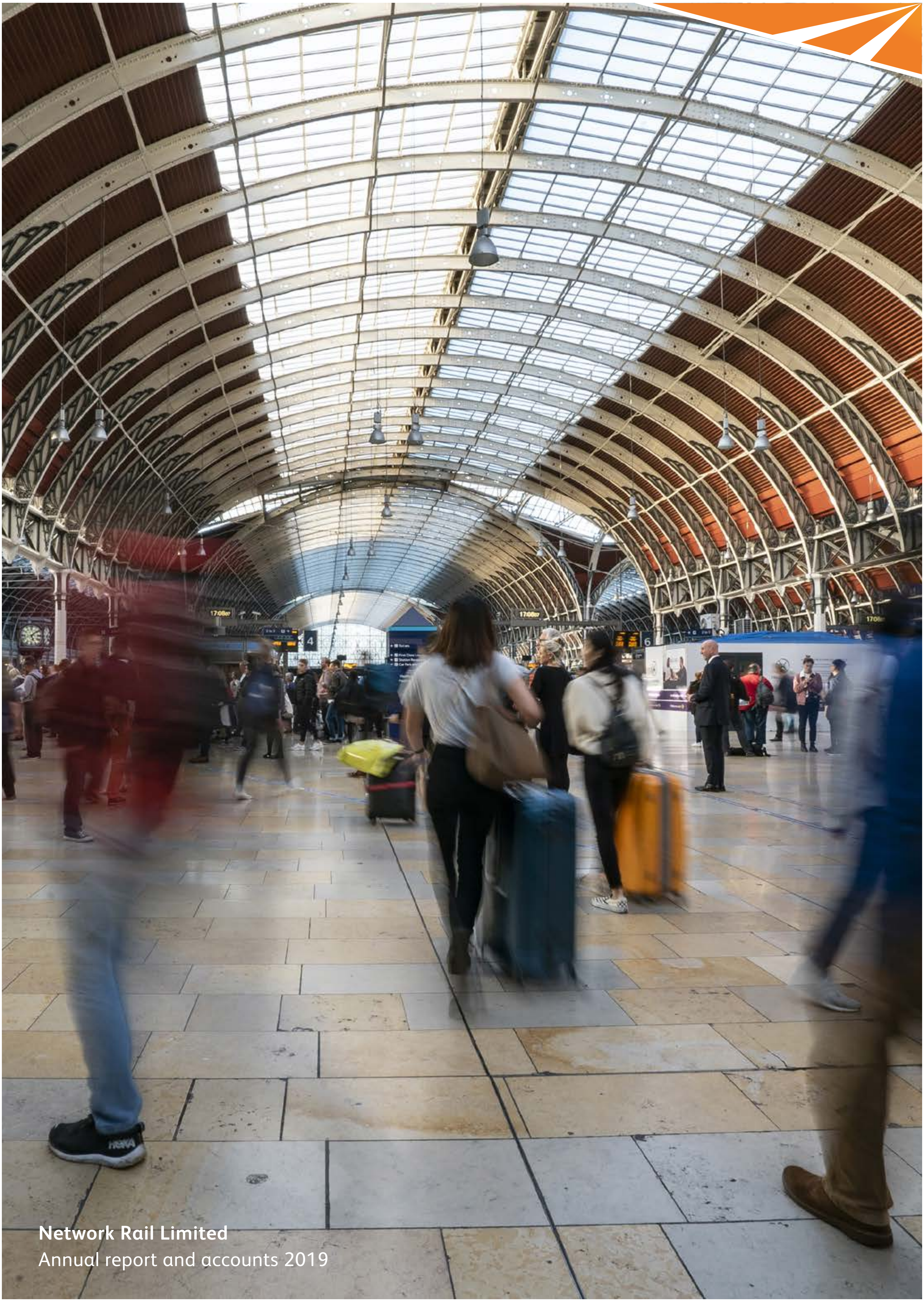

Network Rail Limited

Annual report and accounts 2019

Network Rail Limited's

Annual Report and Accounts 2019

Presented to Parliament

by The Secretary of State for Transport

by Command of Her Majesty

18 July 2019

CP 119

This publication is available on our website at **www.gov.uk/government/official-documents**

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Our year in numbers

In this report we outline performance during 2018/2019, the fifth and final year of Control Period 5.

Here is a snapshot of how we performed against a selection of key indicators.

* Before depreciation and amortisation.

Revenue in the year
£6,676m
(2017/2018: £6,580m)

Passenger km travelled (bn)
68km
(2017/2018: 67km)

Operating costs*
£3,577m
(2017/2018: £3,192m)

Passenger trains on time
86.3%
(2017/2018: 87.8 %)

Loss before tax
£173m
(2017/2018: £48m profit)

Freight trains on time
94.0%
Freight Delivery Metric
(2017/2018: 93.5 %)

Net debt
£54.1bn
(2017/2018: £51.3bn)

Freight moved
17.4bn
(2017/2018: 16.9bn net tonne km)

Capital expenditure
£7,043m
(2017/2018: £6,634m)

Number of workforce safety close calls made against our target of 205,000
256,250
(2017/2018: 259,009)
A higher number represents a better performance.

THINK SAFETY

Putting **passengers** first

We are constantly looking for ways to make passenger journeys as easy and comfortable as possible. Here are some of the changes we have made in the last few years in our managed stations to do just that.

We have introduced hundreds of new seats.

Toilets at our managed stations are now free to use.

We have installed water fountains at 19 of our managed stations, giving passengers free access to water and reducing the need for bottled water.

We are constantly improving our mobility assistance services. We have installed lifts and ramps, improved parking spaces and made toilets accessible.

Contents

Strategic report

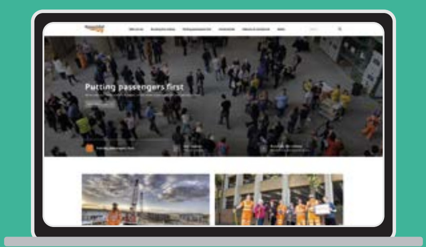
- 01 Introduction by our chair
- 03 Message from our chief executive
- 05 About us
- 12 Chief financial officer's review
- 18 How we performed in 2018/19
- 21 Route performance
  - 23 Anglia
  - 27 London North Eastern and East Midlands
  - 31 London North Western
  - 35 Scotland
  - 39 South East
  - 43 Wales
  - 47 Wessex
  - 51 Western
  - 55 Freight and National Passenger Operators
- 59 Property
- 61 Group Digital Railway
- 62 Putting people first
- 65 Being responsible
- 68 Our approach to risk management
- 78 Viability statement

Corporate governance

- 81 Our board of directors
- 85 Corporate governance report
- 94 Safety, health and environment committee report
- 97 Audit and risk committee report
- 106 Treasury committee report
- 108 Nomination and remuneration committee report
- 110 Directors' remuneration report
- 124 Directors' report

Financial statements

- 127 Independent auditor's report to the member of Network Rail Limited
- 136 Income statement
- 137 Statement of comprehensive income
- 138 Statement of changes in equity
- 139 Balance sheets
- 140 Statement of cash flows
- 141 Notes to the financial statements



For further information visit
networkrail.co.uk

Introduction by our chair, Sir Peter Hendy CBE

Our railway is crucial for Britain's economic prosperity. Rail connectivity creates economic growth, jobs and housing. That is why it is so important that the railway runs smoothly, providing a reliable service, and that we keep investing in rail as wisely and efficiently as possible, to maximise connectivity and boost economic growth.

Over the last five years we have delivered huge investment into the network to do just that. We have completed world-class projects, including some landmark engineering feats and complex programmes to create new capacity and major upgrades at a number of our managed stations.

But despite these successes, Control Period 5 was an extremely challenging period for Network Rail. We entered into it having committed to deliver more projects than ever before, with many at such an early stage of development that we needed to design and deliver them simultaneously. And, following our reclassification, we did this under public ownership and in a very different financial environment.

The full significance of those changes took time to be fully understood and that contributed to the financial and delivery crisis we found ourselves in part way through the control period.

Our commitment to face this challenge head-on and lead our own recovery has seen us mature significantly as a business and we are stronger today as a result. We have developed world-class engineering expertise, delivered greater infrastructure reliability than ever, introduced new rigour into project planning, carried out a large-scale divestment that enabled significant investment and re-focused the organisation on our core business.

But, as our project delivery grew sharper, the day-to-day performance of the railway was declining. The May 2018 timetable difficulties highlighted this imbalance, and revealed significant issues with planning and accountability across the industry, some of which we ourselves are responsible for. The weeks that followed were a humbling reminder of the huge role that rail plays in people's lives and how profoundly they are affected when the industry does not work well enough together. We are very sorry for the disruption that passengers suffered and, in CP6, we will put that right by doing whatever is needed, working more closely with operators and putting the interests of passengers and freight users at the heart of what we do.

Throughout this period, our focus on safety has been unwavering. We have worked hard to improve safety and we now have the safest major railway in Europe, with record low levels of train accident risk. Compared to Control Period 4, the number of fatalities at level crossings has dropped by 14 per cent, and there have been no passenger fatalities in a train accident since 2007. Real progress has been made, but we can and we must do more. Sadly, on 3 July 2019, two of our colleagues in South Wales tragically lost their lives while working on the railway. Their loss is felt deeply by all of us and is a painful reminder of why we must work as hard as we can to get everyone home safe every day.

Nobody has been more committed to driving forward safety on the railway than Mark Carne CBE, who departed as our chief executive in August 2018. This year also saw the departure of Michael O'Higgins as non-executive director. I would like to thank both of them for their contribution to Britain's railway. In particular, I'd like to thank Mark for the pivotal role he played, not only in instilling a relentless focus on safety, but on improving project delivery, furthering devolution, improving equality and diversity, and preparing the organisation for Control Period 6.

I'd like to welcome Mike Putnam and David Noyes, who were appointed to the Board in 2018, and Andrew Haines OBE who joined us as chief executive. Our commitment to passengers and providing great service is embodied in Andrew. He is passionate about putting passengers and freight first, and I know that he will bring this passenger-focused mindset to every level of the business. So far, he has already brought a renewed focus on whole-railway performance, devolved more responsibility to those running the railway day-to-day and initiated and led much greater collaboration within the industry.

Finally, we welcome the Government's Rail Review. This gives a unique opportunity to reshape our industry and align our targets so that we can deliver a better service to passengers and freight users in years to come. We have welcomed the opportunity to work with Keith Williams and his team, and we will fully support the implementation of its recommendations when they are announced later in 2019. If the whole rail industry does the same then I am confident we can deliver a better service for passengers and freight users and a railway that will continue to support and drive sustainable economic growth.

Sir Peter Hendy CBE,
chair

15 July 2019

A message from our chief executive, **Andrew Haines OBE**

The economy of the UK is changing the way that people are living and working. More and more people are using rail as the means of travelling between towns and cities, the economic powerhouses of the country.

In the last two decades rail has time and time again demonstrated that it's the fastest, most efficient and sustainable way to make city-city journeys and passenger numbers have doubled.

Rail freight is playing an important role in a sustainable economy. The modern rail freight industry does so much more than the outdated mental image of coal trains suggests and is a key way to get a huge variety of consumer goods between ports and distribution centres. Rail freight carries over £30bn of goods to customers across the UK every year and delivers around £1.7bn of economic benefits.

The result of this is that the growing economic and social contribution of rail to the UK is increasingly widely recognised and so it is no surprise that the railway has witnessed unprecedented levels of investment over the last few years. In the last year of CP5 alone we completed some of the most complex transport infrastructure projects in the world. By the early 2020s, we will be running 6,400 additional services per week compared to those we ran in 2014. On a network that has barely grown in size, that is a real achievement.

Despite some successes, the past year and in particular the difficulties passengers faced as a result of the May 2018 timetable change, revealed our shortcomings all too clearly. The focus on major infrastructure projects that gave us upgrades like Birmingham New Street, London Bridge and the Edinburgh-Glasgow Improvement Programme meant we sometimes lost focus on the day-to-day running of the railway. May 2018 also demonstrated that, as an industry, we had become too focused on our own parts of the system and not understood the magnitude of operational change needed to realise the passenger benefits of big infrastructure upgrades. We let passengers down, and this was a painful wake-up call.

I took this job because I'm determined to put passengers and freight users first. As a result, this past year has not just been about completing of some of the biggest upgrades ever delivered but about the beginning of a new chapter. One in which we re-focus our efforts on providing a brilliant service to the 4.8 million people that travel by rail every day, and the many businesses that rely on rail freight. We are not an engineering business, we are a service organisation and, over the coming years, we will put passengers and freight users back at the heart of the railway.

When I joined Network Rail in August last year, I was clear that to put passengers first, we should first be an organisation that was much better at listening. So, over my first three months, we spoke to over 100 organisations across the industry, as well as hundreds of colleagues at desks and depots up and down the country. We learned what we do well and where we must do better. And those conversations highlighted three clear areas of focus: we must be significantly more passenger focused, easier to engage with for our stakeholders and a more dependable partner for those we work with.

This requires a real change of mindset. We have some phenomenal talent at Network Rail – people with unrivalled experience, who are hard-working and committed. But the current structures and processes they work within have often encouraged a focus on processes and internal targets, rather than the passengers and freight users we serve. We must, and we will change that.

Chief executive's review continued

Over the coming years, we will work hard to create a culture where positive outcomes for passengers and freight users are always our goal, and where our people are encouraged to safely challenge any processes or targets that get in the way of us putting passengers first. That thinking underpins our announcement in January 2019, that we will make major structural changes, so that we are set-up in a way that encourages a passenger-focused mindset. Our new structure, where many central responsibilities and accountabilities are devolved to our route teams who run the railway every day, will help us better align with train and freight operators who are closest to passengers.

While we still have a long way to go, our commitment to putting passengers and freight users at the heart of all our thinking is already beginning to show. Performance is already beginning to improve and we introduced the December 2018 and May 2019 timetables successfully. This shows what we can achieve when the whole industry works together with a clear focus on passengers. Our commitment to passengers is also reflected in the small but important improvements we are delivering to improve their everyday journey experience. All of our toilets are now free to use, we've introduced hundreds of new seats to make journeys more comfortable and we've installed free water fountains in our managed stations.

Water fountains are also an example of how we're minimising our environmental impact. The climate protests earlier this year showed the passion that people in this country feel for protecting the environment and we must respond to that. While rail is already the greenest form of mass passenger transport and rail freight takes 7.79 million lorry journeys off the roads every year, there is still much more we can do. From looking at how we can run longer and heavier freight trains to making it easier and cost effective to grow the railway or introduce more carbon friendly forms of power.

These are just a few examples of the passenger-focused changes we are making and, in March 2019, we published our Delivery Plan for Control Period 6 that sets out how, over the next five years, we will make more changes to deliver a safe, reliable, efficient and growing railway that puts passengers first.

In some respects, CP6 will be markedly different from previous control periods. This control period we have an unprecedented £42bn over the next five years to fund operations, maintenance and renewals and providing a better day-to-day service for passengers. That's a huge investment and very positive for rail users, but we are mindful that we also have a big responsibility to do right by taxpayers. We have committed to significant efficiencies during this period to ensure that we use that funding as efficiently as possible, constantly challenging ourselves to get the maximum value out of every pound we spend.

While there will be a lot of change in CP6, some challenges remain the subject of relentless focus. The dedication of my predecessors and in particular the leadership shown by Mark Carne CBE, has made a profound difference to the safety of our railway. On 3 July 2019, however, we had a stark reminder that safety is something we must never take for granted, when two colleagues were struck by a train and died whilst working near Port Talbot in Wales. This was devastating and our thoughts and sympathies are with their family and friends. We may have one of the safest major railways in the world, but we will continue to work tirelessly to make it even safer for passengers, the public and our workforce.

There is a huge amount of work to do over the coming years to improve performance and provide a better service for rail users. We are absolutely committed to playing our part and making whatever changes are necessary to achieve that.

I believe strongly in the power of the railway to do good – to help grow the economy, to connect communities and make a positive difference to the lives of people up and down the country. I am excited to be leading Network Rail as we work to deliver the world-class railway that Britain needs and the brilliant service that passengers and freight users deserve.

Andrew Haines OBE,
chief executive

15 July 2019

About us

Who we are

We own and operate Britain's railways, a critical part of the nation's infrastructure. And we are here first and foremost to serve our passengers and freight users. Our rail network covers the length and breadth of the country providing a service for passengers and freight that not only supports people's everyday lives but drives economic growth. We are one of Britain's biggest employers with 40,000 staff across England, Scotland and Wales. We employ hundreds of graduates and apprentices every year, support nearly 120,000 jobs in the supply chain, and we are leading the way to improve diversity and inclusion in the rail industry.

About us continued

What we do

Our core purpose is to provide safe and reliable journeys for passengers and freight. Every day we support 4.8m passenger journeys and the delivery of 200,000 tonnes of goods by freight. We oversee the smooth running of the railway as a whole system and work closely with train operators to deliver train services as reliably and punctually as possible.

Key to this is our role in maintaining and improving the railway network across England, Scotland and Wales. That includes 20,000 miles of track, 30,000 bridges and viaducts as well as thousands of tunnels, signals and level crossings. We manage 20 of the largest and busiest stations in the country, and are also responsible for timetabling and leading the industry's planning for the future of the railway.

For us, this means delivering a safer, more reliable railway, with greater capacity and efficiency than ever before; a railway that connects more people to more places, safely and quickly, and a solid, future-proof foundation for continued growth in the British economy. We drive economic growth, create jobs and enable house building.

How we are structured

Network Rail has previously been broken down into eight geographical routes and one freight and national operator route who were responsible for operating, maintaining and renewing infrastructure in their area to deliver a safe and reliable railway. Each route operated as a large, complex business in its own right, run by a managing director and a senior leadership team who were accountable for effectively and efficiently delivering for customers and key stakeholders.

The nine routes were then supported by central services that provide a national framework, such as standards and services, where economies of scale or specialist expertise mean it makes sense to provide these from a central point, servicing their customers, the routes. This is the way we were set up in 2018/19.

In 2019/20 we are changing the way we are structured in order to deliver a better service for passengers, freight, customers and stakeholders. More detail on these changes can be found on page 7 under 'Putting Passengers First'.

Network Rail is a public sector company, answerable to the Department for Transport (DfT) and Transport Scotland.

Our chair and special director are appointed by the Secretary of State for Transport, and the Board aims to ensure our policies and actions support the wider strategic policies of the Secretary of State and the Scottish Ministers.

We are subject to independent regulation by the Office of Rail and Road (ORR), who set the targets we have to achieve and report regularly on our performance to ensure we are operating efficiently and well, and that we are properly funded.

About us continued

How we are funded

Network Rail is a not-for-dividend organisation, which means that we don't pay out dividends to shareholders. Any profit we make is re-invested into improving the railway and providing a better service for passengers and freight.

The majority of our income in CP5 came from a mix of direct grants and borrowing from the UK and Scottish governments, payments from the train and freight operators that use our network, and a small amount of income from our commercial property estate. We also work closely with third parties to secure investment for specific projects that will benefit both the third party and passengers and freight. In CP6 Network Rail will not be borrowing to invest in the railway network. DfT will instead grant-fund Network Rail's enhancement expenditure. Grants are contributions made directly by Government without the requirement that they are repaid.

The governments specify what they need from Britain's railway and how much they can afford to contribute during each five-year funding cycle. The ORR then sets a framework that specifies the level of fixed income we are allowed to charge and assesses the amount of money we need to efficiently run our business and deliver our regulated outputs. The five-year funding cycles are called control periods, and this annual report covers the fifth and final year of Control Period 5 (CP5), which ran from 2014 - 2019. On 1 April 2019 we entered Control Period 6 (CP6).

Putting passengers first

Train performance, our promise to passengers, has been in decline for the last seven years. The introduction of the new timetable in May 2018, which caused widespread disruption to passengers, further undermined public trust in our ability to deliver a reliable service. Across the industry, there is an understanding that things need to change and that now is the time to act.

Between September 2018 and January 2019 Network Rail undertook an extensive listening exercise. We spoke to hundreds of colleagues internally and more than 200 partners across 100 different organisations externally. We wanted to gain a better understanding of what is working and what is not, and the hours we spent doing this were invaluable.

Through this exercise we heard that there are many things that Network Rail does very well. Our safety record, in particular, was credited as a real achievement. However, it was also clear that train performance and the service that we deliver for passengers and freight users has not been good enough and we are often seen as difficult to work with.

