost forecasts, the design and implementation of enhancement projects through to the maintenance of existing assets. Also critical are the systems that allow our people to receive the right pay at the right time and that, when they arrive at work each day, they have the rights tools to do their job. These tools must work properly and reliably.

Underpinning all our process improvement workstreams is the creation of excellent information services capability and excellent information technology systems. The aim is to align, support and deliver solutions that meet the requirements for access and exploitation of information. This will be achieved by developing collaborative working practices, simple documented processes, and provision of appropriate capability. Key to this is the framework and architecture for managing the life cycle of information utilising standard tools and processes to access data flexibly in support of business requirements.

We need to improve the quality and timeliness of the information provided to decision-makers. We have set a target to reduce the time it takes to generate periodic reports from 10 to three days, with improvement in data quality releasing time to support decision-making.

Good progress has been maintained on the delivery of the programme of work specified in the Asset Register Guidelines. The first phase of data improvements comprising nine separate initiatives, concentrating predominantly on providing information to support PR08, was completed in September 2006. In parallel, data management procedures have been developed

and implemented and an information assurance regime has been established.

The second phase of data improvements, comprising a further 15 initiatives is programmed for completion by September 2007. By this stage, an Asset Register will have been established for all asset disciplines containing the core information necessary to support the primary decisions on maintaining and renewing the network. Allied to this is the improvement in our systems to produce accurate and consistent published information on the capability of the network at a route level.

We are also reviewing our toolkit for the development of projects which will enable us to have greater confidence in the management of risk in delivering customer and stakeholder outputs. Through this review we would also aim to shorten the time to develop and implement projects. A key element is providing better information earlier in the development stage of projects especially when optioneering. This requires a number of disciplines to be addressed including engineering design, operational planning and cost estimation. These improvements will lead to a more efficient process, improved commercial decisions, earlier and more robust commitments to customers and cheaper project costs as the development stage is shortened.

The Engineering function will require new tools to underpin its new way of working with improved resource planning, enhanced project design and planning tools leading to improved delivery of project milestones to time and greater customer satisfaction and higher levels of engagement from its people.

Better tools can help our people on the ground do their jobs more effectively. The deployment of tools, such as train borne asset condition monitoring, and fixed asset condition monitoring will bring benefits to our Maintenance function by improving the quality and timeliness of the data available.

**Underpinning all our process improvement workstreams is the creation of excellent information services capability and excellent information technology systems.**



### **Delivered by great people**

To be become world class, we have to address not only what we do but also the way we do it. Network Rail will only ever be as good as its people. Unless we recruit well and provide training and coaching for our people, we will not succeed. The right values and behaviours of our people and the quality of the leadership and management of the organisation are fundamental to our success.

### **Values and behaviours**

Our core values are focused on safety, integrity, excellence, self-confidence and dependability. Our behaviours are aimed at demonstrating enthusiasm, pride, teamwork and a can do/will do attitude. To be a world class company, our people must live and breathe these values and behaviours.

We have established a corporate-wide workstream tasked with identifying and delivering key actions to develop the right people across the company who live and breathe our values and behaviours. In delivering this workstream we will listen to our people and develop mechanisms to reinforce our behaviours including a focus on leaders, feedback processes, training and development, and communication.

We will retain, reward and recruit the right people. We will develop great people who are accountable, engaged and sought after by others. We must recruit capable people and provide appropriate training for them and placement into jobs where they can excel. This will be underpinned by reward and recognition for all staff.

The company recruits many people every year. We wish to attract and retain high quality employees. To do this we need to develop a strong and attractive recruiting brand and improve our strategic resource planning through our business. This will strengthen our business continuity capability and provide greater surety to the resource plans for the company.

We will create innovative approaches and communications programmes designed to excite and engage Network Rail and its diverse stakeholder community, with a clear understanding of the behaviours expected at all levels.

The mental and physical health and wellbeing of our employees is seen as a key contributor to carrying out their duties safely and in making decisions

that are safe. To this end we will continue to invest in educating our employees in the best ways to keep themselves fit and healthy, providing managers with guidance on how to identify and deal with potential problems, training to avoid injury (lifting being a good example) and providing engineering solutions that reduce potential exposures.

### **Leadership and management**

Great managers are key to recruiting good people, developing and coaching people and providing direction and inspiration.

We will provide a real focus on continuous improvement in leadership and management development, deliver dynamic and stimulating leadership development activity, and establish a flexible talent pool for senior roles in the company.

We will build strong relationships with customers and stakeholders in order to gain their trust and respect. Without this we cannot deliver our vision. To build more trusting relationships with our stakeholders requires a good understanding of their business, their culture and their needs, and our role in achieving these. We wish to become the partner of choice for all our stakeholders and we will only do this by gaining this understanding. We are building closer relationships with all our stakeholders, developing a better awareness of our impact on their businesses and creating a greater focus on their needs.

We need to be better at fact-based decision making built on a sound understanding of passengers, freight-users, our customers and other stakeholders.

The skills of our people are fundamental to the success of the company. We will create a guiding philosophy and principles for our competence management and technical training and applying these to our competence frameworks for professional, managerial, clerical as well as technical and manual roles. This will deliver benefits for the company in terms of business performance. For managers it will provide greater accessibility to standards and guidelines and clarity of the technical competence system and, for our people, greater opportunity for personal recognition and development.

Functional workstreams will be aimed at developing role specific competence, including a competence framework for engineers, improved regulatory awareness and support, communications awareness and skills, and improved leadership, competence and professional development.

We will continue to improve our capability to learn from our actions and the outcomes they cause, particularly in respect of health and safety. We will review how health and safety data is used as part of our management decision processes and how it drives improvements. This workstream will review how such matters are reported to ensure that we have the right processes and data to support continuous learning and improvement in this area.

### **Preparations for CP4**

As part of this plan we describe a range of important activities that are underway to improve our planning capability and to prepare the business for the next control period. The key next milestone for us is the publication of our Strategic Business Plan for CP4 in October 2007.

The key improvements include:

- further refinement of our asset policies and their justification;
- further development of our Infrastructure Cost Model;
- further development of our long-term, top down performance model;
- support to DfT and Transport Scotland on the development of the Network Modelling Framework and the form and content of their High Level Output Specifications;
- improvements to our asset knowledge and data management systems and our definition of the capability of the network;
- embedding and using our cost analysis framework;
- developing a challenging but realistic assessment of the potential efficiency improvements beyond the current control period using an appropriate evidence-base including internal, external and international benchmarking;
- development of a balanced scorecard as an input to the development of the output measures against which Network Rail can be held to account by the ORR; and
- development of longer term route strategies with our customers and stakeholders to deliver the High Level Output Specifications from government, underpinned by robust RUS analysis.

# Rail transport is increasingly fast, efficient and reliable

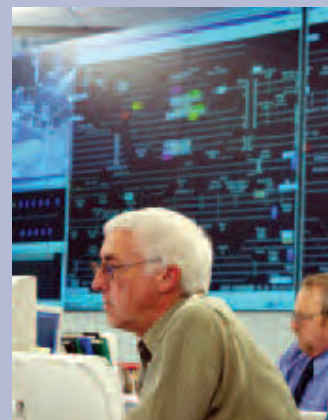
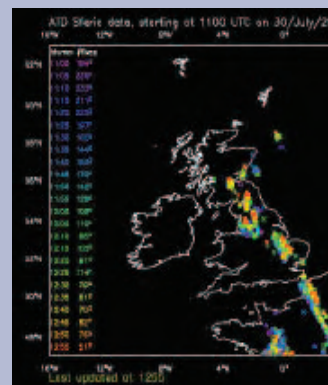


Punctuality on the railway is now at a seven year high. It's not surprising. The investment of the last four years, together with the hard work of everybody involved in the operation and management of the railway, is bringing results.

Punctuality is still improving. We are predicting that 90 per cent of trains will be on time by the end of the control period.

Rail is efficient. A full train emits only two thirds the CO<sub>2</sub> per passenger mile of a car. And shifting freight to rail from the roads reduces both congestion and carbon emissions.

And it's fast. The West Coast Main Line modernisation for instance, which will complete in December 2008, on time and under budget, has already reduced journey times between London and Manchester. The result? Rail's share of London to Manchester traffic has increased from 40 per cent to 60 per cent while the air route has declined from 60 per cent to 40 per cent.