We have listened carefully to this feedback and at the end of January the Network Rail Board approved a set of proposals to change the business to one that is unequivocally on the side of passengers and freight users and set up to drive better performance by putting the needs of rail users at the centre of all our thinking and decision making.

We are going to change how we engage with each other and our stakeholders so that we are more focused on our customers and on putting passengers first. We will also be changing how we are organised, devolving further to 14 routes, supported by five Network Rail regions (to which we will devolve capital delivery), two service units and smaller teams in the centre.

About us continued

By devolving operating capability to a more local level and creating more opportunities to align ourselves closely with train operators and stakeholders, we can drive better train performance and deliver a better service for passengers and freight users. We will use this improved alignment to explore a range of different delivery mechanisms for our routes, including partnerships, concessions and alliances. By establishing Network Rail regions, we will also create organisations that are large enough to absorb further devolution and increase route capabilities locally as well as improve relationships with our stakeholders.

As with any change on this scale, there are risks involved and it will take time. That's why we plan to make these changes in four separate phases. The first phase – the formation of the new routes and regions – taking place in summer 2019. We will make these changes when we are fully ready, rather than rushing them. Our priority will continue to be the safe and reliable running of the network. The proposals are now subject to consultation and safety validation and we expect the whole programme to be complete by the end of 2020.

London Liverpool Street

The Rail Review

In September 2018 the Government launched a review to look at the structure of the whole rail industry. The review, led by independent chair Keith Williams, is well underway and offers the opportunity to help align the whole industry with a clear focus on passenger and freight interests.

The review will consider all parts of the rail industry, including the current franchising system and industry structures, accountability and value for money for passengers and taxpayers. The government will publish a white paper on the review's recommendations in autumn 2019, with the implementation of reforms planned to start from 2020.

Network Rail is working closely with Keith Williams and his team on the review. We believe that we have a once-in-a-generation opportunity to transform our industry for the benefit of passengers and freight users, and we will do all we can to make sure that the outcomes of this review are a success.

About us continued

Control Period 6 (CP6) and our vision for Network Rail

Our vision

"A company that is on the side of passengers and freight users; that is easy to engage with and a dependable partner; a company people are proud to work for; instinctively recognised as an industry leader."

In CP6, we are putting passengers and freight users first. For too long the industry has been introspective and focused on engineering excellence, rather than on the service that we provide.

From now on we will be driven by what is collectively agreed are the right outcomes for passengers and freight users. We will cultivate a customer service mindset to ensure that, wherever you work within the business – on the frontline or in a supporting function – you are always thinking about how to best serve passengers and freight users.

Our purpose

"Connecting people to places and goods, driving economic growth."

We exist to get people and goods where they need to be, at the right time, and to drive economic growth and productivity. The railway connects homes with schools, workplaces, businesses with markets and can help unlock new land for house building. It is part of the social fabric of our nation, connecting people with friends, family and loved ones. The railway also carries goods worth over £30bn each year, bringing food to shops, building materials to construction sites, and fuel to power stations. Even for those who never use a train, the railway makes everyday life possible, in an environmentally sustainable way.

Our role

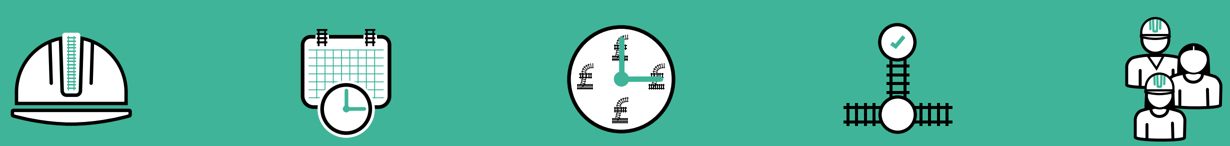
"Running a safe, reliable and efficient railway, serving customers and communities."

Our role is to deliver a railway that people can rely on, with trains that turn up and arrive at their destination on time, and where passengers feel confident that they are safe. We have been allocated £53bn of funding from the Department for Transport (DfT) and Transport Scotland to fulfil this role in CP6. Reliable train performance is what we must deliver on a daily basis in CP6, and what we should and will be held to account for throughout the control period.

Our strategy

In March 2019 we published our Delivery Plan for CP6 (2019-2024). Our Delivery Plan represents the continued development of our plans, following the publication of our Strategic Business Plan in February 2018. Over the next five years we will spend £42bn on operations, maintenance and renewals on the network to improve punctuality and reliability for passengers and freight. Our Delivery Plan sets out how we will spend this money.

As a passenger and customer focused business, our plan for the next control period focuses on the following key responsibilities:



Safe | Reliable | Efficient | Growing | Our people

About us continued

Safe

Safely running Britain's railways will always be our priority. Throughout CP6, we will continue to make our rail network a safer place to travel, work or live near, with a specific focus on five areas:

- **Passenger safety:** Our plan for 2019-2024 shows how we will reduce the risk of a train accident by a further 10 per cent, building on the 38 per cent reduction in risk that we have achieved over the last five years.
- **Public safety:** Our award-winning work to reduce trespass on the railways and prevent suicides will continue, building on the 14 per cent reduction in suicides on the railway that we have seen in CP5.
- **Level crossing safety:** We will use better techniques and digital technologies to improve the way we maintain and manage our infrastructure and take steps to further reduce risk to the public at our level crossings by 13 per cent.
- **Workforce safety:** We want an injury-free and healthy workforce, so we will continue to improve our lost time injury frequency rate (LTIFR) measure by 54 per cent. We will also increase our work on mental health and resilience, with a target of a 25 per cent reduction in work and part work-related mental health by the end of CP6.
- **Safety and sustainability:** We are broadening our approach to safety by embracing environmental performance. Making sure the land around the railway (cuttings and banks) is stable is crucial to safety. The stability of these earthworks is often reliant on the way we manage vegetation near the railway. We plan to increase biodiversity on and around the railway, and we will also reduce energy consumption in our operations by 18 per cent over the next five years.

Reliable

We know that passengers want a reliable train service, so improving performance is a priority in CP6. It is essential that we continue to work together across the rail industry to improve train performance for our passengers. We have therefore set ourselves a target to reduce the number of delayed trains by 12 per cent in 2019/20 and by 28 per cent by the end of the control period.

With a new operating structure and a renewed focus on putting passengers first, we will get train performance back up to the standard that passengers expect and deserve. Our CP6 plans detail how we will work with train operators to reduce the number of trains that are delayed on the network, with a particular focus on the following areas:

- **Assets:** Improving the reliability of the railway infrastructure to reduce the number of incidents that cause disruption.
- **Timetables:** Improving the accuracy of assumptions on which the timetable is based.
- **Operations:** Improving operational processes so that service recovery from incidents is rapid.
- **Information:** Improving the accuracy of train running data to help problem solve, and improve the information passengers receive during disruption.

Efficient

Passenger numbers have grown significantly over the past 20 years, and as passenger demand has increased, so has the cost of running the railway.

Network Rail needs to become the most efficient company we can be, if we are to play our part in delivering an affordable and reliable railway for the future. Driving greater efficiency is a core part of our vision for CP6.

We have a target of saving £3.5bn between 2019-2024, which we firmly believe we can achieve. Some efficiency savings will come existing through programmes that are already driving efficiency, and through new programmes that began in April 2019.

Some of the ways that we will deliver a more efficient railway over CP6 include:

- **Using intelligent infrastructure:** New technology is allowing us to collect improved information about the condition of railway infrastructure, allowing us to predict and prevent problems and better target our maintenance and renewals work.
- **Stabilising our work plan:** Making it easier for both us and our supply chain to plan and deliver work efficiently.

About us continued

- **Better Every Day:** Better Every Day uses the good ideas from our 40,000 strong workforce to aggregate marginal gains in hundreds of different day to day work activities. If we are dedicated to driving efficiency, it is crucial that we engage the whole organisation and make everyone accountable for everyday improvements. This is already saving millions of pounds.
- **Making the best use of access:** The amount of time we have to access the railway to undertake work has reduced, so we are taking a number of steps to optimise the way we work when we do have access.
- **Improved contracting strategies:** Working with our supply chain to become an industry client of choice.
- **Making our national functions more efficient:** Delivering savings through IT transformation, increased commercialisation of business services and improved supply chain operations.

Growing

We want to make it easier for other people to fund, finance or deliver work on the railway. We are implementing a number of reforms that aim to cut red tape, so people can come forward with innovative solutions and new ways of working on the railway. In the years ahead, we will:

- Make it easier for third parties to compete for work.
- Enable third parties to carry out work on the railway directly.
- Make third party funding easier to achieve.
- Attract and reward third party finance and delivery.

Moving into the next control period, we will continue to improve our railway through the delivery of enhancements. We have already radically changed our approach to planning enhancements in recent years, to prevent projects from being committed to before they are properly developed and costed.

From 2019, enhancements will be considered on a case by case basis rather than in one five-year budget. This pipeline approach will be supported by business cases to confirm the strategic fit, value for money, affordability and deliverability of proposals.

Our people

Achieving our business objectives for CP6 will be hugely influenced by our ability to attract, retain and develop dedicated and committed people. This means becoming one of Britain's best employers, so our Putting People First strategy includes the following four overall objectives:

- To enable and engage our people to do the best job they can, in turn supporting the business to achieve its objectives.
- To create an environment where people can truly say "I'm doing my best work and have the best boss I've ever had".
- To be industry-leading in all we do when it comes to our people.
- To support the embedding of a customer service culture at Network Rail.

We have set ourselves ambitious targets to help achieve these objectives during CP6 including:

- Reducing mental health issues by 25 per cent by prioritising mental health and employee wellbeing.
- Leading the way in making the industry more diverse and inclusive including by increasing the female workforce to 20 per cent by 2020 and doubling the proportion of women at Network Rail by 2024.

We will also look to achieve the following outcomes:

- Lead the industry in planning for, and developing, leadership skills to meet the future needs of the railway.
- Make Network Rail a place people are proud to work.
- Be an organisation where people feel safe, looked after and treated with dignity and respect.
- Encourage great leadership and become a place where there is mutual trust and respect between line managers and their teams.

We believe our plan for the next five years will help create an environment which enables our people to reach their full potential and help to deliver the railway that our passengers expect and deserve.

Chief financial officer's review of 2018/19

This financial year saw the completion of Network Rail's five-year spending plan. This review will look back over the last year, a year of successfully completing investment projects, overcoming performance challenges, and making plans so that the business can look forward to the next five years with confidence and with renewed determination to play our part in providing the railway our customers need.

The year has seen some mixed results. We have achieved a near record investment in railway enhancements in 2018/19 as the Railway Upgrade Plan enters its final phase. While the regulatory settlement for the five years to 2019 always earmarked this year for the company to report a loss, our performance challenges, including the May 2018 timetable issues, have added to this. However, the company remains on a firm financial footing with better than expected receipts from other activities keeping Network Rail within its budget.

Our focus is working ever more closely with our industry partners to turn around train performance and to complete our multi-billion-pound Railway Upgrade Plan.

Key financial highlights:
(the financial statements start on page 136)

- £7bn invested in the year, the highest on record and 80 per cent more than in 2010/11.
- Revenue increased slightly from £6.6bn to £6.7bn.
- Operating costs increased from £4.7bn to £5.2bn largely due to increased depreciation and electricity costs and more being spent on maintenance.
- Operating profit was £1.4bn, compared to £1.8bn last year.
- The sale of lettings in railway arches raised income of over £1.4bn and property sales generated a profit £0.3bn above their carrying value in the accounts.
- Loss before tax was £173m, compared to a £48m profit last year.
- Net debt increased from £51.3bn to £54.1bn to finance the company's investment plans as per its regulatory settlement.

The record investment in the year saw the completion of many projects, with new infrastructure ready to provide opportunities for new and improved services, less crowded and more frequent services, putting the passenger first.

Our key projects for the year have included the Thameslink Programme, the Great North Rail Project, the Edinburgh Glasgow Improvement Programme, Great Western Electrification Programme, Crossrail, and the Waterloo and South West upgrade. Most of these mega-projects are now coming towards an end, with more frequent trains coming into service.

Our efficiencies have faced further challenge this year. The Office of Rail and Road (ORR) outlined, and Network Rail accepted, ambitious targets at the start of Control Period 5 (CP5), which have been built into the determination of charges. Efficiencies have been made (for example through contracting strategies, workbank planning and new technology) but are often offset against cost pressures, including changes to improve workforce safety and decreasing opportunities to carry out works as the network becomes busier.

In the year, Network Rail achieved the savings and asset disposals it needed to deliver its investment programme within its budget.

The largest asset disposal saw the divestment of a large proportion of the commercial property portfolio. This achieved a sales value of over circa £1.4bn and generated net returns above the carrying value of circa £0.2bn. This was a complex deal involving around 5,250 properties primarily let to small and medium-sized businesses.

Devolution continues across the business. Our recent plans to put the passenger at the heart of everything we do have

Chief financial officer's review continued

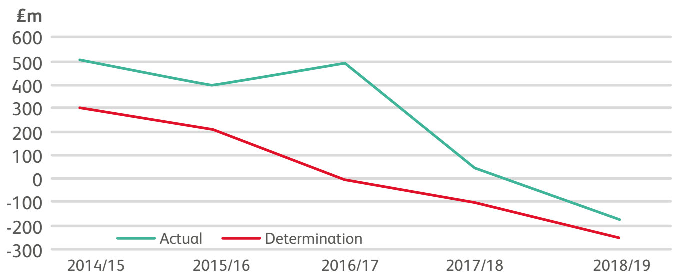
created five regional hubs, which will provide local leadership and economies of scale as we continue our path to devolution, allowing us to work more closely with our key stakeholders, drive improved performance, and be more cost-efficient and cost competitive.

In October the ORR set out the next five-year funding plan for the period 2019-2024. This provides funding for Network Rail's plans and sets out the challenging outputs that we have targeted. The key challenges are to achieve much better train performance, and drive significant efficiencies. Providing the journeys the customer and the nation needs, at a price that both can afford.

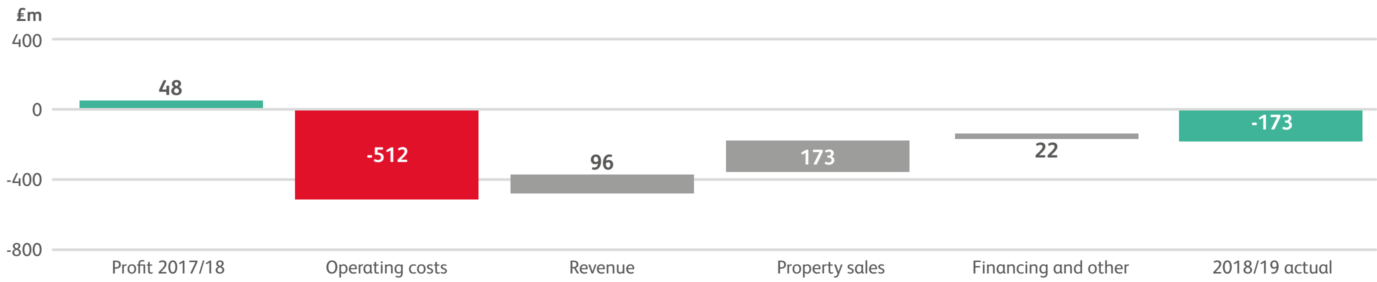
Financial summary

This review will focus on the financial performance achieved by Network Rail in 2018/19. This year we made a loss before tax of £173m (2017/18: profit £48m). Low and declining profitability is assumed in the CP5 regulatory determination. This is because income, largely fixed by the regulator, does not increase in line with borrowing costs and depreciation charges, which increase because of the accumulated investment in the Railway Upgrade Plan. Over the last five years Network Rail's actual profitability has benefitted from increases in the useful economic life of the railway network, largely offset by failing to achieve the train performance and efficiency savings set out in the regulatory determination. Had we achieved the levels of performance and efficiency assumed in the determination, with no improvement in the economic life of the railway network, then Network Rail should have expected losses in 2017/18 and 2018/19.

Profit before tax achieved and anticipated in the determination



Profit before tax movement since last year

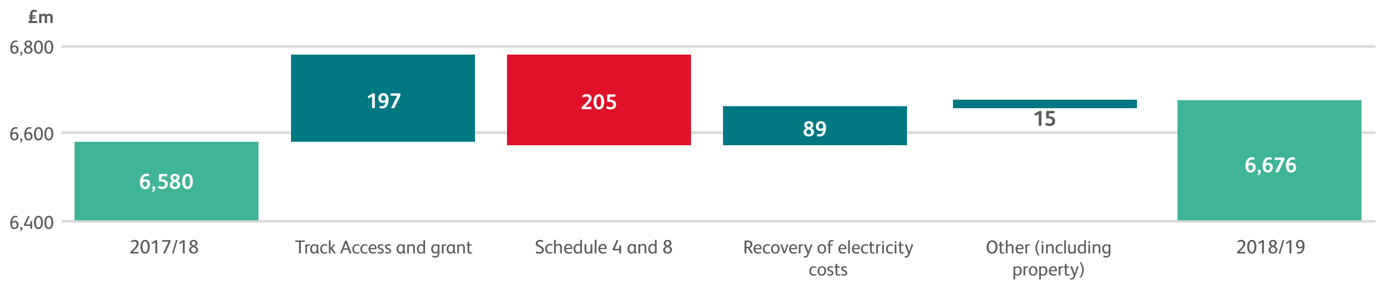


The variations in costs and revenue are explained in more detail in subsequent sections. Broadly, net revenue increase did not keep pace with operating costs. This was largely as planned in the regulatory determination of charges, but with reductions in revenue relating to compensation paid to customers of over £200m. This included over £80m for timetabling issues, £40m related to delivering planned engineering works and around £50m as a result of higher compensation costs to customers. Depreciation rose by £172m, as expected during a period of heavy investment in new infrastructure, and this was coupled with a ramping up in maintenance activity towards the levels set out in the CP6 determination, higher electricity, pension and insurance charges to produce an overall increase in costs. Offsetting this, net property sales were £173m more than last year due mainly to the large commercial property disposal, which reduced overall profitability to a loss of £173m (2017/18: profit £48m).

Revenue

Revenue rose in the year, as the company achieved a turnover of £6,676m. This represents an increase of £96m (2017/18: £6,580m).

Revenue movements compared to last year (£m)



Chief financial officer's review continued

Track access and grants rose (£197m) in line with that set out in the rail regulator's determination of charges (including £27m more relating to variable income - as a result of increased traffic), augmented by an additional £89m recovered as a joint industry cost regarding electricity for traction (EC4T).

Schedule 4 & 8 performance regime revenue reductions increased in the year by £205m. This was a result of a number of factors including: over £80m for timetabling issues, over £40m related to delivering planned engineering works and around £50m as a result of improving compensation offers to customers. There was a particular downturn during the record-breaking long hot summer where the network experienced poor performance in the season when performance is normally at its peak. Generally, asset performance was good, but performance in the year continued to be impacted by slower recovery times from incidents, a knock-on effect of a more congested network. Network Rail has already taken steps to improve performance by increasing the size of maintenance teams to respond more quickly to incidents.

Network Rail also generated an additional £15m of freight, property and other revenue, with continued growth in income from retail at stations, and an increase of nearly 10 per cent in freight revenue.

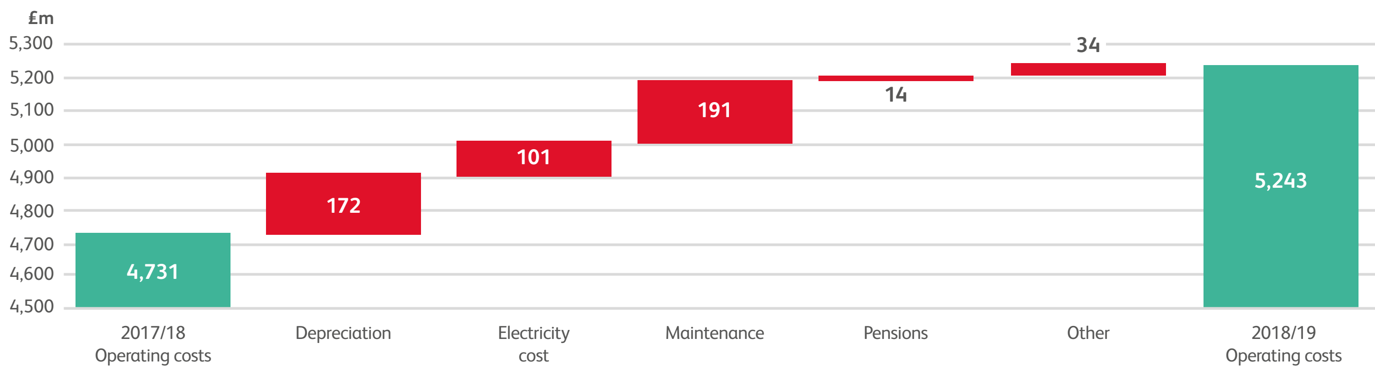
Operating costs

Net operating costs this year were £5,243m. This has increased by £512m from last year's expenditure of £4,731m. This increase in expenditure is in part driven by extra investment that has increased depreciation by £172m.