# Appendices

## Total expenditure, income and key performance indicators

**Figure 17** Total operating expenditure, maintenance and renewal projections

£m (2006/07 prices)	2006/07 (forecast)	2007/08	2008/09
<b>Operating expenditure</b>			
Controllable opex	(826)	(814)	(783)
Non-controllable opex	(350)	(320)	(337)
<b>Total operating expenditure</b>	<b>(1,176)</b>	<b>(1,134)</b>	<b>(1,120)</b>
<b>Maintenance</b>			
	(1,162)	(1,094)	(1,024)
<b>Renewals (non-WCRM)</b>			
Plain line track	(647)	(582)	(526)
Switches and crossings	(215)	(229)	(212)
Track (other)	(14)	(32)	(32)
Signalling	(428)	(478)	(572)
Telecoms	(179)	(249)	(239)
Civils	(385)	(393)	(388)
Electrification	(89)	(111)	(122)
Plant	(79)	(109)	(114)
Stations	(203)	(176)	(154)
Depots	(15)	(29)	(26)
Lineside buildings	–	(8)	(6)
IT	(102)	(102)	(101)
Other renewals	(72)	(299)	(238)
<b>Total renewals</b>	<b>(2,427)</b>	<b>(2,795)</b>	<b>(2,729)</b>
<b>Renewals (WCRM)</b>			
<b>Total</b>	<b>(381)</b>	<b>(368)</b>	<b>(179)</b>
<b>Total renewals</b>	<b>(2,808)</b>	<b>(3,163)</b>	<b>(2,908)</b>
<b>Total operating expenditure, maintenance and renewal</b>	<b>(5,146)</b>	<b>(5,392)</b>	<b>(5,052)</b>

## Total expenditure, income and key performance indicators (continued)

**Figure 18** Total enhancement projections

£m (2006/07 prices)	2006/07 (forecast)	2007/08	2008/09
<b>Funded by 2003 Access Charges Review</b>			
Safety schemes	(46)	(65)	(36)
Transition projects	(59)	(79)	(82)
West Coast Route Modernisation	(144)	(156)	(49)
<b>RAB funded schemes</b>			
<b>Schemes which are committed or being planned</b>			
Network Rail Discretionary Fund	(15)	(51)	(133)
King's Cross development	(7)	(11)	(55)
Access for All	(27)	(38)	(39)
Transport Scotland sponsored	–	(22)	(147)
Customer sponsored	(79)	(37)	(65)
Other	(34)	(158)	(117)
<b>Potential schemes</b>			
Thameslink	–	(106)	(269)
Other	–	(51)	(159)
Planning adjustment	–	111	275
<b>Outperformance fund</b>	(9)	(98)	(93)
<b>Third party funded schemes</b>			
Transport Scotland	(64)	(101)	(70)
Welsh Assembly Government	(3)	(49)	(27)
Other third party	(82)	(172)	(444)
Planning adjustment	–	50	100
<b>Total enhancements</b>	<b>(567)</b>	<b>(1,031)</b>	<b>(1,411)</b>

**Figure 19** Total income projections

£m (2006/07 prices)	2006/07 (forecast)	2007/08	2008/09
Schedule 8	80	81	60
Access charge supplement – Schedule 8	7	7	6
Schedule 4	(101)	(115)	(115)
Access charge supplement – Schedule 4	87	90	91
Fixed track access	1,362	1,950	2,126
Variable track access	228	233	235
Electricity for traction	163	190	208
Capacity charge	7	8	8
Network grant	3,327	2,681	2,423
Single till (see opposite)	765	758	770
<b>Total income</b>	<b>5,925</b>	<b>5,884</b>	<b>5,812</b>



**Figure 20** Total single till income projections

£m (2006/07 prices)	2006/07 (forecast)	2007/08	2008/09
Stations	263	262	263
Depots	47	46	46
QX	42	41	41
Freight income	96	97	99
Property income	253	255	271
Open access income	61	54	48
Other	2	2	2
<b>Total single till income</b>	<b>765</b>	<b>758</b>	<b>770</b>

**Figure 21** Total key performance indicators

	2006/07 (forecast)	2007/08	2008/09
<b>Higher performance</b>			
Reliability index	1.281	1.375	1.421
Public performance measure	88.0%	89.5%	90.2%
Train delay minutes	10,464	9,115	8,500
Delay per 100 train km	2.15	1.86	1.72
<b>Increased system capability</b>			
Network availability	97.2%	97.2%	97.2%
Cumulative passenger train miles growth	1.2%	1.7%	2.5%
Cumulative freight train tonne miles growth	0.0%	0.6%	3.6%
<b>Improved customer and stakeholder relationships</b>			
Passenger complaints (per 100,000 journeys)	n/a	64	62
TOC satisfaction	(0.14)		
FOC satisfaction	0.0		
New customer satisfaction measure	3.40	3.50	3.65
<b>Improved financial control</b>			
Financial efficiency index (old definition)	1,877	1,799	1,698
Financial efficiency index (new definition)	81.3	77.9	73.0
<b>Improved asset stewardship</b>			
Asset stewardship incentive index	0.74	0.74	0.72
<b>Improved business performance</b>			
Employee engagement	3.53	3.85	4.00
<b>Supplementary indicators</b>			
Delay minutes per 100 train km (passenger)	1.91	1.66	1.54
Delay minutes per 100 train km (freight)	4.54	3.90	3.58
Number of broken rails	200	280	270
Level 2 exceedences	0.737	0.725	0.710
Number of signalling failures > 10 mins delay	23,000	20,685	19,740
Number of structures and earthworks TSRs	43	47	46
Traction power supply failures	80	65	61
Track geometry	0.813	0.813	0.813
Points and track circuit failures	17,300	14,775	14,100

## Financial plan

**Figure 22** Financial projections: profit and loss account

£m (nominal prices)	2006/07 (forecast)	2007/08	2008/09
Fixed track access income	1,456	2,126	2,371
Other track access income	399	448	482
Single till income	765	787	821
Schedule 4/8	(21)	(35)	(59)
Revenue grants	3,328	2,785	2,584
Rebate for net debt adjustment	(105)	(109)	(112)
<b>Total income</b>	<b>5,822</b>	<b>6,003</b>	<b>6,088</b>
Opex	1,175	1,178	1,195
Maintenance	1,262	1,236	1,193
Depreciation	1,039	1,121	1,228
<b>Total costs</b>	<b>3,477</b>	<b>3,535</b>	<b>3,616</b>
<b>Operating profit</b>	<b>2,345</b>	<b>2,467</b>	<b>2,472</b>
Net Interest	(918)	(977)	(1,050)
<b>Profit before tax</b>	<b>1,427</b>	<b>1,490</b>	<b>1,422</b>
Tax	(441)	(452)	(432)
<b>Retained profit</b>	<b>986</b>	<b>1,038</b>	<b>990</b>

**Figure 23** Financial projections: balance sheet

£m (nominal prices)	2006/07 (forecast)	2007/08	2008/09
Net fixed assets	28,444	31,089	33,735
Net current and long term assets/liabilities	(1,989)	(1,958)	(1,928)
Net debt	(18,947)	(20,413)	(21,904)
Provisions	(2,661)	(3,021)	(3,372)
<b>Net assets</b>	<b>4,846</b>	<b>5,698</b>	<b>6,532</b>
<b>Capital and reserves</b>			
Share capital and other reserves	1,518	1,518	1,518
Retained earnings reserve	(504)	534	1,524
Revaluation reserve	3,832	3,645	3,489
<b>Capital and reserves</b>	<b>4,846</b>	<b>5,698</b>	<b>6,532</b>

**Figure 24** Financial projections: cash flow

£m (nominal prices)	2006/07 (forecast)	2007/08	2008/09
Opening debt	18,201	18,947	20,413
Track access income	1,855	2,574	2,853
Single till income	765	787	821
Schedule 4/8	(21)	(35)	(59)
Revenue grants	3,328	2,785	2,584
Rebate for net debt adjustment	(105)	(109)	(112)
<b>Total income</b>	<b>5,822</b>	<b>6,003</b>	<b>6,088</b>
Renewals	2,708	3,186	3,001
Opex	1,175	1,178	1,195
Maintenance	1,262	1,236	1,193
Enhancements	419	789	1,034
Interest	992	1,067	1,141
Tax	11	12	15
<b>Total expenditure</b>	<b>6,568</b>	<b>7,469</b>	<b>7,579</b>
<b>Net cash flow</b>	<b>(746)</b>	<b>(1,466)</b>	<b>(1,491)</b>
<b>Closing net debt</b>	<b>18,947</b>	<b>20,413</b>	<b>21,904</b>