Operating costs before depreciation rose by £385m to £3,577m from £3,192m.

This is driven by: increases in pension costs (£14m); Joint Industry Cost increases including electricity for traction £101m (largely recovered through track access charges); additional maintenance costs as part of asset management delivery, to respond more quickly to incidents, to resource the maintenance of new electrification assets and as part of a planned increase in maintenance activity agreed as part of the regulatory settlement 2019-2024; and some other smaller increases such as more vehicle leasing and increases in business rates and insurance costs.

Net operating costs



Employee costs

Staff costs increased by £142m largely because of an increase in pension costs (£14m), an increase in the average number of employees in the year (£55m), and average pay increases of two per cent.

Average headcount for the year was 40,268. This is an increase from 2017/18, when the headcount average for the year totalled 39,370. This was due to recruitment in the last year in the routes to fill maintenance vacancies and reduce overtime costs, to respond faster to incidents and to support new electrification assets, offsetting a reduction in infrastructure project teams as the CP5 Railway Upgrade Plan enters its final phases and positions the business well for CP6.

Tax

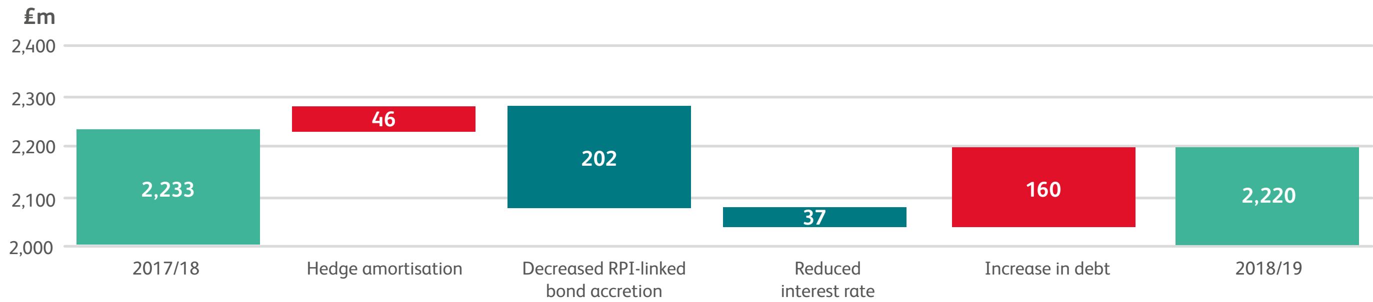
Network Rail has significant brought forward tax losses, not recognised as a tax asset in the accounts. As it continues to invest heavily in the railway network, it therefore pays relatively small amounts of corporation tax. The tax expense was £52m (2017/18: credit of £27m). Our deferred tax liability has increased to £3bn (2017/2018: £2.5bn).

Chief financial officer's review continued

Financing costs

Finance costs for the year were £2,200m. This is in line with last year's charge of £2,233m. This is because lower inflation in the year meant that RPI-linked bonds increased in value more slowly than in 2017/18. This more than off-set the increase in cash finance costs from additional borrowing in the year.

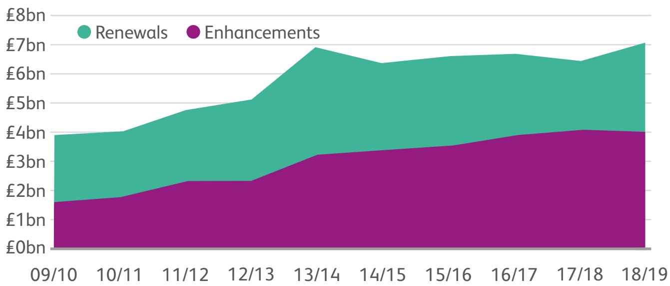
Finance cost movements (£m)



Investment in the railway network

The Railway Upgrade Plan has for the last few years been transforming the railway network. We have some of the largest and most complex engineering projects in the world. These mega-projects include the Thameslink Programme, Great Western Electrification, Crossrail, and the Edinburgh Glasgow Improvement Programme. Network Rail has been delivering nearly a quarter of the spend on infrastructure in the UK. This year Network Rail delivered £7bn of railway investment (2017/18: £6.5bn).

Capital expenditure



To deliver this level of investment Network Rail relies on a strong supply chain. Network Rail has a long-standing commitment to engage positively and collaboratively with its supply chain, including introducing a fair payment charter.

Enhancements that will increase the capacity of the network have amounted to £3.8bn. This follows last year's record in terms of delivery of £4.1bn.

We have also invested £3.1bn on renewals this year. This included over £0.9bn of track renewals which delivered over 900km of new track and replaced over 900 switches and crossings. In addition £0.7bn was spent on signalling renewals, £0.4bn on civils (including around 60,000 square meters of underbridges, and 20,000 square meters of tunnels), £0.3bn on electrification assets, £0.3bn on buildings & property (including around £0.2bn on improving stations for passengers) and £0.5bn on other renewals (including telecoms, IT, plant and equipment, intelligent infrastructure and faster isolations).

In the year, Network Rail hit 124 per cent of its seven key renewal volumes (2017/18: 100 per cent), and 91 per cent of its Delivery Plan & Enhancement milestones (2017/18: 81 per cent).

Financial performance measure and efficiencies drive

Network Rail's key performance indicator regarding efficiency is its financial performance measure (FPM), which measures our performance against the regulatory determination and against our in-year targets.

Network Rail is constantly working to reduce the cost of the work that we deliver. We continue to make good progress in our commercial efficiencies and through the leverage of new technologies. Network Rail has made higher payments to train operators due to performance issues, an increase in incursions onto the railway and adverse weather during the current year, which mitigated through savings found elsewhere, principally in the reduction of central costs.

In the year, while we outperformed our FPM renewals target by £15m, we missed FPM targets for profit and loss by £48m, and enhancements by £180m.

Profit and loss FPM for the year is £48m below target, mostly due to poor train performance in the early part of the year. Compensation to train operators for worse performance was £93m worse than our target for the year.

This was exacerbated by the long hot summer where prolonged periods of hot weather caused many track incidents (including track condition/geometry issues, and temporary speed restrictions) as well as signalling and electrification issues. The introduction of the May 2018 timetable affected timetable resilience. This has been partially offset by significant outperformance in many of the winter periods, due to benign weather, fewer disruptive one-off events, and operational benefits of the December 2018 timetable change.

Compensation for engineering works was better than target due to major programmes having better planned possessions. This is most evident in South East, London North Eastern & East Midlands and Scotland. Benign weather this year has also generated savings in emergency timetable costs.

Turnover is lower than planned due to fewer trains running than planned, which has reduced variable track passenger revenues. The introduction of the May timetable had widespread impacts on services throughout the year, whilst de-risking the December timetable meant running fewer services for the latter part of the year.

Operating costs were favourable to target (£30m on £2.8bn of costs), mainly due to savings in central support functions.

Across the £3.1bn renewals portfolio, FPM was £15m favourable to target, representing the best result in this control period. Financial performance was generated from additional volumes constructed, helping reduce average unit costs, better delivery this year and tight fiscal management on individual programmes which was partly offset by extra costs incurred to deliver electrification programmes, delays in the commissioning of Norwich to Yarmouth, resignalling and extra works at Leeds station.

Full year enhancement FPM showed a £180m underperformance, partially due to cost increases in Crossrail and the GWEP programme as these key enhancement programmes worked hard to deliver and complete flagship enhancements.

Financial framework

The railway network that we own and have a licence to operate is included in the accounts at a value that represents what a third-party purchaser would pay for it. This valuation underpins our financial framework.

The basis of this valuation is set out in a note to the accounts and comes from an assessment of the cash flows that are forecast to arise from the asset. The starting point for this valuation is the regulatory asset base (RAB). Subject to certain criteria established by the ORR, each year capital expenditure is added to the RAB and amortisation is deducted. The ORR can make deductions from the RAB if we do not achieve our required outputs. For example, not meeting required train performance, breaching a licence condition, or where the ORR wishes to make a retrospective funding adjustment.

As the valuation of the railway network is based on projected cash flows, we have considered the potential for underperformance in CP6; both in terms of the financial settlement and the required outputs. This therefore reflects the gap between the trajectory of costs assumed in the CP6 determination and our forecasts.

As a result, the valuation of the railway network was increased by £2,632m (2017/18: £675m). See Note 12 for further details.

Borrowing

Since becoming a public sector body in September 2014, Network Rail borrows directly from government and no longer issues debt on the capital markets. This applies to both the borrowing required for new investment and refinancing of existing debt.

The regulatory settlement provides strong security for future income and the Department for Transport (DfT) loan agreement provides a robust platform to refinance and borrow to invest in the railway network. Network Rail operated within the funding envelope established at the time of agreeing the DfT loan facility in the period 2014-2019.

During the year ended 31 March 2019, Network Rail borrowed £6.7bn from the DfT. Part of this new debt was used to pay back existing bonds and maturing DfT borrowing, whilst the remainder was used to invest in the railway infrastructure. As a result, net debt rose to £54.1bn from £51.3bn.

In the year Network Rail sold most of its investment property portfolio for circa £1.4bn to reinvest in its core infrastructure investment programme and reduce borrowing requirements.

New financing arrangements

Network Rail is not expected to undertake any new borrowing during 2019-2024. Instead it's activities are largely funded by grants from the Department for Transport, Transport Scotland and revenue from customers. In addition, a new loan facility of £32.3bn has been agreed with DfT. This will be used to refinance maturing DfT and external debt in the period 2019-2024.

The new loan facility between Network Rail and DfT was signed on 28 March 2019. On 1 April 2019, all borrowings under the previous (July 2014) facility agreement were transferred to the new facility agreement (with their existing interest rates and maturity dates) and the 2014 agreement was terminated.

The 2019 facility is sized so that when the legacy bonds fall due for repayment, new money will be provided by borrowing under the 2019 facility (the first such borrowing will not be required until June 2020).

The cash required to pay the interest due on borrowings (to DfT or to bondholders) is provided to NRIL through the Financing Costs Grants.

Chief financial officer's review continued

Grant agreements with DfT/Transport Scotland (TS)

Eight separate grants were agreed between Network Rail Infrastructure Limited (NRIL) and DfT/TS, replacing the two grants (England and Wales Network Grant and Scotland Network Grant) that operated throughout CP5.

These grants are:
- with DfT: Network Grant; Enhancements Grant; British Transport Police Grant; Financing Costs Grant for DfT interest; Financing Costs Grant for external interest (bonds and swaps); and Corporation Tax Grant.
- With TS: Network Grant and Enhancements Grant.

Risk management: Interest rates and currency

Network Rail manages its interest and foreign exchange risk by using derivative financial instruments (hedges). All these arrangements were entered into prior to Network Rail becoming a public body and will over time reduce in significance as we expect to have no requirement to enter into new hedging programmes in the future.

The group measures its hedges for accounting purposes at their market value as required by international financial reporting standards. A market value is determined by comparing the original value of the hedges against the current market rate.

We do not intend to trade these hedges but use them to minimise our financial risks. If the hedges are economically effective (i.e. that they offset changes in the cost of existing and/or future loans), their value at any point in time should not be a key focus when assessing the group's performance.

By qualifying to use hedge accounting rules, we match gains or losses in the market value of hedges to fluctuations in the hedged item (i.e. the loans). The gains on debt and derivative valuations taken through the income statement were £220m (2017/18: £234m). This gain largely represents the reduction of the fair value of interest rate derivatives liabilities through interest paid on swaps (the latter is included in finance costs).

Pensions

Network Rail is party to two shared-cost defined benefit pension schemes. Costs are shared with pension scheme members on a 60:40 basis. Pensions are measured differently for IFRS than for actuarial funding reports. IFRS is more conservative and discounts expected future liabilities to a present value, using 'risk-free' borrowing rate, and compares this with current asset valuation.

Network Rail's accounting deficit at 31 March 2019 increased to £2,566m (2017/2018: £2,311m) as gains on assets were more than offset by the decrease in discount rate from 2.4 per cent to 2.3 per cent. On a funding basis the schemes are not considered to be in a significantly different position than at last year end. Assets held by the schemes increased by £455m in the year and the latest actuarial valuation indicates the schemes are more than 100 per cent funded.

Post balance sheet events

Except as disclosed above, there have not been any significant post balance sheet events, whether adjusting or non-adjusting.

Summary

Network Rail has delivered the major part of the Railway Upgrade Plan. This has meant delivering the highest level of enhancements to the railway network since Victorian times.

These enhancements will improve performance and increase network capacity to assist in meeting the increasing demand for rail travel and benefit our customers for decades to come. To maintain this momentum in the investment programme, Network Rail plans to continue to look for additional funding from third parties and to deliver further cost efficiencies.

The ORR published its final determination for 2019-2024 in October 2018, setting out its decision on what Network Rail should deliver and the funding available to enable a safe, reliable and efficient railway. This was a critical step in the development of our plans for this period. Network Rail is putting in place what it needs for this five-year plan and is in a strong position to deliver. Our plans represent an opportunity to bring about real change, focusing on putting passengers and freight users at the front and centre of what we do.

There are challenges ahead, but we will make this funding work hard over the next five years and, through our devolved businesses, deliver a better and more reliable railway.

Jeremy Westlake,
chief financial officer

15 July 2019

How we performed in 2018/2019

Area	Weightings	Year End Actuals		
Safety		Scorecard Minimum	Target	Scorecard Maximum
Workforce safety – Lost Time Injury Frequency Rate (LTIFR)	2.5 %	0.344	0.328	0.310 0.312
Workforce safety – Close calls raised	1.0 %	153,750	205,000	256,250 278,000
Workforce safety – Close calls closed within 90 days (%)	1.5 %	80 %	85 %	88.9 % 90 %
Passenger Train Accident Risk Reduction Measures	2.5 %	60 %	80 % 88.5 %	100 %
Top 10 Milestones to reduce Level Crossing Risk	2.5 %	6	8	10
Financial Performance		Scorecard Minimum	Target	Scorecard Maximum
Financial performance measure (FPM) – Gross Renewals (£m)	2.5 %	£(160)m	15	£160m
Financial performance measure (FPM) – Gross Profit and Loss (£m)	2.5 %	£(75)m (48)	-	£75m
Financial performance measure (FPM) – Gross Enhancements Only (£m)	2.5 %	(180) £(155)m	-	£155m
Cash Compliance – Income and Expenditure	2.5 %	£200m Under Spent / (£50m) Over Spent	£100m Under Spent / (£25m) Over Spent	£0m
Investment		Scorecard Minimum	Target	Scorecard Maximum
All Delivery Plan Enhancement Milestones (%)	5.0 %	80 %	90 % 43/47	100 %
Asset Management		Scorecard Minimum	Target	Scorecard Maximum
Composite Reliability Index (CRI)	2.5 %	18 %	19 %	19.9 % 20 %
Renewals (Seven Key Volumes)	2.5 %	90 %	95 %	100 % 124 %
Train Performance		Scorecard Minimum	Target	Scorecard Maximum
Train Performance	10.00 %	0 %	35.3 % 50 %	100 %
Locally Driven Customer Measures		Scorecard Minimum	Target	Scorecard Maximum
Locally Driven Customer Measures	10.00 %	0 %	50 % 68.5 %	100 %
Route Performance		Scorecard Minimum	Target	Scorecard Maximum
Anglia	7.57 %	0 %	50 % 58.2 %	100 %
LNE & EM	6.86 %	0 %	50 % 55.5 %	100 %
LNW	6.28 %	0 %	50 % 54.4 %	100 %
Scotland	5.09 %	0 %	50 % 60.5 %	100 %
South East	12.33 %	0 %	50 % 55.7 %	100 %
Wales	2.11 %	0 %	50 % 70.4 %	100 %
Wessex	4.06 %	0 %	49.4 % 50 %	100 %
Western	3.94 %	0 %	50 % 55.1 %	100 %
FNPO	1.75 %	0 %	50 % 53.3 %	100 %

Below scorecard minimum · Adverse to Target · Meeting or Exceeding Target · Significantly Exceeding Target

Our performance continued

Safety

Lost Time Injury Frequency Rate (LTIFR): Means time lost to injuries and fatalities among Network Rail staff and contractors employed by Network Rail per 100,000 hours worked. A lower figure represents a better performance against target.

We exceeded our LTIFR reduction target of 0.328, ending the year at 0.310.

Close Calls: Means the number of close calls reported for any occurrence that has the potential to cause injury or damage – this can be an unsafe act or an unsafe condition. A higher number represents a better performance.

278,000 close calls were reported. This exceeded both the target of 205,000 and the scorecard maximum of 256,250. 88.9 % of these calls were closed within 90 days, exceeding the target of 85 %.

Train Accident Risk Reduction Measures: Measures our achievement of the key milestones and metrics to reduce train accident risk. This is reported at route level as well as national, providing greater visibility and accountability in delivering a safer railway.

In 2018/19 the target was to achieve 80 % of planned volumes and milestones to reduce train accident risk. The year-end actual was 88.5 % thus exceeding target.

Level Crossing Risk Reduction: A measure of benefits achieved through closures of level crossings, downgrade in status and crossing enhancements.

In 2018/19 we met our scorecard target by closing eight of our top 10 milestones to reduce level crossing risk.

Financial Performance

Financial Performance (FPM) Gross Renewals (£m) : Measures how much renewals projects are costing compared to our budget. Each individual renewals project is assessed to understand whether the project is costing more or less than it should for the outputs being delivered. Our target for the year is £0, so a positive figure represents outperformance against our target.

Financial Performance (FPM) Gross Profit & Loss (£m): Measures how we are performing against our income & opex budget. Targets are adjusted for activity where appropriate. Our target for the year is £0, so a positive figure represents outperformance against our target.

Financial Performance (FPM) Gross Enhancements Only (£m): Measures how much Enhancements are costing compared to baselines. Enhancement baselines are compared to the forecast expenditure across the programme. An amount of under/out performance is allocated to the current year based on the much of the programme has been completed. Our target for the year is £0, so a positive figure represents outperformance against our target.

Enhancements Only: This measures our financial performance in delivering enhancement programmes by comparing expenditure to the baseline set at the start of the year. The baseline is adjusted to reflect the progress made in delivering programmes during the year to create a like-for-like comparison.

Our gross financial performance in 2018/19 was £15m favourable to target.

Cash Compliance: This is a measure of how well we have remained within our funding envelope in total. A measure of the variance in Actual Cash Consumed versus the Budgeted Cash Consumed. The optimum target is for there to be no variance in the actual amount of cash consumed and the budgeted cash consumed. However, a 'Target Variance Range' has been set up that the variance is no worse than £50m over budget or £200m below budget.

Cash compliance was at the top of the taper as a result of positive measures such as improving working capital forecasting and proactive management of risks and opportunities to make optimal use of the cash available.

Investment

All Delivery Plan Enhancement Milestones: Our investment projects are managed using the Governance for Railway Investment Projects (GRIP) approach, which has milestones at stages three and six of the eight-stage project process.

We achieved 43 out of 47 of our enhancement milestones, exceeding our target of 90 %.

Asset Management

Composite Reliability Index: This is a measure of the short-term condition and performance of our assets including track, signalling, points, electrification, telecoms, buildings, structures and earthworks.

We achieved an improvement in CRI of 19.9 %, exceeding both our target of 19 %.

Renewals (Seven Key Volumes): Our seven key volumes for renewals are plain line track; switches and crossings; signalling equivalent units; underbridges; total earthworks; wire runs; and conductor rail.

We ended the year at 124 %, significantly exceeding our overall target of 95 % and our scorecard maximum of 100 %.

Train Performance

This is an aggregation of all train performance related measures on the route scorecards, and consolidated into one measure to summarise train performance.

We achieved 35.3 %, demonstrating overall we are adverse to our train performance targets.

Locally Driven Customer Measures

This is an aggregation of all locally driven customer measures on the route scorecards, and consolidated into one measure to summarise the nature of these measures.

We achieved 68.5 %, demonstrating overall we are exceeding to our locally driven customer measure performance targets.