**Figure 25** Supplementary KPIs: ORR financial measures

£m	2006/07 (forecast)	2007/08	2008/09
Variance in expenditure (excluding enhancements) – annual	(242)	(608)	(533)
Variance in expenditure (excluding enhancements) – cumulative	758	151	(383)
Adjusted interest coverage (including amortisation)	1.84x	1.84x	1.78x
Liquidity (on gross cash outflow)	0.8	0.7	0.7
Net debt	(18,947)	(20,413)	(21,904)
Debt to RAB ratio	75.0%	73.1%	71.5%
RAB less debt	6,322	7,521	8,742
Cushion/spend multiple	113.2%	117.1%	134.9%

## Scotland: expenditure, income and key performance indicators

**Figure 26** Scotland operating expenditure, maintenance and renewal projections

£m (2006/07 prices)	2006/07 (forecast)	2007/08	2008/09
<b>Operating expenditure</b>			
Controllable opex	(77)	(74)	(72)
Non-controllable opex	(26)	(26)	(27)
<b>Total operating expenditure</b>	<b>(103)</b>	<b>(100)</b>	<b>(99)</b>
<b>Maintenance</b>			
	(110)	(98)	(95)
<b>Renewals (non-WCRM)</b>			
Plain line track	(55)	(45)	(33)
Switches and crossings	(28)	(24)	(21)
Track (other)	(1)	(5)	(5)
Signalling	(33)	(69)	(62)
Telecoms	(46)	(35)	(34)
Civils	(66)	(67)	(66)
Electrification	(10)	(4)	(8)
Plant	(4)	(8)	(8)
Stations	(15)	(22)	(13)
Depots	(1)	(4)	(3)
Lineside buildings	–	(2)	(1)
IT	(10)	(10)	(10)
Other renewals	(5)	(30)	(21)
<b>Total renewals</b>	<b>(274)</b>	<b>(324)</b>	<b>(285)</b>
<b>Renewals (WCRM)</b>			
<b>Total</b>	<b>(30)</b>	<b>(10)</b>	<b>(0)</b>
<b>Total renewals</b>	<b>(304)</b>	<b>(334)</b>	<b>(285)</b>
<b>Total operating expenditure, maintenance and renewal</b>	<b>(516)</b>	<b>(533)</b>	<b>(479)</b>



**Figure 27** Scotland enhancement projections

£m (2006/07 prices)	2006/07 (forecast)	2007/08	2008/09
<b>Funded by 2003 Access Charges Review</b>			
Safety schemes	(3)	(7)	(3)
Transition projects	–	(1)	(2)
West Coast Route Modernisation	(5)	(3)	(1)
<b>RAB funded schemes</b>			
<b>Schemes which are committed or being planned</b>			
Network Rail Discretionary Fund	(1)	(10)	(3)
Transport Scotland sponsored	–	(22)	(147)
Other	–	(4)	(5)
Potential schemes	–	(1)	(0)
Planning adjustment	–	11	27
<b>Outperformance fund</b>	–	(30)	(10)
<b>Third party funded schemes</b>			
Transport Scotland	(64)	(101)	(70)
Other third party	(3)	(4)	(9)
Planning adjustment	–	5	10
<b>Total enhancements</b>	<b>(75)</b>	<b>(167)</b>	<b>(213)</b>

**Figure 28** Scotland income projections

£m (2006/07 prices)	2006/07 (forecast)	2007/08	2008/09
Schedule 8	2	2	1
Access charge supplement – Schedule 8	0	0	0
Schedule 4	(3)	(11)	(11)
Access charge supplement – Schedule 4	7	7	7
Fixed track access	133	131	135
Variable track access	11	11	11
Electricity for traction	7	10	11
Capacity charge	0	0	0
Network grant	353	353	339
Single till (see overleaf)	60	56	53
<b>Total income</b>	<b>570</b>	<b>560</b>	<b>547</b>