Route Performance

Anglia: Scorecard performance was favourable to 50 % target, at 58.2 %. Strongest performing areas were safety and investment. Weakest performing areas were financial and train performance.

LNE: Scorecard performance was favourable to 50 % target, at 55.5 %. Strongest performing areas were safety and investment. Weakest performing areas were financial and train performance.

LNW: Scorecard performance was favourable to 50 % target, at 54.4 %. Strongest performing area was safety. Weakest performing areas were financial and train performance.

Scotland: Scorecard performance was favourable to 50 % target, at 60.5 %. Strongest performing areas were investment and asset management. Weakest performing area was train performance.

South East: Scorecard performance was favourable to 50 % target, at 55.7 %. Strongest performing areas were locally driven customer
measures and safety. Weakest performing areas were asset management and investment.

Wales: Scorecard performance was significantly favourable to 50 % target, at 70.4 %. Investment, asset management and locally driven customer measures all performed strongly. Weakest performing area was train performance.

Wessex: Scorecard performance was slightly adverse to 50 % target, at 49.4 %. Strongest performing areas were safety and locally driven customer measures. Weakest performing areas were financial performance and asset management.

Western: Scorecard performance was favourable to 50 % target, at 55.1 %. Strongest performing areas were safety and investment. Weakest performing area was financial performance.

FNPO: Scorecard performance was favourable to 50 % target, at 53.3 %. Strongest performing areas were safety, financial performance and locally driven customer measures. Weakest performing area was investment.

Section 172(1) statement

Network Rail is aware of the requirements under the Companies (Miscellaneous Reporting) Regulations 2018 to include a "Section 172(1) statement" describing how directors have had regard to the matters set out in section 172(1)(a) to (f) of the Companies Act 2006 when performing their duties under section 172.

The Board has considered the issues and factors set out in section 172(1) (a) to (f), particularly, in respect of stakeholders and broader matters that impact performance over the longer term:

(a) the likely consequences of any decision in the long term;

(b) the interests of the company's employees;

(c) the need to foster the company's business relationships with suppliers, customers and others;

(d) the impact of the company's operations on the community and the environment;

(e) the desirability of the company maintaining a reputation for high standards of business conduct; and

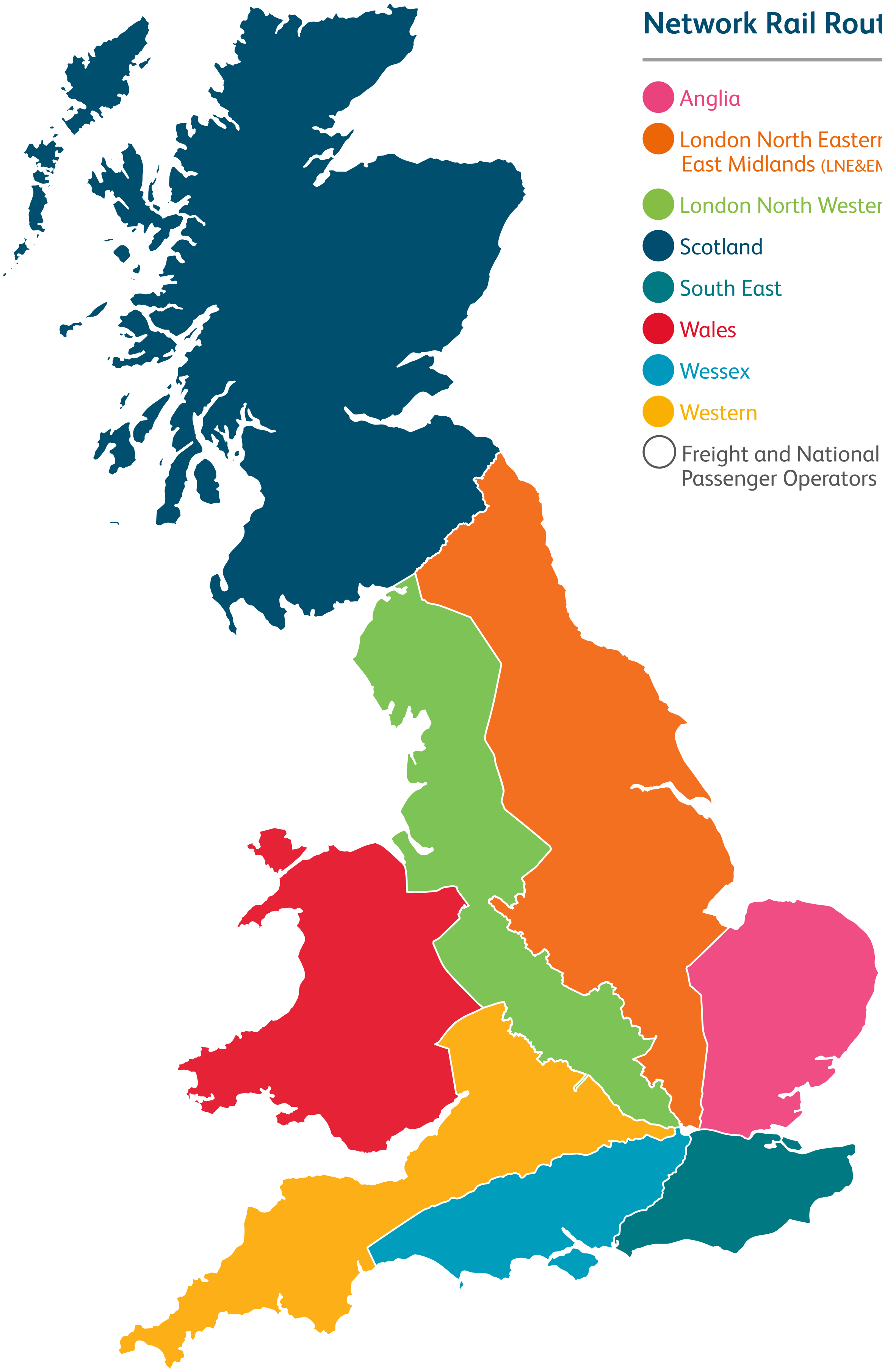
(f) the need to act fairly between members of the company.

Based on consideration of the factors set out in section 172(1) (a) to (f), the Board has formed an opinion that each director of Network Rail has acted in a way that would be most likely to promote the success of Network Rail for the benefit of its sole member.

The legal disclosures in respect of the how the directors have (i) engaged with employees, suppliers, customers and others and (ii) have had regard to employee interests, the need to foster the company's business relationships with suppliers, customers and others, and the effect of that regard, including on the principal decisions taken by the company during the financial year are included in the Directors' Report on pages 124 to 125.

Previous Network Rail routes*

*Correct for reporting year 2018/19.

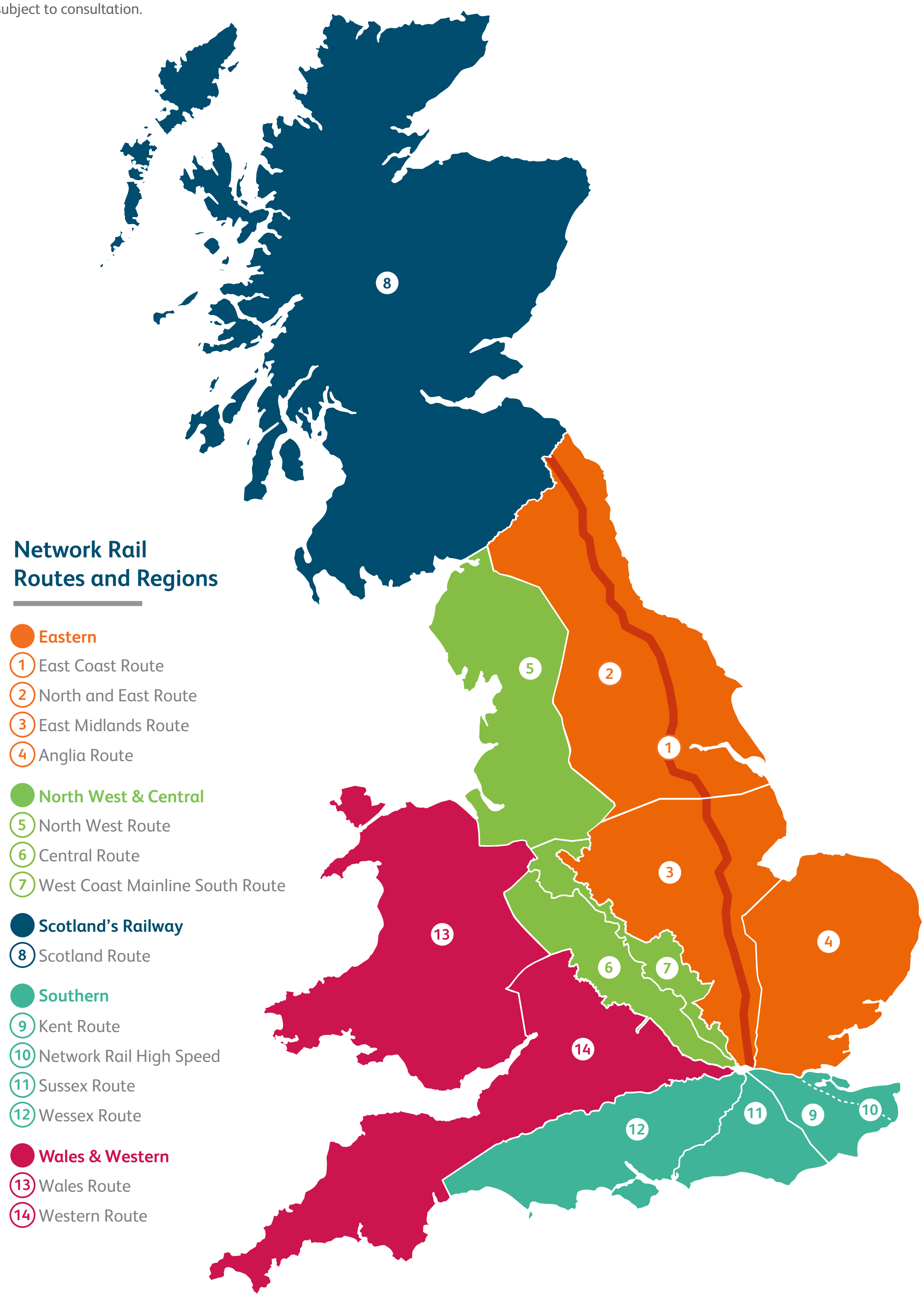


Network Rail Routes

- Anglia
- London North Eastern and East Midlands (LNE&EM)
- London North Western (LNW)
- Scotland
- South East
- Wales
- Wessex
- Western
- Freight and National Passenger Operators (FNPO)

Network Rail routes and regions*

*As of 24 June 2019. Indicative only and subject to consultation.



London's newest station Meridian Water opened in Enfield on 3 June 2019

Anglia

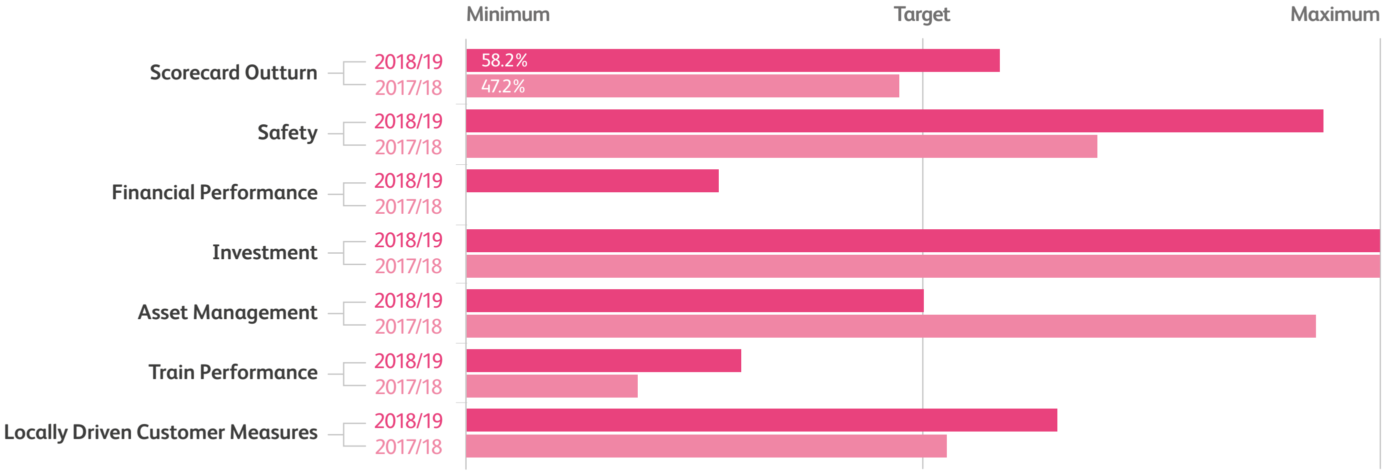
2,500	4,230	235	763	8
employees	services per day	stations	level crossings	passenger train operators

Anglia serves a fast-growing region connecting millions of commuters, leisure travellers and freight to vital destinations including Cambridge, Norwich, Chelmsford, Southend and the City of London. Our rural, coastal and intercity routes connect people across the region and the lines that serve London Liverpool Street and Fenchurch Street stations are increasingly popular for commuters. Anglia's railway is a crucial economic gateway connecting people and businesses to three major UK ports at Felixstowe, Thameshaven and Tilbury as well as the busy Stansted and Southend airports.

In February 2019 we announced changes to the organisational structure at Network Rail. Anglia will be one of 14 routes, which will be supported by five Network Rail regions, and will become part of a new Eastern region alongside the East Coast, East Midlands and North & Eastern routes. These changes will enable more local decision making and allow us to put a greater focus on improving train performance and putting passengers and freight users first. As these changes bed in, each region will publish updated strategic plans, setting out how we will deliver for our stakeholders under the new structure.

Key scorecard targets

Anglia continued



Anglia has improved overall on its scorecard targets in 2018/19 from the previous year. In particular, our progress on workforce safety has been considerable. Anglia has significantly reduced the number of staff hurt, from 44 to 26. Progress has been achieved by setting a clear strategy and focusing on areas that make the most difference. These include improved protective equipment, new technology designed to keep track workers safer, increasing understanding of mental health issues and where to find help, as well as identifying and removing hazards before they are a problem.

We've also continued to improve safety for passengers and communities by closing or upgrading level crossings and introducing footbridges. Slipe Lane in north London was a high risk crossing that now has a pedestrian footbridge connecting the busy Lee Valley Park. We have introduced new technology at a number of user-worked crossings, making them safer, and near misses with vehicles at level crossings have significantly reduced following improved engagement with authorised users and communities.

The route is seeking to close or alter around 100 level crossings by three Transport and Work Act orders. By removing crossings where there are nearby alternatives, we will improve public safety and enable potential line speed improvements. We have completed the public inquiry stage and are awaiting decisions if the powers will be granted.

While Anglia has some of the highest performing train operators in the country, the challenging targets we have set meant we haven't always achieved these owing to a mixture of infrastructure failures and a worsening fleet performance by some operators. However, in recent months, passengers and freight users will have seen positive progress with signs of improving reliability.

Unfortunately, the long, hot and dry summer impacted our ability to deliver all our planned proactive maintenance to fix track faults. Disturbing the track to repair it at extreme high temperatures risks it buckling and causing further damage and delays. While all these faults have now been fixed, this resulted in us narrowly missing our target to minimise the number of delay minutes caused by faulty infrastructure. As the seasons changed, performance improved, with our autumn preparation resulting in 18 per cent fewer delays than 2017/18.

Since December 2018 and the launch of our Every Second Counts initiative, train performance has steadily improved. We created joint plans with operators to help us consistently deliver the reliability that passengers rightly expect. In early 2019 we committed an additional £10m for initiatives that will bring timely performance benefits for passengers and freight users.

Case Study

Putting passengers first

Discussions with a local MP over our renewals of the overhead line systems on the Southend Victoria to Shenfield line, led us to review the programme. Recognising that passengers were understandably fatigued by the ongoing weekend closures, we worked with Greater Anglia to see how we could reduce the impact on passengers. By creating a nine-day blockade during the late Spring half term week, we were able to reduce the number of weekend closures by six, and the number of mid-week closures by 11. This also meant we could finish the majority of works two months early.

Anglia continued

Larger scale projects can often bring the greatest benefits for passengers and freight users, and this year has been positive. All our scorecard investment milestones have been achieved, with significant progress on upgrade projects that better connect passengers, increase the frequency of services and move more freight.

Of course, we know that when we carry out our work, we need to be considerate of those who live and work next to the line. So we were pleased that complaints from our lineside neighbours about our railway works have significantly reduced for the second year running following improvements in how we get in touch ahead of our most disruptive works.

Activities in the year

Track works being undertaken at Felixstowe over Christmas 2018

Our upgrade projects have progressed well with a number close to completion, bringing much needed capacity and journey experience benefits for passengers. The Lee Valley Rail Programme has built an additional track between Stratford and Meridian Water on the West Anglia Main Line, which will enable two additional trains an hour; a brand new station at Meridian Water, and improved accessibility at Northumberland Park and Tottenham Hale stations, easing congestion.

The project to increase capacity on the Felixstowe branch line is almost finished. We have built a new 1.3km track loop that will significantly increase freight capacity from the Port of Felixstowe, supporting environmental sustainability by getting lorries off the roads and improving reliability for passengers.

Our track and overhead line programmes have replaced more of our ageing infrastructure and significantly reduced the number of temporary speed restrictions that cause delays. In total, 57km of track was renewed and 87km of overhead line replaced, making the railway more resilient and reliable for passengers.

Anglia has committed to £272m of efficiencies through CP6 by adopting new technology, new ways of working and optimised access strategies, amongst other initiatives. We have been developing our efficiency strategic themes into project-level action plans which we can track and hold teams to account for. Our efficiency profile is challenging but our teams are determined to deliver or exceed the targets set by the regulator.

Finally, we launched the Anglia Supervisory Board. Chaired by passenger champion and industry expert Arthur Leathley, with train and freight operators and Transport Focus, this helps consolidate our cross-industry approach and focus on putting passengers and freight users first in the planning and delivery of our works.

Anglia continued

Case Study

Efficiencies

London Liverpool Street lighting the way

London Liverpool Street station is located in the heart of the City of London. It comprises 18 platforms, various station buildings, retail premises and interchange access to Liverpool Street London Underground station.

The electrical switch panels and distribution boards supply power to all the station facilities, including offices, retail and platform and concourse lighting. The power is located in multiple switch rooms throughout the station. The panels were constructed circa. 1986-1991 and spares were no longer in production, so a full renewal was imperative.

One of the main challenges of the project was planning the renewals works whilst ensuring that the essential daily operations and functionality of the busy station were not affected or compromised.

The team undertook a collaborative approach with maintenance and asset teams to ensure the new panels could be easily and efficiently maintained for years to come and future-proofed this by delivering additional power requirements. The project saved circa £400k but a further £100k p.a saving will be made through installing LED lighting in the station. This not only brightens the station for all its visitors and passengers, it also reduces the annual CO_2 emissions by an estimated 290,000 tonnes. Other benefits include removing the need to meter read so we can accurately bill, as well as reducing future maintenance costs with a modern system.

In the year ahead

We will continue to work collaboratively with Greater Anglia to support the introduction of an entire new fleet. From May 2019, passengers have been enjoying faster services from Norwich to London, as we introduced additional services in the May 2019 timetable that achieve that journey in 90 minutes.

Improvements for passengers in the capital continue. Meridian Water station opened in May 2019, with additional services expected to run between the station and Stratford from the autumn. We will continue to support TfL to deliver the Barking Riverside development with its 1.5km track extension and new station. We're also working with TfL to support delivery of the new Elizabeth line taking more people from Essex to London, Heathrow and the West and upgrading Ilford and Romford stations.

In the north of the route, we are on-track to complete the Felixstowe project by autumn 2019, increasing freight capacity and improving reliability for passengers. We will also upgrade four and close five level crossings, making the railway safer. The government has approved the final funding package for the King's Lynn line platform extensions, and construction will begin later this year. We also hope to complete the resignalling of the Norwich Yarmouth Lowestoft area once design issues have been resolved.

Finally, passengers and station visitors no longer needed to spend a penny as London Liverpool Street station removed the charges for its toilets from 1 April 2019.