## Scotland: expenditure, income and key performance indicators (continued)

**Figure 29** Scotland single till income projections

£m (2006/07 prices)	2006/07 (forecast)	2007/08	2008/09
Stations	22	21	22
Depots	5	5	5
QX	4	4	4
Freight income	10	10	10
Property income	19	15	12
Other	0	0	0
<b>Total single till income</b>	<b>60</b>	<b>56</b>	<b>53</b>

**Figure 30** Scotland key performance indicators

	2006/07 (forecast)	2007/08	2008/09
<b>Higher performance</b>			
Reliability index	1.125	1.183	1.201
Public performance measure	89.0%	90.0%	90.4%
Train delay minutes	766	735	737
<b>Increased system capability</b>			
Cumulative passenger train miles growth	1.7%	3.1%	4.9%
Cumulative freight train tonne miles growth	0.0%	0.6%	3.6%
<b>Supplementary indicators</b>			
Number of broken rails	27	30	30
Level 2 exceedences	0.587	0.578	0.566
Number of signalling failures > 10 mins delay	2,767	1,986	1,896
Number of structures and earthworks TSRs	0	4	4
Traction power supply failures	6	5	5
Points and track circuit failures	2,285	1,799	1,715

## England and Wales: expenditure, income and key performance indicators

**Figure 31** England and Wales operating expenditure, maintenance and renewal projections

£m (2006/07 prices)	2006/07 (forecast)	2007/08	2008/09
<b>Operating expenditure</b>			
Controllable opex	(749)	(740)	(712)
Non-controllable opex	(323)	(294)	(310)
<b>Total operating expenditure</b>	<b>(1,072)</b>	<b>(1,034)</b>	<b>(1,022)</b>
<b>Maintenance</b>			
	(1,053)	(996)	(930)
<b>Renewals (non-WCRM)</b>			
Plain line track	(592)	(537)	(493)
Switches and crossings	(186)	(204)	(191)
Track (other)	(13)	(28)	(27)
Signalling	(395)	(409)	(510)
Telecoms	(133)	(213)	(205)
Civils	(319)	(325)	(323)
Electrification	(79)	(106)	(114)
Plant	(76)	(100)	(106)
Stations	(188)	(154)	(140)
Depots	(14)	(25)	(23)
Lineside buildings	–	(6)	(5)
IT	(93)	(93)	(91)
Other renewals	(67)	(270)	(217)
<b>Total renewals</b>	<b>(2,153)</b>	<b>(2,471)</b>	<b>(2,445)</b>
<b>Renewals (WCRM)</b>			
<b>Total</b>	<b>(351)</b>	<b>(358)</b>	<b>(178)</b>
<b>Total renewals</b>	<b>(2,505)</b>	<b>(2,829)</b>	<b>(2,623)</b>
<b>Total operating expenditure, maintenance and renewal</b>	<b>(4,629)</b>	<b>(4,859)</b>	<b>(4,575)</b>

## England and Wales: expenditure, income and key performance indicators (continued)

**Figure 32** England and Wales enhancement projections

£m (2006/07 prices)	2006/07 (forecast)	2007/08	2008/09
<b>Funded by 2003 Access Charges Review</b>			
Safety schemes	(43)	(58)	(33)
Transition projects	(59)	(77)	(80)
West Coast Route Modernisation	(139)	(152)	(49)
<b>RAB funded schemes</b>			
<b>Schemes which are committed or being planned</b>			
Network Rail Discretionary Fund	(14)	(41)	(130)
King's Cross development	(7)	(11)	(55)
Access for All	(27)	(38)	(39)
Customer sponsored	(79)	(37)	(65)
Other	(34)	(154)	(112)
<b>Potential schemes</b>			
Thameslink	–	(106)	(269)
Other	–	(50)	(159)
Planning adjustment	–	100	248
<b>Outperformance fund</b>	(9)	(68)	(83)
<b>Third party funded schemes</b>			
Welsh Assembly Government	(3)	(49)	(27)
Other third party	(79)	(167)	(435)
Planning adjustment	–	45	90
<b>Total enhancements</b>	<b>(491)</b>	<b>(863)</b>	<b>(1,197)</b>