Meliha Duymaz,
route managing director, Anglia

15 July 2019

London North Eastern and East Midlands

Overhead line work at Connington tip in January

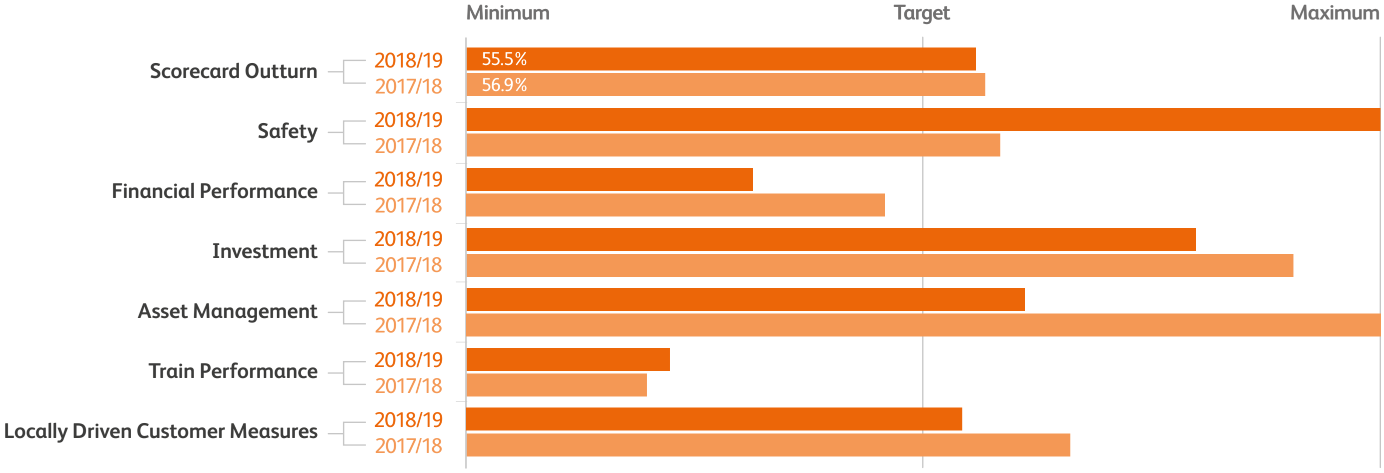
3,400	221m	58m	7.6m	£330bn
services every weekday	passenger journeys per year	freight tonnes moved annually – equivalent to 6.9m lorry loads	people live in the communities served by our route	generated annually by our towns and cities

LNE & EM links economies and communities across the length of England, including important economic hubs, leisure destinations, ports, power stations and airports. Our route encompasses three of the country's most important passenger and freight rail corridors: the East Coast Main Line (ECML), the Midland Main Line (MML) and the Transpennine Route. The route directly manages Leeds and King's Cross stations and works in partnership with HS1 to manage St Pancras International station.

Over the next year LNE & EM will be changing in order to get closer to our customers and passengers, making us more responsive to their needs. The old LNE & EM route will become three separate routes, focussed on particular customer needs. The East Coast route will work ever more closely with LNER and other operators to improve services for long distance passengers and London commuters. The North East route will make sure that passengers across the north of England benefit from an unrelenting focus on improving service performance while delivering the biggest enhancement programme in the country by upgrading the Transpennine route. The East Midlands route will incorporate Lincolnshire to provide an efficient mixed-use railway for this part of the network and complete the Midland Main Line upgrade. The three new routes will work with colleagues in Anglia to form a new Eastern region that will better deliver for passengers, customers and the communities it serves.

Key scorecard targets

London North Eastern and East Midlands continued



Scorecard commentary and activities in the year

We've made great strides this year in improving reliability across LNE & EM. The Derby resignalling project was delivered on time and is already bringing benefits to passengers. The track and signalling outside the station was transformed over 79 days in the summer. New and longer platforms were installed, creating vital space for passengers, along with a new track layout that will allow trains to run in and out of the station more reliably. This project was a key part of the Midland Main Line upgrade, which will allow more trains to run on the line and shorten journey times for passengers along the route.

In October the first Tram Train began operating in South Yorkshire – a first for Britain – offering direct links between Sheffield and Rotherham. Aside from this, we have undertaken a raft of small station platform, track and signalling alterations that will enable operators to run new and longer trains, providing more seats for passengers.

Over the past year we have made a number of other changes to improve passenger experience on our route. These include improved accessibility through the Department for Transport's Access for All schemes at Hebden Bridge, Scunthorpe and Headingley and platform improvements at Marsden to reduce the stepping distance; a free water fountain at King's Cross and free toilets at Leeds station. We have also introduced customer response teams to support passengers during disruption and ensure they're getting the most up-to-date information we have.

Case Study

Putting passengers first

New Tram Train Service gets 100 per cent passenger satisfaction score

Passengers in South Yorkshire are the first in the country to benefit from pioneering Tram Trains that provide a direct service between Sheffield city centre, Rotherham Central and Parkgate shopping centre, travelling on street tramlines and the national rail network. The UK's first Tram Train welcomed its first passengers on board on Thursday 25 October. Rob McIntosh, Route Managing Director said: "Tram Train is bringing new choices for travellers in south Yorkshire, supporting jobs and the local economy. It's also important to us at Network Rail as the national infrastructure provider, as it gives us a wealth of data and experience which we can share with partners around the country when we are looking to improve connections between communities."

The services have been welcomed by passengers, as demonstrated in the independent survey results released by Transport Focus in April 2019. Passengers' satisfaction with the overall journey and journey time was 100 per cent, and 92 per cent were satisfied with the value for money.

London North Eastern and East Midlands continued

Official opening of a new footbridge and two new lifts at Scunthorpe station, making the station fully accessible

Despite these improvements, providing a train service which passengers can rely upon has been the main challenge of the year. The May 2018 timetable introduced significantly more services and our planning work was not adequate. The service offered to passengers is improving, for example performance levels on East Midlands Trains are now back to pre-May 2018 levels, but we have much more work to do to restore passenger confidence and deliver the service they deserve. This can be clearly seen in the customer and performance measures on our scorecard.

Post-incident delay caused by train congestion and train, drivers and crew being displaced reached the highest level in recent years. This was largely also attributed to the impact of the May 2018 timetable. In addition to fixing the timetable itself, significant changes to staffing and management have been brought in to respond more quickly on the ground to incidents and better manage service recovery.

The route faced significant challenges this year from external factors including trespass and fatalities. This category now makes almost a quarter of the route's delay with fatalities and trespass the greatest single source of passenger disruption. We continue to work with Samaritans and train operators to provide support to vulnerable people and, where possible, make infrastructure changes such as fencing, lighting and signage to deter trespass.

Our main success of the year was our improvement in safety, where we exceeded target on all our safety measures. Level crossings have been closed and upgraded to improve safety for passengers and the communities our railway runs through. We are also sending more of our workers home safely every day. The lost time injury frequency rate ended the year at 0.349; the lowest ever recorded by the route. We've also launched and continue to run a highly successful electrical safety campaign in the East Midlands in preparation for the first electrical train services in the region.

Over the year the route has delivered hundreds of projects which have improved the railway, enabling better services and a more comfortable environment for passengers. Reflecting the poor train performance and reliability we have paid out £19m more than expected in compensation to train operating companies to support provision of alternative transport and passenger information as well as direct financial compensation for passengers. This has meant that the route has missed its overall financial performance target.

Case Study

Efficiencies

Safe and effective working

To deliver our work more efficiently we are targeting, among other things, the planning process used by the maintenance teams. By aligning our workforce, our access and the work we need to do we will get the safest, least disruptive and most efficient way of doing our work. This three year programme has already recorded efficiencies of around £800k in the first year. As important as the financial efficiencies are, they fundamentally support a safer working environment for our teams. We have increased by two per cent the amount of maintenance work which is carried out when trains aren't running. The number of late access requests has also nearly halved, demonstrating improved planning processes. By providing consistent access for our teams and planning work into this access we have increased the amount of work we planned to do by seven per cent. We are now rolling out this programme through all our maintenance delivery units.

In the year ahead

The Derby Resignalling Project was completed on 8 October 2018 as part of the Midland Main Line upgrade

In the first year of CP6 we're making a number of improvements to stations along the route to improve passenger experience for the people who use our railway. We will replace the roof of the south entrance at Leeds station and realign the ticket line to create a more spacious and welcoming gateway to the city. Market Harborough station will have a new footbridge installed to give customers full accessibility, and at Keighley station the Grade II listed station building will be refurbished, improving accessibility and creating a better environment for passengers.

We also plan to deliver a brand new station at Horden near Peterlee in the north east. This scheme, funded by Durham County Council, the Department for Transport and the North East Local Enterprise Partnership, is expected to open in Spring 2020 and be used by 70,000 passengers each year.

On top of improvements to stations along the route, passengers can also expect to see new rolling stock that will improve passenger experience and provide more seats on lines across the route.

As we move forward into the next control period we have a number of efficiency plans in place. We have been working hard on our planning process, to align our workforce, our access and the work we need to do to get the safest, least disruptive and efficient way of doing our work.

Rob McIntosh,

route managing director, London North Eastern and East Midlands

15 July 2019

Liverpool Lime Street station

London North Western

7,200	6,724	246.5m	571	4,500
employees	services per day	passenger journeys per year	stations	miles of track

London North Western (LNW) is the backbone of Britain – the economic spine connecting our main cities. It runs from London Euston and Marylebone in the South through the Chiltern and West Midlands regions, the North West and Cumbria before joining with Scotland at Gretna.

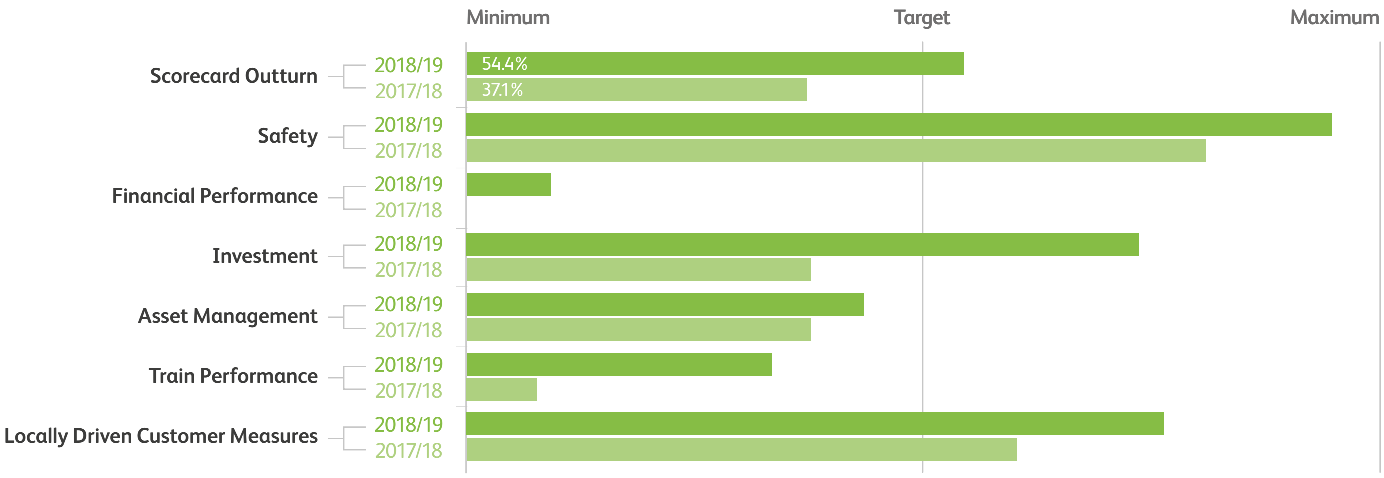
We are home to the West Coast Main Line, the busiest mixed-use railway in Europe, serving London, Birmingham, Manchester, Liverpool, Edinburgh and Glasgow.

LNW's vision is "one team safely delivering brilliant services for customers and taxpayers." LNW is key to Britain's economic future. It connects workers with jobs, people with loved ones and goods with markets.

In the new financial year LNW will be changing. From June 2019 Network Rail's nine route businesses will become 14, which will be supported by five Network Rail regions. The new LNW region, called North West and Central, will have the same geographical footprint as the existing LNW route. The new North West and Central region will be formed of three routes – the North West route, the Central route and the West Coast Mainline South route. Our new structure will enable more local decision making and improve responsiveness and relationships with our local stakeholders. This will help us improve train performance and put passengers and freight users first.

Key scorecard targets

London North Western continued



Activities in the year

Investment and performance - putting passengers first

In the last year LNW has undertaken a huge programme of work to improve passengers' journeys and the experience they have at stations. A record 95 per cent of our regulated milestones in the year were met, meaning passengers benefited from the improvements we had promised. Benefits delivered include:

- Liverpool Lime Street remodelling to provide passengers with better journey options and longer trains with more seats.
- Electrification of the railway from Blackpool to Preston and Preston to Manchester to provide passengers with faster, more frequent journeys.
- Electrification of the railway between Walsall and Rugeley Trent Valley to provide passengers with faster journeys and more journey options.
- New stations at Newton-le-Willows and Maghull North and ongoing work with key partners to redevelop Wolverhampton station and build a new station at Warrington West, giving passengers in both areas new and more comfortable journey options.

Case Study

Putting passengers first

London Euston manages eight per cent of all passenger assistance requests on the rail network. In the past, the process and service did not meet the standard that passengers or the station expected. The Euston team is a keen advocate for good passenger experience for our disabled customers and has been looking at making transformative changes in the service being offered. This has covered all aspects of how assistance is provided to better understand what and where the issues were so an action plan could be drawn up to provide a better service looking at all staff, customers and equipment.

The team has also been working at a national level to influence change in the 'journey care' system by working collaboratively with train operators and the Rail Delivery Group to develop a new assistance app (and back of house system) to better meet the demands of our customers.

On a practical level, there has been a huge improvement to the quality and use of assistance ramps. All 50 were fully serviced and any faults fixed and staff were given clear information on how and where to use them correctly for each type of train.

This thorough approach has seen a 75 per cent decrease in complaints related to assistance. There has also been a significant reduction in the number of customers who did not receive the help they needed. It has helped develop a strong, caring team that is proud to serve passengers who need their help.

London North Western continued

Freightliner freight train using the new sidings in Buxton

December 2018 saw the completion of one of the most challenging elements of the Great North Rail Project when testing for electric trains took place along the 'Bolton corridor' from Manchester to Preston. Infrastructure including new overhead lines, line speed improvements and station enhancements were all commissioned in advance of the May 2019 timetable which will see faster, more reliable journeys for passengers.

Investment by Merseytravel to fund upgrades to platforms to support the introduction and operation of new trains has made good progress, and we continue to work closely with Merseytravel to plan longer trains on the Merseyrail network. These two upgrades combined will provide passengers with modern trains which provide better journey options, more space and more seats.

In the West Midlands, work to electrify the railway between Walsall and Rugeley Trent Valley was successfully completed at the end of December 2018, ready for the May 2019 timetable change. This will support the introduction of West Midlands Trains' new routes, providing passengers with better journey options across the region as well as better links to Liverpool and London.

2018/19 saw passenger satisfaction at LNW's four managed stations (London Euston, Birmingham New Street, Liverpool Lime Street and Manchester Piccadilly) remain positive, with an average overall satisfaction result across the year of 87 per cent against a target of 86 per cent.

Liverpool Lime Street was the highest ranked of the 20 Network Rail managed stations; Birmingham New Street also ranked highly, coming fourth. We continue to work closely with all our TOC customers to understand passenger needs and maintain these high standards.

Where National Rail Passengers Satisfaction (NRPS) was high, performance was more of a challenge. The introduction of the May 2018 timetable changed the landscape for performance in the north of England. Although the new timetable was intended to bring faster, more frequent services to passengers, many experienced delays and cancellations that were unacceptable. We have since worked very closely with TOCs to learn from this experience. External influences including suicides and severe weather - including a prolonged period of hot weather - also contributed to some disappointing results.

Despite difficulties in some areas we are proud that LNW had the highest performing train operator of all: Merseyrail ended the year at 95.5 per cent, 0.4 per cent better than plan. We continue to work closely with all operators on the development of joint performance improvement strategies to provide passengers with a better level of service in 2019/20.

Safety – everyone home safe every day

The basis of a reliable and performing railway is safety. Workforce safety performance on LNW in 2018/19 was favourable to target on most measures. For lost time injury frequency rate (LTIFR) we saw an improvement of over 50 per cent in LTIFR over the last three years. This was achieved through the application of continuous improvement principles across our activities.

We exceeded our close calls raised stretch target of 22,700, raising over 25,000 close calls. In 2017/18 the route only closed 76 per cent of these reports within 90 days, missing our target. This year we have prioritised the closure of close calls achieving 88.7 per cent within 90 days, which is better than our target of 85 per cent.

Our 'Take 5 for Safety' principle remains at the heart of our workplace culture. This means everyone taking five seconds to think through what they're doing to ensure it is safe.

Financial performance

LNW remained very close to budget on both operational and renewals expenditure in 2018/19 after a real focus upon delivering financial efficiency and investment. This year we have focused on the process and cultural changes required to address the financial rules for Control Period 6 (CP6).

However, financial performance was affected by train punctuality being below where it needed to be. We have invested in a series of performance initiatives this year to improve our asset resilience in the future, and we have also invested in suicide prevention measures to help minimise the impact this has on performance and therefore finance.

Major railway upgrade schemes (including the Walsall to Rugeley electrification and Liverpool Lime Street upgrade) were delivered to budget and the North West Electrification Project had financial challenges during the year but still achieved critical milestones. The resignalling of Birmingham New Street has now entered into its sixth and seventh phases. The route continues to work in partnership with HS2 Limited as construction continues.

Attracting third party investment for the benefit of passengers

Over the course of Control Period 5 (CP5), LNW secured more than £500m of third-party funding for enhancements. This included £260m for completion of two large one-off projects, started in CP4: Birmingham New Street Gateway and East-West Rail Phase 1. In 2018/19, third parties invested £98m across 70 different projects.

To reinforce the Network Rail Open for Business programme, LNW is currently facilitating third party delivery on 18 different projects. This ranges from development of station improvements at University of Birmingham to delivery of improvements at Kirkdale and Birkenhead North depots to support the introduction of new trains for Merseyrail. In total, £41m of railway enhancement work was delivered in this way across LNW in 2018/19.

Case Study

Efficiencies

The Buxton freight extension in Derbyshire, part of the Great North Rail Project and delivered by IP Northern Programmes, allows much longer freight trains to serve local quarries. This delivers efficiencies in costs to the UK construction sector and has significant green credentials, removing lorries from the road network. The project team was challenged to save money to help deliver other improvements elsewhere on the freight network. Working closely with the contractor (Buckingham Group), £4m of savings were identified. This included reducing the length of track installed to suit the specific requirements of the trains using it and an innovative method of track drainage. Working closely and collaboratively with the contractor on a vital infrastructure upgrade helped generate a significant efficiency saving while still delivering the original, required changes.

The year ahead

In 2019/20 we will begin a vital operations, maintenance and renewals programme. We will deliver six Access for All schemes, providing passengers at more stations across the route with step-free access to services. Nearly 100 platforms across 58 stations on the Merseyrail network will also be altered to provide step-free access to Merseyrail's new trains from 2020.

As part of the Great North Rail Project, over 100 platforms will be extended at more than 70 Northern and TransPennine Express stations. HS2 construction will progress along the route between London and Birmingham this year, and preparation will continue for the construction of East-West Rail between Bicester and Bedford.

Martin Frobisher,

route managing director, London North Western

15 July 2019

Passengers at Glasgow Central station

Scotland

3,000 employees

2,500 services per day

107m passenger journeys per year

359 stations

2,800 miles of track

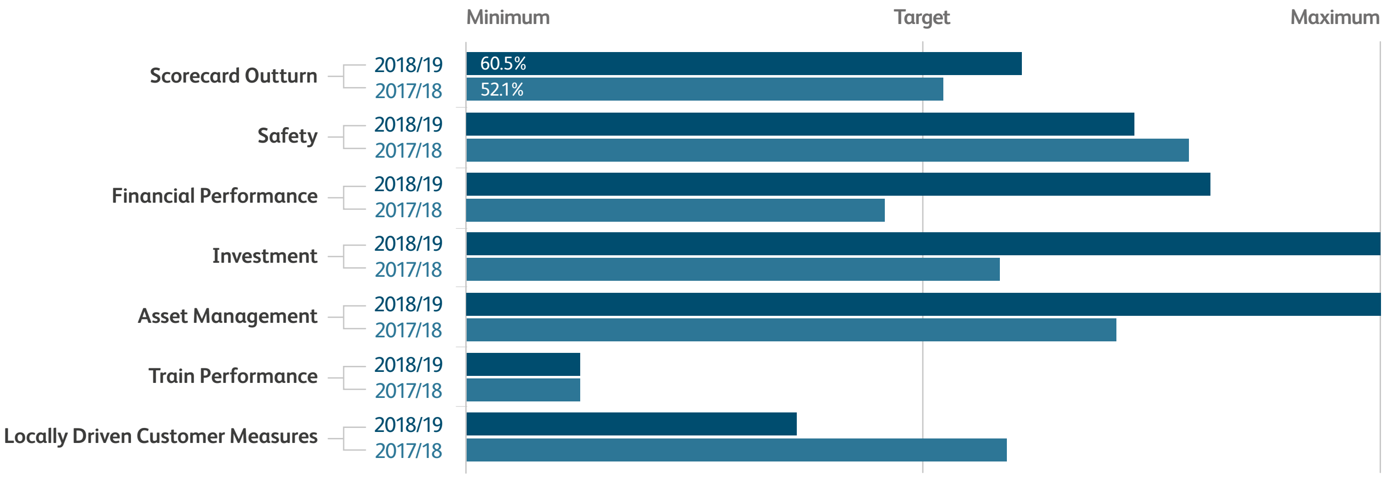
Network Rail Scotland route manages and maintains more than 2,800 miles of track and 359 stations on a network which carries over 107 million passengers a year and runs more than 2,500 services a day. The route looks after world-famous structures such as the Forth Bridge and Glenfinnan Viaduct and serves a wide variety of needs, from the commuter routes around our major cities to rural railways running through the west Highlands and far north of the country.

Network Rail Scotland employs nearly 3,000 people and engages over 160 suppliers, while the rail industry as a whole is key to Scotland's success – contributing up to £1.3bn each year to the economy. In Scotland, Network Rail operates in a deep partnership with Abellio ScotRail under a joint managing director as part of the ScotRail Alliance. The route also maintains strong relationships with cross-border passenger and freight operators and works closely with the Scottish Government and other stakeholders to deliver a railway that meets the needs of passengers and businesses.

In the next year Network Rail will undergo some changes in the way our organisation is structured. This includes a shift from nine route businesses to 14, which will be supported by five Network Rail regions. As part of these changes a new region called Scotland's Railway will be created, which will support the current Scotland route.

Key scorecard targets

Scotland continued



Train performance

Scotland's railway has struggled to deliver performance at the level required this year. Throughout 2018/19, the ScotRail Alliance has been working closely to deliver the 20 recommendations provided by independent industry expert, Nick Donovan.

A programme management office was deployed in 2018 to control and manage the delivery of the Donovan review, while also monitoring any additional performance projects. Nichols were jointly commissioned by the Office of Rail and Road (ORR) and Network Rail to review Scotland's implementation of the Donovan recommendations, within which several areas of best practice were identified.

Throughout the year, asset and fleet reliability have both improved, although public performance measure (PPM) failures per incident continues to be a challenge.

Locally driven customer measures

Passenger satisfaction has fallen to 79 per cent, reflecting the poor performance delivered by the ScotRail Alliance in the last year. Leisure travellers' satisfaction, however, was at its highest level since 2016 at 91 per cent.

Despite a 16 per cent increase in complaints and enquiries in 2018/19, which was expected given the intensification of engineering works across the route, response times improved by 25 per cent.

Safety

The lost time injury frequency rate (LTIFR) increased significantly in 2018/19. Tragically, there was also a fatal accident on the route when a member of contractor staff died at Bearsden Station following a fall from a step ladder.

Case Study

Putting passengers first

Scottish Network Improvement Fund

In 2018/19 teams across Scotland worked hard to develop a multi-million-pound investment programme to improve the service we offer our customers.

The Scottish Network Improvement Fund delivered £160m of investment across the country, targeting every aspect of our business. The 228 projects to benefit from the fund will boost performance and customers satisfaction for years to come.

Improvements delivered for our passengers included new lifts and footbridges at Addiewell, Cleland and Fauldhouse stations, resurfaced the car parks at 23 stations and new customer information screens at 30 rural locations, all designed to improve passenger experience on the network.

The fund also helped improve freight connectivity with a new connection constructed at Blackford in Perthshire and saw station buildings improved across Scotland, including the renewal of the platform canopies and roofs at Aberdeen and Kilmarnock.

Scotland continued

Most accidents were caused by slips, trips and falls and related to access and egress from worksites or involved manual handling. Reviews are underway into standardised site lighting and better use of mechanical aids.

No lost time accidents occurred in Scotland this year as a result of staff being involved in a road traffic collision – it's clear the rollout of the vehicle speed warning system and drivers' mandate has had a positive effect.

For the second year running Scotland achieved full compliance with the assessment process for detecting hand arm vibration syndrome (HAVS) in our workforce.

Financial performance

The route's overall financial performance was better than target due to a strong performance in renewals. This was mainly due to effective risk management on major signalling schemes at Motherwell North and Polmadie & Rutherglen.

Financial performance was negatively impacted by overall train performance throughout the year, as a result of Storms Ali and Callum, and the prolonged period of hot weather last summer.

In enhancements, there were revised cost target baselines agreed for the Edinburgh Glasgow Improvement Programme, which helped offset the negative financial performance of the Stirling-Dunblane-Alloa project, where costs increased due to the revised programme required to achieve the ORR completion milestone.

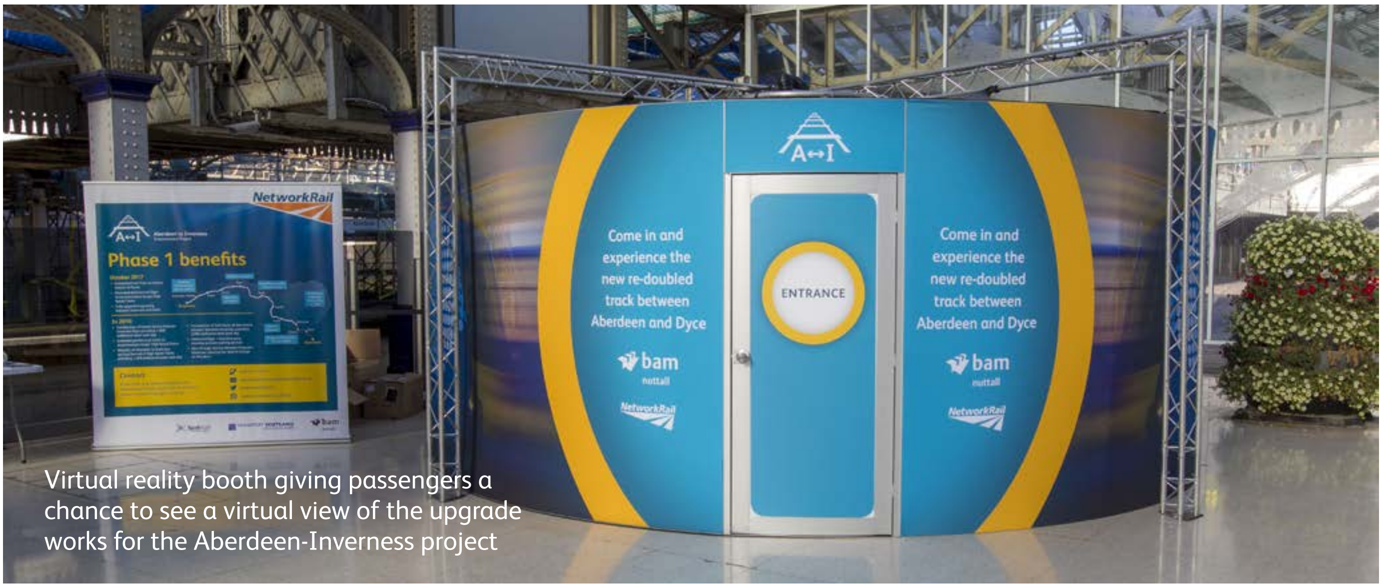
Asset management

Scotland made good progress in reducing service affecting failures, bettering the composite reliability index target and the annual asset failure targets. Improvements were driven through focusing on the reliability of assets most critical to train performance. Successes include the installation of new LED light engines, OLE reliability improvements and further use of intelligent infrastructure to identify potential failures.

The route has continued to invest in its asset improvement programme (AIP) to reduce the quantum of asset failures. Over the last three years this targeted spend has delivered over £24m of improvements.

Scotland exceeded target for the six key renewal volumes on the scorecard.

Activities in the year



Virtual reality booth giving passengers a chance to see a virtual view of the upgrade works for the Aberdeen-Inverness project

This year saw the delivery of significant major enhancements across the Scotland route. The Stirling-Dunblane-Alloa electrification project was completed to programme in December 2018 while the Grangemouth Freight Branch was electrified in March 2019. The project to electrify the Shotts line (Holytown Junction to Mid-Calder Junction) was also successfully completed in the same month. We also delivered the Motherwell North

Scotland continued

and Polmadie and Rutherglen Renewals signalling schemes. Extensive works, including to signalling and gauging, were also undertaken across the route to prepare the network for the introduction of new fleets.

The redevelopment of Queen Street station continued apace, with the extension of Platform 1 to accommodate 4-car length trains completing in May 2018. The overall redevelopment is due to be finished in March 2020.

At Edinburgh Waverley, extensions to platforms five and six entered service in February 2019. These longer platforms at the east of the station provide additional capacity for ScotRail and LNER services.

The Highland Main Line project finished on time and at half the original budget. The project has created capacity for more services and improved journey time between Glasgow, Edinburgh and Inverness.

In the year ahead

In 2019/20, the route will continue to deliver major enhancement schemes with the Aberdeen-Inverness Improvement Project set to complete the double-tracking of the line between Aberdeen and Inverurie in summer 2019. This project will deliver an hourly service between Elgin and Inverness, additional Elgin-Aberdeen early morning and late evening services, and a half-hourly service all day between Inverurie and Aberdeen from December 2019, with extra services at peak times.

The route will also continue its focus on driving down infrastructure faults and improving the service we provide to passengers. The planned investment in Control Period 6 (CP6), which starts this financial year, represents the biggest ever devolved budget for the route and will see increased spend on the day-to-day running of the railway.

To deliver our targets, we will need to improve asset reliability and our CP6 plans reflect this – having been structured to deliver increased resilience to weather events, reduce disruption and improved reliability. Our plans also make greater allowance for more autonomy in decision-making, with teams more able to identify and deliver improvement schemes to drive improved performance at a local level.

Case Study

Efficiencies

The Highland Main Line Enhancements project

A £57 million programme of upgrades on the Highland Main Line between Perth and Inverness was delivered for half its original budget due to close collaboration between Network Rail and train operators.

Working closely with ScotRail, the project team were able to identify ways to reduce the amount of infrastructure work required through changes to rolling stock and timetabling.

Infrastructure enhancements at Aviemore and Pitlochry stations have now allowed High Speed Trains to be used on the route by ScotRail, which better handle the steep gradients on the line.

Completed in March 2019, the project delivered an hourly service between Perth and Inverness, with an average end to end journey time improvement of around 10 minutes and more efficient freight operations on the route.

Alex Hynes,
route managing director, Scotland

15 July 2019

Members of Team Victoria

South East

3,500 employees

500m passenger journeys per year

344 stations

2,000 miles of track

20%+ freight growth in CP5

The South East route is the busiest and most congested in the country, connecting the capital and its southern and south eastern suburbs with Kent, Surrey, Sussex and Channel routes to Europe.

Around 5,000 passenger trains run every day over almost 2,000 miles of track and we manage four of the busiest stations in the country – London Victoria, London Bridge, London Charing Cross and London Cannon Street.

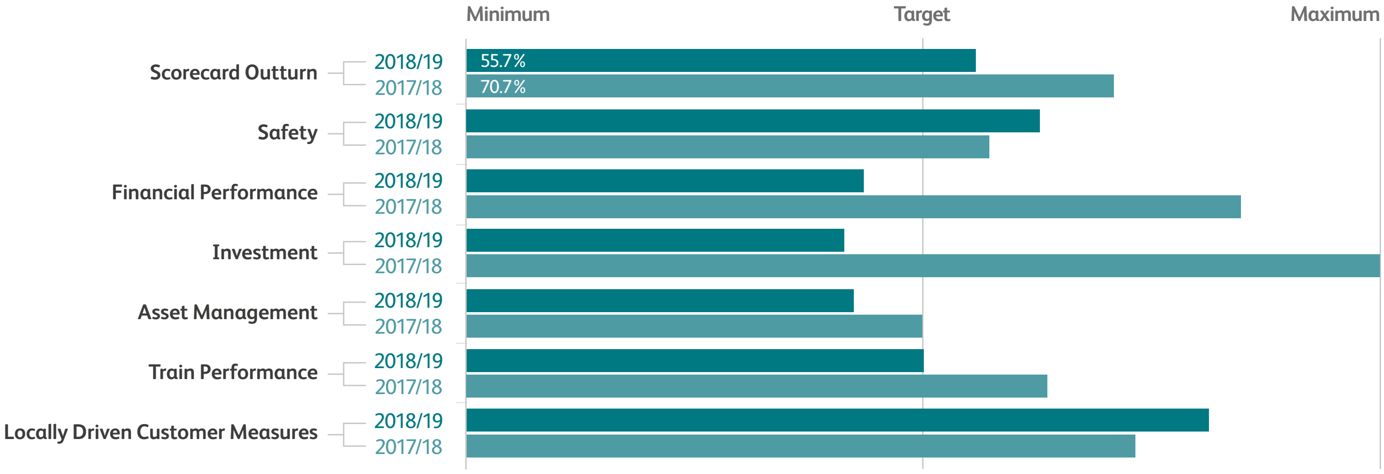
After extraordinary growth in the last decade, we now deliver almost 500 million passenger journeys a year, which is a third of the national total, and still rising.

Freight demand is also predicted to increase, on top of the 20 per cent growth experienced since 2014. This has been driven by the booming construction industry and supports businesses and boosts economic growth.

As part of Network Rail's 'Putting Passengers First' programme, the South East route will split to form the Sussex and Kent routes. Together with the Wessex route, the three routes will form the Southern region. This will make us more responsive to the needs of our customers and passengers, helping us drive up train performance.

Key scorecard targets

South East continued



We have exceeded our targets across all three of our major passenger train operators this year.

That was in part down to our joint performance teams with Southeastern and GTR, which have changed the way we look at performance and give us a much deeper understanding of how our railway operates.

Our principal performance measure on South East is Right Time, which measures trains arriving at their destination within 59 seconds of their published time.

For Southeastern, we delivered a Right Time moving annual average of 66 per cent, which was above target. For GTR, we achieved 57.5 per cent against a target of 54.6 per cent, and for Arriva Rail London's Overground services, we finished the year on 90 per cent against a target of 88.9 per cent.

While we've made good progress year on year, we have to be honest with ourselves and our passengers and admit it's still not good enough and we have to keep striving for better.

Despite our strong focus on safety and wellbeing, our efforts were overshadowed this year by some tragic incidents, including the death of a colleague on the railway near Purley.

Another of our colleagues suffered severe burns in an electrical fire while working on a substation at Godinton, near Ashford.

We're determined to learn from these tragedies to prevent incidents in future and we are striving to embed a positive safety culture across the business.

Case Study

Putting passengers first

Team Victoria

Passengers are now much more satisfied with their experience at London Victoria station, thanks to the Team Victoria initiative, bringing the Network Rail and train operator teams together in one uniform, serving passengers as one team.

This is a perfect example of how we are putting passengers first and has helped increase passenger satisfaction by 13 per cent in just 12 months.

In what has been described as a first for Britain's rail industry, our staff, along with employees at train operators Southeastern, Southern and Gatwick Express, waved goodbye to their individual company uniforms in favour of a new purple Team Victoria outfit. It's not just a cosmetic change though, as staff were retrained to assist every passenger regardless of the service they're using. This means passengers no longer need to seek out or be pointed towards specific staff to help with their particular issue or query and provides a better level of customer service.

In 2019 this initiative will be rolled out to London Bridge, London Charing Cross and London Cannon Street.

South East continued

Financial performance in 2018/19 was positive overall, thanks largely to improved operating performance which meant lower compensation payments to train operators, and the cost of compensation for engineering work possessions was less than expected.

We delivered all our planned efficiencies, including the move of the route's headquarters from London Bridge to Southwark, which also contributes to the efficiencies being delivered for Control Period 6 (CP6).

Activities in the year

New seating at London Victoria station

2018/19 has been a year to remember for the South East route with passengers reaping the rewards of our hard work.

We started the year with the official opening of London Bridge by His Royal Highness the Duke of Cambridge, following a five-year transformation that nearly doubled passenger capacity and allowed for 30 per cent more trains.

And we closed with the successful completion of one of the biggest projects in our route's history on the Brighton Main Line, where we tackled the root causes of delay to give passengers a more reliable service.

Completing the work over an unprecedented nine-day blockade plus 15 weekends – instead of the alternative of 79 weekend closures – has meant we were able to fast track the benefits for the 300,000 daily passengers.

Less happily, we recognise that we let passengers down with the May 2018 timetable troubles. A whole system approach to timetable planning must be the way ahead and December's timetable, which introduced modest improvements, was a step in the right direction.

Winter weather conditions in 2018 were the most challenging we've seen in the South East for more than a decade. Unfortunately, this led to a very serious incident in Lewisham, and we're determined to learn from what happened. Working with our colleagues at Southeastern, we have identified and implemented a number of improvements to how we handle stranded trains.

Passengers at London Victoria station will soon enjoy clean, modern, reliable and comfortable toilets thanks to a major revamp. And they still won't have to spend a penny as the toilets will remain free to use. New seats were also installed at London Bridge and London Victoria stations.

Passengers are also soon to benefit from improved accessibility at stations as part of the Government's Access for All programme. Work at Plumstead, Shortlands, Canterbury East, Carshalton, Coulsdon South and Selhurst stations will all be completed later in 2019.

We also made great strides for the passengers who pass daily through one of our busiest junctions at Battersea Pier, on the approach to London Victoria, by completing a replacement over Christmas.

Passengers, businesses and residents also largely supported our plans to remove Britain's biggest railway bottleneck at Croydon at a series of consultation events. The 300,000 passengers who travel through this crucial junction every day will enjoy a step-change in reliability if we realise our ambition to remodel the junctions with new flyovers, so trains can pass each other without having to wait at red signals.

But our work didn't only focus on running the railway. Working with community groups and renowned artists, we also helped transform 15 of London's historic railway bridges into stunning pieces of art, which are inspiring pride in people's neighbourhoods and reducing graffiti.

Case Study

Efficiencies

A major part of our efficiency savings during CP5 was the relocation of our route headquarters and 740 employees from London Bridge Cottons Centre to James Forbes House in Southwark.

In order to realise the significant £7m route saving over CP6, we had to move quickly. Despite difficult market conditions, we secured a sub-let of our space at the Cottons Centre in London Bridge, which required a fast exit months earlier than our anticipated move. We therefore had to accelerate our programme to keep the deal and maximise our efficiency. We completed the move in September in just one weekend, with no disruption to the day-to-day operational business.

Throughout CP6 we have a target of £300m in further efficiencies, which we must deliver. The team is already delivering year one targets and these are reported against periodically.

In the year ahead

We have received a record £4.3bn to spend over the next five years to run, maintain and upgrade the railway. That's over £1bn more than we received in the last funding period.

We now need to spend this money wisely to address historic under-investment in the South East. That means prioritising investment in maintenance to keep our infrastructure running reliably, while we use the extra funding to renew critical infrastructure to improve performance in the longer term.

Improvements to signalling are also planned, as well as the introduction of digital traffic management to help our signallers operate more efficiently.

Major improvements

In the year ahead, we will continue transforming our stations, working more closely than ever with our train operator colleagues to improve passenger experience.

On the Kent route, working with our colleagues at Medway Council, we will complete a jointly funded regeneration project that will breathe new life into the area around Chatham station.

Kent passengers can also look forward to a bigger, better and more attractive Maidstone East station as redevelopment continues.

We'll also complete upgrades of the signalling on the lines from Deptford to Woolwich and Lewisham, and between Hither Green and New Eltham and Elmstead.

We will also complete a huge package of work to renew critical junctions, including at North Kent East, Hither Green and Ashford. Old track will be completely replaced on sections of line across the route including at Canterbury East, the Catford Loop, the approaches to Cannon Street, at Gillingham and at Forest Hill.