**Figure 33** England and Wales income projections

£m (2006/07 prices)	2006/07 (forecast)	2007/08	2008/09
Schedule 8	78	79	58
Access charge supplement – Schedule 8	7	7	6
Schedule 4	(98)	(104)	(104)
Access charge supplement – Schedule 4	80	82	83
Fixed track access	1,228	1,819	1,991
Variable track access	217	222	224
Electricity for traction	156	180	197
Capacity charge	7	8	8
Network grant	2,974	2,328	2,084
Single till (see opposite)	705	702	717
<b>Total income</b>	<b>5,355</b>	<b>5,324</b>	<b>5,266</b>



**Figure 34** England and Wales single till income projections

£m (2006/07 prices)	2006/07 (forecast)	2007/08	2008/09
Stations	242	241	241
Depots	42	41	41
QX	38	37	37
Freight income	86	86	89
Property income	234	240	259
Open access income	61	54	48
Other	2	2	2
<b>Total single till income</b>	<b>705</b>	<b>702</b>	<b>717</b>

**Figure 35** England and Wales key performance indicators

£m (2006/07 prices)	2006/07 (forecast)	2007/08	2008/09
<b>Higher performance</b>			
Reliability index	1.293	1.388	1.436
Public performance measure	87.9%	89.4%	90.1%
Train delay minutes	9,698	8,380	7,763
<b>Increased system capability</b>			
Cumulative passenger train miles growth	1.1%	1.5%	2.2%
Cumulative freight train tonne miles growth	0.0%	0.6%	3.6%
<b>Supplementary indicators</b>			
Number of broken rails	173	250	240
Level 2 exceedences	0.761	0.748	0.732
Number of signalling failures > 10 mins delay	20,213	18,699	17,844
Number of structures and earthworks TSRs	43	43	42
Traction power supply failures	74	60	56
Points and track circuit failures	15,009	12,976	12,385

# Definitions

## Key Performance Indicators

Set out below is a definition of the Key Performance Indicators included in this document.

### Reliability index

The reliability measure is expressed as an index of performance compared to a base year, and is made up of two key components: a measure of the improvement in passenger services in terms of PPM and delay minutes, and a measure of the improvement in freight services. The base year has been fixed at 2003/04.

### Train delay minutes

Delay is a measure of the time losses by individual trains compared to their scheduled running times at, or between, delay reporting points (which will generally include origin and destination locations and a number of intermediary stations and other locations). Delay minutes attributable to Network Rail are defined in principle through contractual performance regimes with operators. The detailed working definitions are documented in the Delay Attribution Guide, which is overseen by the cross-industry Delay Attribution Board.

### Train delay minutes per 100 train km

Train delay minutes attributable to Network Rail affecting major passenger and freight operators normalised for passenger train kilometres. The definition of minutes is as for Train Delay Minutes KPI.

### Public Performance Measure (PPM)

Percentage of trains arriving 'on time'. 'On time' is defined as less than five or ten minutes late at final destination depending on the type of operator or train, as defined by DfT. Full or partially cancelled trains are included in the

calculation of PPM. PPM is measured for franchised passenger operators only.

### Cumulative passenger train miles growth

Percentage cumulative growth in passenger train miles. The baseline year is 2004/05.

### Cumulative freight tonne miles growth

Percentage cumulative growth in freight tonne miles. The baseline year is 2004/05.

### Network availability

The proportion of total track miles that is available to our customers.

### Asset Stewardship Incentive Index

The Asset Stewardship Incentive Index reflects the overall status of a number of contributory indicators that have been selected by the ORR to provide an incentive mechanism for our stewardship of the network. The Asset Stewardship Incentive Index is the sum of individual KPIs in relation to track geometry, broken rails, Level 2 exceedences, signaling failures, point/track circuit failures, structures and earthworks temporary speed restrictions and traction power supply failures.

### Financial Efficiency Index

The index is expressed as the sum of operating, maintenance and renewals costs normalised to take into account changes to the volume of work.

### Employee Engagement Index

The measure will be the mean score, the Q12 Grand Mean. This is the average score on a five point scale of the 12 items measured.