Our proposals to redevelop Gatwick Airport station to provide a railway station that works for passengers have been approved by all funding parties. Work on this major redevelopment plan will start later this year.

Proposals to address the major bottlenecks on the Brighton Main Line to provide more reliable, more frequent and faster services will continue to be developed and we'll keep making the case for this critical investment.

Our people are our biggest asset and fundamental to our success. So as part of our plan to create a great place to work, where our people feel valued, we are focusing on four main areas: more effective induction; training, including practice using realistic simulation environments; improving diversity to create an environment where everyone feels included, respected and can be themselves at work; and wellbeing initiatives such as our Occupational Health Centre at London Victoria station.

John Halsall,

route managing director, South East

15 July 2019

Shrewsbury Station

Wales

1,700
employees

30.4m
passenger journeys per year

44%
more passenger journeys than a decade ago

248
stations

1,505
miles of track

People across Wales and Borders rely on the railway network to connect them to places and goods, driving economic growth. We run the safest major railway in Europe, committed to getting our passengers and our employees home safe every day. Almost 50 per cent more passenger journeys are made to, from and within Wales than a decade ago. We employ over 6,000 people directly or indirectly and spend tens of millions of pounds with local suppliers every year.

Our devolved leadership team works within a national framework while proactively supporting the aspirations of Transport for Wales (TfW), the Welsh Government, the Department for Transport and the wider Wales and Borders stakeholder community. We are working closely with our industry partners to put our passengers and freight customers first, improve performance and create additional capacity to accommodate the expected continued long-term growth in demand for rail services.

The planned changes to Network Rail's structure will deepen devolution enabling more local decision making, improved responsiveness and more collaborative stakeholder relationships. The plans will drive an even greater focus on putting passengers and our customers first. Our route will be supported by one of five new regions, the

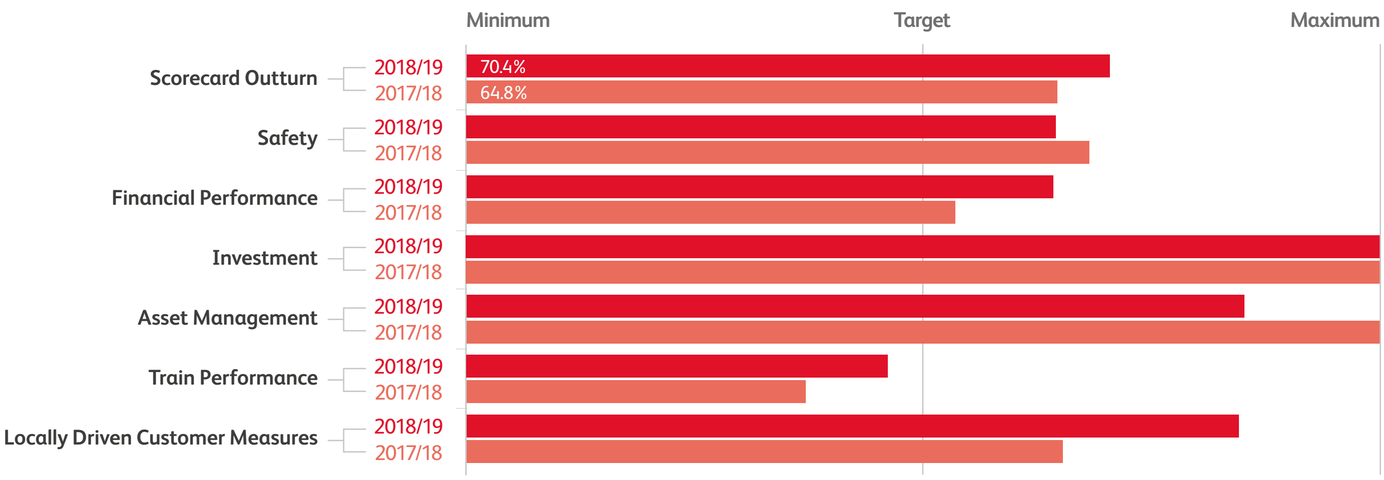
Wales continued

Wales and Western region, which will include project delivery and be supported by two service units and smaller central teams. One of the key principles driving the design of the Wales and Western region and the two routes, will be to free up our people so they have more time to deliver the best service possible for passengers and freight.

The commentary for this report was written prior to the events of 3 July 2019 when we were devastated by the deaths of two colleagues near Port Talbot. The railway community has been deeply affected by this sad loss. We continue to remember them as well as supporting their families, friends and colleagues.

At the time of this report we are undertaking our own investigation and cooperating fully with the investigations under way by the British Transport Police and Rail Accident Investigation Branch. We will report fully once all investigations have concluded. We remain committed to getting everyone home safe every day.

Key scorecard targets



We saw a slight increase in lost time injuries (LTIs) this year and an increase in the LTI frequency rate. To tackle this we launched our home safe plan, which includes our strategy to reduce LTIs and focus on the golden hour for incident response. Our level crossing risk reduction campaign was on target with all milestones achieved, including the closure of six level crossings.

Delay minutes caused by Network Rail decreased over the year, achieving a 15 per cent decrease compared to 2017/18. We narrowly missed our public performance measure (PPM) target, achieving 91.4 per cent, a 0.9 per cent decrease compared to last year. PPM was impacted by a challenging autumn caused by low rail adhesion, fleet reliability and availability and train crew availability. We have worked closely with lead operator TfW to introduce new passenger focused measures for 2019/20. Average passenger train lateness and on time metrics will provide a clearer view of how well we are delivering. Our National Rail Passenger Survey score remained at 82 per cent which was below target.

Despite the impact of the agreed re-phasing of the electrification project, overall financial performance improved compared to last year. Renewals performance was particularly strong, with all key volumes exceeding stretch targets, and we realised £11m of positive financial performance from our renewals delivery portfolio. Major projects including the Port Talbot-Swansea signalling renewal scheme contributed to this and we worked closely with our supply chain to accelerate our Control Period 6 (CP6) preparedness strategy, utilising capacity across the supply chain and delivering work ahead of schedule. The hot summer negatively impacted our service affecting failures result and we narrowly missed target. The reliability of our assets across our most critical infrastructure improved significantly over 2018/19 and we finished the control period 21 per cent better than the start, almost double the target of 11 per cent.

Wales continued

Case Study

Putting passengers first

We created a joint performance strategy in collaboration with Transport for Wales, which puts passengers at the heart of everything we do. The strategy adopted recommendations identified by the Steer and Donovan industry reports and recognises our railway as a system, looking to identify and deliver improvement at a local level, using experience from front line staff. The strategy focuses on making a positive difference to passengers' experience and adopting more stringent performance metrics.

Activities in the year

Pupils in North Wales taught importance of rail safety with Crucial Crew sessions

In this year we delivered the final stage of the North Wales Railway Upgrade Project. This major upgrade increased the resilience and reliability of the railway in North Wales and included a new signalling system from Shotton to Colwyn Bay, with bi-directional signalling between Flint and Rhyl.

Modernisation of the South Wales Main Line continued and included the installation of a new signalling system from Port Talbot to Swansea, increasing resilience, flexibility and reliability. The new signalling system between Cockett Tunnel and Baglan was commissioned in March 2019 and we also upgraded track, power supplies and telecoms equipment, ensuring a more resilient railway.

Working with our lead train operator we improved accessibility and facilities for our passengers at Neath, Shrewsbury, Cardiff, Bridgend and Radyr.

The route launched its Transport Leaders' Forum and hosted four events, bringing together public and private sector leaders to drive and influence the transport debate across Wales and Borders, in addition to our now well-established route supervisory board. We commissioned the first Wales and Borders independent stakeholder perception survey which showed 93 per cent satisfaction with stakeholder relationships with Network Rail and 87 per cent satisfaction with performance.

We continued to bring track and train closer together through our joint communication, operations and safety boards.

In January we were delighted to be awarded the industry-wide Golden Whistle award for the best route in terms of delay minutes caused by Network Rail on our operators, based on performance data up to period nine.

Case Study

Efficiencies

Project Atlantic

We achieved our efficiency target through initiatives like Project Atlantic, devolving materials handling and storage from Ryton to strategically placed Regional Distribution Centres (RDCs). Working with the route Structured Continuous Improvement (SCI) team it has delivered £340k of efficiencies. We used '5S/Workplace Organisation' to remove excess and obsolete materials from delivery units and depots including at Aberystwyth, Ebbw Vale, Porthmadog, Port Talbot and Shrewsbury.

In the year ahead

Wales continued

It is an exciting time for the rail industry in Wales and Borders. TfW's commitment to invest £5 billion in rail over the next 15 years combined with our £2 billion CP6 settlement means historic levels of funding to deliver improvements for passengers and freight users.

Our plan for the start of CP6 builds on the excellent work and changes we implemented during Control Period 5 (CP5). The plan is made up of over a thousand local schemes designed to deliver improvements for as many passengers as possible.

We have a robust renewals programme to maintain the safety and performance of the railway infrastructure including level crossing renewals, bridge repairs, track drainage work and fencing. Enhanced maintenance strategies, greater use of remote condition monitoring and a 'predict and prevent' approach will achieve a more resilient railway. We aim to achieve a 6.6 per cent reduction in operating expenditure through smarter working, better planning, more efficient use of the railway and better technology.

Train performance and reliability are top priorities for passengers and freight customers. Passengers and freight customers can look forward to capacity improvements delivered by TfW as part of the new rail services contract and we will be working closely with them to ensure we maximise every opportunity to unlock capacity and provide greater flexibility, resilience and reliability across the network.

We will also continue to work closely with the Welsh Government and TfW to support them in delivering their transformation of the Core Valley Lines. This includes the proposed transfer of the Core Valley Lines assets which is scheduled to take place in September 2019.

Worksite in Llanwern, South Wales where 97 % diesel-free working was achieved

Major upgrade works/works coming to completion

Work to electrify the South Wales Main Line to Cardiff, an important rail route linking major towns and cities, continues to progress. Once complete later this year, the work will enable Intercity Express Trains to run between London and Cardiff on electricity, improving journeys for passengers and creating a quieter environment for our lineside neighbours.

Preparatory work will commence on the renewal of Grade 2 listed Barmouth Viaduct, which provides a critical link for passengers travelling across Mid and North West Wales. We are installing a new stepped-footbridge with two lifts at Cadoxton station, funded by the Department for Transport to provide a fully accessible route from the station entrance to platform two for the first time, allowing all passengers to make full use of the station.

Bill Kelly,

route managing director, Wales

15 July 2019

WheelPower celebrated the 70th anniversary of the first wheelchair games in July 2018 (London Waterloo station).

Wessex

1,800 employees	**2,000** services per day	**200** stations	**323** level crossings	**1,300** miles of track

We run one of the busiest parts of Britain's railway, with 213 million passenger journeys across our network every year. London Waterloo station is the busiest in the country with around 330,000 passengers every single day – equal to four full capacity crowds at Twickenham stadium.

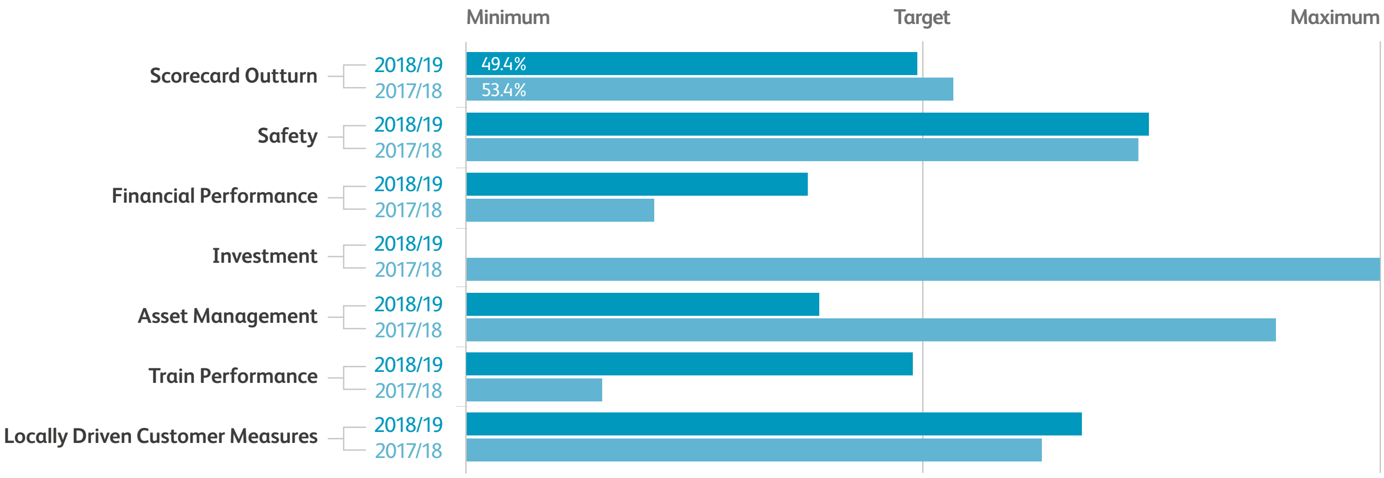
Our purpose is to connect people, businesses and communities, to support economic growth for all. It is only by putting passengers and freight at the heart of our operations that we will ensure our customers safely get to where they want to go on time, whilst keeping them informed and minimising service impacts during any potential disruption.

Our biggest challenge is train performance and we continue to work in close collaboration with our train operating companies to put passengers first and provide them with the service they deserve.

With this challenge in mind, Wessex and South East routes are combining to form the new Network Rail Southern region from 24 June 2019. This is an important change to our business that will help us to realign our organisation and bring us closer to our train and freight operating companies, to better meet the needs of our passengers and freight users.

Key scorecard targets

Wessex continued



Overall scorecard performance was just over target at 50.2 per cent. This is 3.3 per cent adverse to last year (2017/18).

Safety continued to be strong overall with Wessex on schedule to achieve its safety, health and environment scorecard measures (close calls raised, close calls closed, train accident risk reduction measures and top 10 level crossing milestones) apart from the lost time injury frequency rate (LTIFR) target. While the total number of accidents in the year were fewer than in previous years, we had a poor start to the year and an abnormal period 8, resulting in us having five more lost time injuries than last year. This has meant that LTIFR was adverse and we did not achieve the year-end target.

Our financial performance measure (FPM) was strong in both renewals and enhancements gross and our cash position was within taper. The main area of challenge was our profit and loss FPM, which has been influenced by our lower than expected train performance levels. This meant that the route incurred much higher Schedule 8 costs than budgeted.

We achieved four out of five of our investment milestones, an 80 per cent achievement overall. Opening Waterloo International Terminal for the December 2018 timetable change was a huge achievement, and other schemes have improved the resilience of the network. The missed milestone was the Southampton freight train lengthening scheme and efforts are underway to determine how best to deliver the required outputs through a revised scheme.

Asset performance was short of target at 37 per cent. This is predominantly due to two factors: the long, hot summer and accompanying desiccation of earthworks leading to a large number of track related service affecting failures (though our non-track assets were better than target), the contractor's decision to defer commissioning of phase zero of Feltham in February and the consequential loss of key signalling renewal volumes.

Train performance achieved almost 50 per cent of the scorecard target and was much better than last year with significant contribution from Network Rail Wessex delay minutes on South Western Railway (SWR) services, freight delivery metrics and Govia Thameslink Railway delay minutes. There have been recent excellent period performances against non lead TOC public performance measure (PPM) and CrossCountry right time arrivals at Reading, but previous poor performance means these do not contribute strongly to the overall scorecard.

Locally driven customer measures have been strong in both years, with good results in railway work complaints, performance management and the customer scorecard.

Case Study

Putting passengers first

Passenger improvements at Waterloo station

Improvements to the passenger experience at Waterloo station have included real-time service information on new mobile technology for station support staff, mobile information points now open throughout the day, two new water fountains providing free water, removal of toilet charges, additional seating, new service information screens, new joint-branded tabards for Network Rail and SWR staff and measures to improve congestion through exit two.

Wessex continued

Schoolchildren helped open the new footbridge over White Hart Lane level crossing in Barnes

Activities in the year

Waterloo International Terminal reopened

Three new platforms in the former Waterloo International Terminal opened in December 2018, giving more space to passengers and forming a vital part of our Wessex Capacity Improvement Programme. This has included lengthening platforms across the route to make room for longer 10-car trains. The final two platforms opened in May 2019 to coincide with the SWR timetable change, and retail space underneath the terminal is set to open by 2021.

Joint Performance Improvement Centre

A Joint Performance Improvement Centre has been formed with SWR at Waterloo to bring track and train teams closer together, ensure lessons learned are embedded, and to support passengers and service recovery on the route. Within this, we are conducting 'deep dive' reviews into key areas (joint operational procedures, improvement strategies, capabilities and contingency plans) so they are fit for purpose and incorporate lessons and recommendations.

Faster safer isolations

This year the Wessex route has become the first in the country to introduce safer and faster power isolation technology. This initiative will give our staff an extra 66 days per year in which to carry out work in overnight possessions when rollout is completed across the route in Control Period 6 (CP6). The Wessex route has the shortest window in which to carry out overnight work, so the rollout of faster safer isolations is proving vital to improved maintenance and renewals. Not only does this give more time for work to be carried out, but it also improves safety for our workforce. This replaces the outdated and laborious practice of 'manual strapping' which typically requires two people having to walk out onto the live railway line, carrying more than 30kg of kit.

Taking on Clapham Junction and Guildford stations

Network Rail took over management of Clapham Junction and Guildford stations in April 2018 to support future redevelopment. Deep cleans and toilet refurbishments at both stations have since been completed. Further improvements for passengers are to follow, including improvements to retail units, additional seating and the introduction of 'soft services' to maintain cleanliness at Clapham Junction.

Hot weather/speed restrictions removal plan

The very hot summer saw a number of speed restrictions put in place across the route due to ground stability being affected by the heat. We have continued to deliver a robust plan to remove them, which has seen the number halved since October 2018, from 72 to 38.

Land Sheriffs

Land Sheriffs are now working alongside Network Rail and the British Transport Police across the route, patrolling areas prone to incidents which can affect the operational railway, such as trespass, vandalism and deliberate level crossing misuse. The aim of this initiative is to deter and prevent incidents which can cause late-running trains and pose safety risks. Incidents of this nature have caused 300,000 minutes of passenger delays in the last year.

Community safety

Our community safety team has delivered rail safety sessions to more than 26,000 young people and 1,000 adults across the route, and we have formed partnerships with Athletic Football Club Bournemouth, Brentford Football Club, Portsmouth Football Club, Southampton Football Club and England Boxing. Helping keep people safe on the railway also helps improve train performance for passengers.

Diversity and inclusion

The Wessex route is the most improved route in terms of an increase in female staff members, with a near two per cent increase in the last year, taking the proportion of females on the route up to 13.6 per cent. Diversity and inclusion on the route has been boosted with the launch of Women in Rail Hampshire, reverse mentoring with senior leaders linking up with junior members of staff and delivering 50/50 gender split on recruitment for staffing Waterloo International Terminal.

Case Study

Efficiencies

We have used new technology to reduce Schedule 8 payments and improve performance by introducing a high-speed clamping system to deal with track defects more quickly. The system means we have reduced the number of emergency speed restrictions required which can cause delays, and can re-introduce trains at their normal line speed, instead of 50mph.

In the year ahead

It is an exciting time for Network Rail and the Wessex route. In February 2019 we announced changes to the way we are structured, to put us in the best position to deliver our CP6 commitments. This includes the creation of a new Southern region, supported by four routes – Wessex, Sussex, Kent and Network Rail High Speed. These changes will enable more local decision making, improve responsiveness and relationships with our regional stakeholders, and will help us put more focus on improving train performance and putting passengers and our customers first.

To deliver our purpose over CP6, and meet our strategic business plan commitments, we have been awarded more than £2bn of funding - this is 20 per cent more than we were awarded in Control Period 5 - which will be invested across the route. This is really good news, as in setting our business plan we engaged with our stakeholders, and the wider industry, to ensure we achieved the best possible outcome for all.

This funding will support the operations, maintenance and renewals of our existing infrastructure, such as stations, tracks, bridges and signalling equipment. Service improvements from enhancement projects will be funded and delivered separately on a rolling basis with the Department for Transport and third-party investors. This can include anything from a new lift at a station to improve access, through to a major capacity enhancement to make room for more trains on our tracks. This additional investment in the railway will bring further economic benefits across the region.

Wessex's team of more than 1,800 people will be working 24/7 across the route, delivering value for money services for our communities, passengers and freight services. We will be doing all this jointly with our train and freight operating companies, particularly SWR, to ensure we maintain focus on the right outcomes for our customers.

Andy Thomas,

route managing director, Wessex

15 July 2019

Track work at Sydney Gardens, Bath

Western

2,700 employees

2,200 services per day

92m passenger journeys per year

650 level crossings

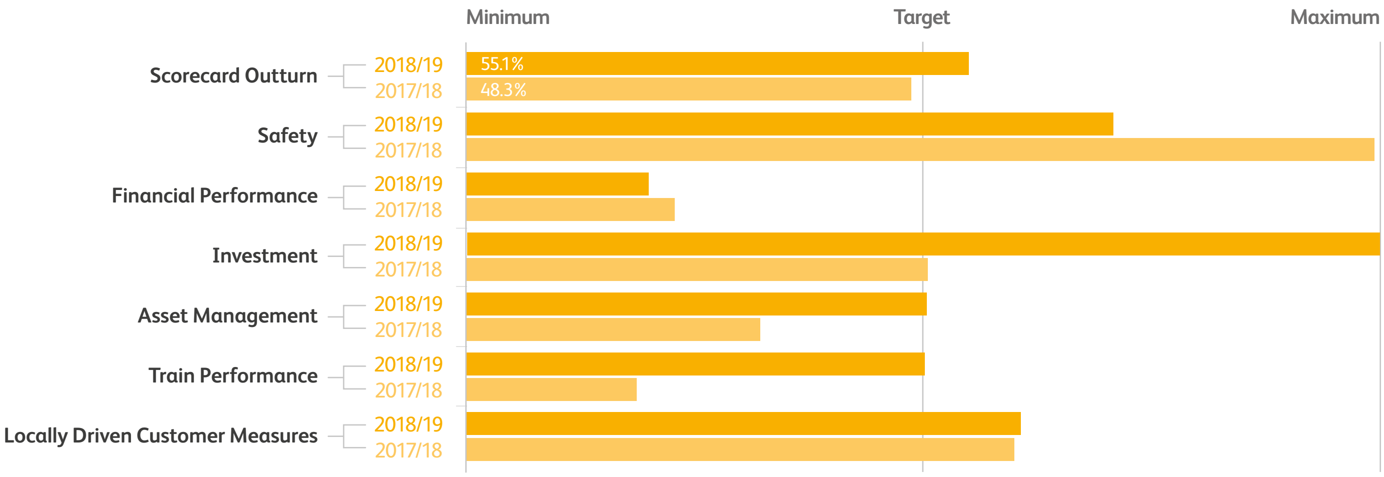
2,839 bridges

The Western route stretches from London across the Thames Valley to Oxford, Worcestershire, the Cotswolds, the West and South West, serving some of Britain's most important towns and cities. We own, maintain and operate 1,847 miles of track and manage London Paddington, Reading and Bristol Temple Meads stations. We transport hundreds of thousands of workers on their daily commutes and connect national and international travellers with some of Britain's most popular tourist sites. For many people, their first experience of the UK is the rail line linking Heathrow, Europe's busiest airport, to the Western route's busiest and most iconic station, London Paddington.

In February 2019 we announced changes to the way Network Rail is structured in order to better deliver for passengers and freight users. This means that in Control Period 6 (CP6) Western will become part of the newly formed Wales and Western region. The Wales & Borders route and the Western route will remain separate within the new regional structure. Both routes will benefit from devolution of more activities and accountabilities to the route and regional structures that are being put in place. This will help improve efficiency, streamline planning and enable faster decision making so that we can be closer to our stakeholders and enable us to be more passenger focused.

Key scorecard targets

Western continued



Scorecard commentary and activities in the year

Putting passengers first – delivering a reliable, high-performing railway

Passengers experienced poor train performance for the first half of the year, negatively affected by the impact of ongoing improvement works, poor track geometry, train detection equipment faults and issues with new rolling stock and train crew availability.

Throughout the year we worked closely with our alliance partner Great Western Railway (GWR), and other operators on the route, to improve performance. Our activities included specific area improvement plans, improved and integrated operations, greater control of track access, a reduction of temporary speed restrictions, improved real-time network management to reduce delay per incident, and plans to improve asset performance. In the mid-point of the year, the Office of Rail and Road requested a submission setting out these steps being taken.

By December 2018 better-working new trains, electrification to Bristol Parkway and Newbury, doubling the tracks from Bristol Parkway to Bristol Temple Meads, more reliable infrastructure and signalling, reduction in speed restrictions — supported by the area improvement plans and new ways of working — all contributed to a more reliable, better performing railway. By the end of 2018/19 we were able to deliver the best train performance since 2012. While missing its primary target, GWR performance significantly improved in the latter half of the year. Heathrow Express and TfL Rail were the only two operators, out of four nationally, to beat their public performance measure (PPM) targets for the year.

Freight performance was similarly a year of two halves; performance was negatively affected by final electrification works during the first half of the year, but this recovered significantly during the latter half of the year. Around seven million tonnes of aggregate was moved over the course of the year, boosted by the re-opening of the line to Tytherington Quarry in South Gloucestershire to help remove waste from HS2 works at Old Oak Common.

Taking on board the lessons learnt elsewhere in the UK following the introduction of the May 2018 timetable, we agreed with operators, including GWR, to defer the introduction of the enhanced December 2018 timetable to a combination of May and December 2019. This decision was taken to ensure that any timetable changes would only be introduced when we were confident that their introduction would not have a negative impact on passengers.

Our close collaboration with alliance partner GWR was recognised across the industry and we were jointly awarded ‘best collaboration’ at the 2018 Rail Partnership Awards and ‘rail team of the year’ at the February 2019 Rail Business Awards.

Assisting passengers at London Paddington station

Western continued

Case Study

Putting passengers first

Through our alliance with GWR we introduced a joint industry approach to improving passenger satisfaction by sharing insights data and more regular customer satisfaction measures to drive improvements in the key areas important to passengers. We worked collaboratively to develop ideas for passenger improvements across all levels of our companies from front line staff through to station management.

During 2018/19 we were able to implement a suite of physical improvements to our managed stations including:

- Free water bottle refill points - with over 14,500 refills taking place at Paddington in the first two months of installation.
- Free to use toilets at London Paddington three months ahead of schedule and improvements to the toilets on Platform 1.
- Deep cleaning at all of our managed stations.
- Two new entrances at Bristol Temple Meads, to reduce overcrowding and congestion.
- Updates to Customer Information Systems at Reading to install estimated time of arrival for intermediate and destination stations.
- 53 new seating benches providing a total of 236 new seats at Reading, Bristol Temple Meads and London Paddington.

In CP6, we will continue to improve passenger experience at our managed stations, including improved customer service training and making our stations more accessible.

Everyone home safe every day

Ensuring ‘everyone home safe every day’ is critical to our work. After a strong start, we were disappointed not to meet our lost time injury frequency rate target for the year. This was a result of a high number of slips, trips and falls experienced by our colleagues. To counter this, we are continuing to promote improved risk awareness, better manual handling techniques and a tidier railway.

As part of our Cornwall resignalling scheme, we delivered new miniature stop-light installations at six level crossings and permanently closed three level crossings, removing risk entirely.

At Reading station, we worked to significantly improve wayfinding to the lifts, notably reducing the number of passenger accidents on the escalators.

Supporting jobs, housing and economic growth

This year, we delivered the final elements of the significant transformation of the Great Western Main Line in England. By December 2018, we had successfully electrified to Bristol Parkway and Newbury. Platforms were extended at several stations on the North Cotswolds line and in Wiltshire and Gloucestershire to cater for longer GWR trains.

The tracks between Bristol Temple Meads and Bristol Parkway were doubled this year to improve performance and reliability, removing the bottleneck which often delayed passenger and freight services.

Cornwall resignalling work was completed on time to improve the resilience of day-to-day services and pave the way for additional services from May 2019 and the doubling of passenger services between Plymouth and Penzance in the December 2019 timetable. Remodelling and resignalling work at Oxford to deliver more capacity and improve resilience was also completed in the summer of 2018.

These projects, and our performance improvement plans, were the drivers behind the significant improvement in punctuality and reliability of passenger services that started in period 10 and continued to the end of the year, resulting in the best performance since 2012.

Work to enable the Elizabeth line continued with platform extensions at Acton Main Line, Ealing Broadway, West Ealing and Southall, all completed in 2018. Large flood drains were successfully installed at Cowley Bridge in Devon to significantly reduce the risk of the services being disrupted by flooding in the area, and a public consultation was undertaken on detailed proposals for a Western Rail Link to Heathrow (WRLTH).

In February 2019 the Department for Transport confirmed funding to enable us to start the first phase of the South West Rail Resilience programme (SWRRP), maintaining the vital rail link between Devon, Cornwall and the rest of the UK.

Finally, we continued to support the development of MetroWest 1 and 2, local and combined authority projects to improve suburban services for Bristol, Bath and the surrounding area.

Affordable and efficient

The route performed strongly, delivering all key renewal volumes which resulted in the financial performance measure being positive for the first time during Control Period 5 (CP5). This was the result of efficiencies made, such as improved delivery in high output volumes and the use of new technologies. All other financial performance targets were negatively impacted across the year.

Improved train performance from period 10 onward saw a return of Schedule 8 income to the route. This was not able to offset the overall negative position which was the result of much larger Schedule 8 payments due to several large incidents that occurred during the first half of the year. Our enhancement financial performance measure was missed because of the updated anticipated final cost for electrification of the Great Western Main Line. However, this update was in line with our estimates reported in the Hendy review and all key milestones have been delivered since.

Great people, great culture

Our people are our greatest asset. This year we launched our Great People Manager programme designed to improve leadership skills and people management capability across the route. By the end of the year, 56 managers had been upskilled.

To support a more diverse route, more than 70 per cent of colleagues undertook the ‘Everyone’ diversity awareness training programme.

We also made additional funding available to improve workplace accommodation and delivered several upgrades to accommodation for maintenance, operations and office-based colleagues.

Case Study

Efficiencies

During 2018/19 we achieved over £4 million of efficiency in our structure’s renewals work, through increased delivery of track high output volumes, the use of new technologies to renew tunnels and a different approach to designing new structures. This included changing the design for Lusty underbridge works, near Bruton in Somerset, to more specifically targeted repairs, identifying alternative access point arrangements for work at Chalford and amending the design solution at Barnards Lock to a deck replacement requiring less possessions.

In the year ahead

Our focus for 2019/20, working collaboratively with GWR and other train and freight operators, is the successful and smooth delivery of the May and December 2019 enhanced timetables. Enabled by the investment we delivered in CP5 these new timetables will deliver new services and faster journey times for passengers.

We will continue planning for the implementation of our two largest renewals in CP6; the modernisation of train detection equipment outside Paddington to reduce delays, and the renewal of Bristol Temple Meads’ historic roof to ensure its safe continued use.

Working with Transport for London, we will continue to work together in delivering the new Elizabeth line. In Devon we have started to rebuild the sea wall at Dawlish as part of the South West Rail Resilience Programme.

Mark Langman,
route managing director, Western

15 July 2019

Mendip Rail aggregates traffic at Westbury

Freight and National Passenger Operators

80
employees

600
freight services per day

3,500
miles covered every night by Caledonian sleeper

1,500
miles covered by CrossCountry

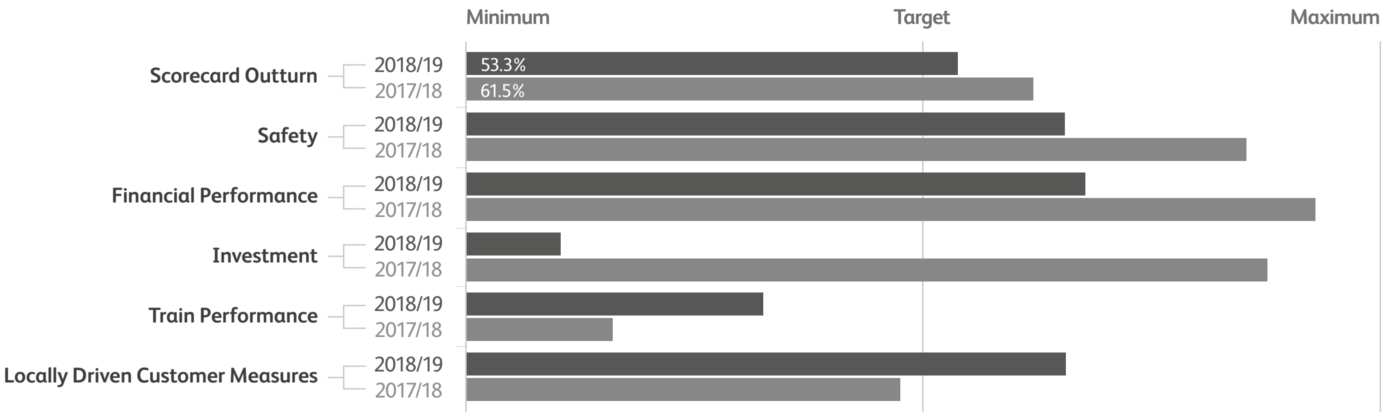
1,000
charter trains run every year across the UK

Freight and National Passenger Operators (FNPO) was established to support nationally focused customers whose interests extend network-wide and across our geographical routes' boundaries. FNPO does not directly manage assets or control train operations. We deliver outputs and solutions for our customers by working with and through the geographic routes, System Operator and other parts of Network Rail.

Our customers range from freight operating companies (FOCs), CrossCountry, Caledonian Sleeper, charter operators to aspirant open access operators, who together operate around 1,000 trains every day. This means that our stakeholder base is diverse, including train operating companies, freight operating companies, freight industry third parties (such as ports, shippers and manufacturers) and Governments, the regulator and other public bodies. Our internal stakeholders include the geographic routes and System Operator. As part of Network Rail's organisational changes, FNPO will continue to operate as a team supporting the needs of our customers and passengers in a newly created Network Services Directorate.

Key scorecard targets

Freight and National Passenger Operators continued



Our 2018/19 scorecard included 27 individual measures and our final year outurn was 53.3 per cent. We have worked closely with the routes and customers and have delivered 'on target or above' against 17 of the 27 measures on our scorecard.

Performance

We ended the year on target for freight delivery metric (FDM) at 94 per cent against target. This represents a 0.5 per cent improvement on last year. The first seven periods of the year were challenging, with a mix of storms, heat related delay and an increase in timetable related delay resulting in the year to date figure being roughly one per cent below where we would expect it. However, as a result of good asset performance, working closely with the geographical routes, lower than average disruption through autumn and a mild winter period, performance has recovered well. Our freight customers hit the target for delay caused to passenger services which ended the year at 1.8 minutes per 100km.

Looking at our national passenger operators, Caledonian Sleeper right time arrivals ended the year on 85 per cent against an 80 per cent contractual target. The first three years of the control period showed steady improvement for CrossCountry. However, the last 18 months, and this year in particular, have been more challenging. The final figure for CrossCountry PPM was 84.4 per cent against a target of 90 per cent. ORR raised concerns about this with Network Rail, placing CrossCountry performance on the regulatory escalator. We have developed performance improvement plans with CrossCountry and the routes, and the ORR has since taken the issue off the escalator.

Financial

Continued freight growth particularly in the aggregates and intermodal sectors means that we have outperformed our financial targets for the financial year by £3.5m. However, this has been partially offset by poor train performance, particularly at the start of the financial year, which led to a significant amount of compensation paid out to operators through Schedule 8. Tight cost controls, and recovery of backdated income have also assisted our financial result for the year.

Case Study

Putting passengers first

Freightliner Heavy Haul (FLHH) secured a contact with British Airways PLC (International Airlines Group) to deliver critical aviation fuel to Heathrow from the Isle of Grain in Kent. The Freight and National Passenger Operators Capacity team undertook a Service Plan Review (SPR) started in December 2018. This looked at how we could work with FLHH to understand how changing our operational requirements would enable them to meet the requirements for their customers.

One of the main considerations was the challenging gradient of Mitre Bridge Bank on the West London Line, which meant that there was a historic load restriction. Working with route and track teams we gradually tested the infrastructure by running and monitoring trains with heavier loads. The testing was success and enabled our customers to increase the number of wagons on each train from 18 to 20. This increase avoided the need for more trains on the network to deliver the fuel and makes this flow of traffic more efficient on an already congested network.

Freight and National Passenger Operators continued

Investment

We have delivered the majority of the 22 strategic freight network schemes planned for Control Period 5. This includes the near completion of a major upgrade on the Felixstowe branch line, which will enable an additiona 10 freight trains in either direction from the Port of Felixstowe. This will be a major boost for our customers and for the national and regional economy.

We did not achieve our target of delivering 90 per cent of schemes in Control Period 6 (CP6) due to the deferral of the Southampton Freight Train Lengthening Scheme. This was cancelled due to concerns over the viability of works. FNPO have commissioned an independent review, which will allow us to learn lessons and show accountability to our stakeholders.

We end the year with approximately £25m underspend on the strategic freight network fund. Our work developing Network Rail's freight estate has secured roughly £3m in private investment and has a new freight revenue of over £3m in the past 12 months.

Safety

We achieved target for four out of our six scorecard safety measures in 2018/19, but failed to achieve our target for both signals passed at danger (SPADs) and derailments.

Through the National Freight Safety Group we have spent the past 12 months working together with freight operators to build a better understanding of the root causes of SPADs. Despite this, the rail industry has seen an upward trend, and for FNPO this has resulted in 44 SPADs in the year. The vast majority of these events have seen signals passed by a very short distance and being categorised as low risk.

During this year we have experienced 13 derailments against a target of 10. There was a major derailment of multiple wagons at Hams Hall during September 2018, which blocked the main line between Birmingham and Nuneaton. The point of derailment was not on Network Rail infrastructure, however, the train continued in a derailed state and affected the main line, causing significant impacts for freight and passenger customers, as well as impacting terminal access arrangements. As a result of this we have contacted over 600 rail connected parties so that we can work with them to better understand and reduce risk related to off network maintenance.

We have also been working closely with STE and the routes to enhance the use of wheel impact load detection technology, so we can identify any adverse loading trends that might potentially lead to derailments.

Elsewhere, we continue to work with our customers to reduce the number of injuries to their staff on Network Rail infrastructure. This year we have completed 140 joint safety tours with freight operators and the results of this work are reflected in our end of year results, with six incidents against a target of 10. We will be developing further FNPO safety initiatives in CP6 with the introduction of the £22m FNPO safety improvement programme.

Case Study

Efficiencies

Buxton Freight Sidings

In March a £14 million extension to the sidings at Buxton in Derbyshire was completed. The scheme, which was funded by the Strategic Freight Network allows our customers and end users to carry more construction materials from nearby quarries in the Peak District to build major infrastructure and housing schemes across the UK.

The project was completed on time and £3 million under budget. The extra 140m of track means that freight operators such as Freightliner and DB Cargo can now run trains carrying 24 wagons of aggregates rather than 18. This is an example of an intervention that will allow for future growth in an area in we have seen a major boom over the last control period. With projects such as HS2 on the horizon, this scheme and others like it help us to meet the growing market demand for materiel.

Locally driven customer measures

Our locally driven customer measures represent targets that have been identified by our customers as key deliverables for FNPO. For our freight customers we have met targets aimed at pushing freight growth and increased reliability on the network, these include the amount of net tonne miles of materials moved, reviews of freight service delivery plans to optimise the timetable and also strategic capacity.

We've also launched an industry plan to grow freight traffic in Scotland by 7.5 per cent by 2024. The target, which was set by Scottish Ministers in the high level output specification is for new flows on the network. We will work together with the industry to deliver this growth. We also exceeded our target for freight end user satisfaction with a final year score of 78 per cent against a target of 73 per cent. Over the past 12 months we have worked closely with freight users to understand and adapt to their business requirements and this is reflected in the score.

We failed to achieve CrossCountry targets on access planning and average lateness, which help to address performance issues. We have a comprehensive plan in place

Freight and National Passenger Operators continued

to address these issues and have set realistic, agreed targets for the next year. We have hit targets for providing our charter customers with timely and reliable information, so they can better plan their business and commercial offer.

Activities in the year

- We received the go ahead for a £50m boost to our Digital Railway programme, which will see a first in class fleet of trains fitted with digital signalling technology.
- Our first multiple occupancy freight campus opened its doors in August. The site in Bristol East welcomed Tarmac as the first tenant on the rail connected site that can accommodate a further two more.
- The Buxton Freight Sidings project was completed in March. The project will help provide an economic boost for local quarries and future national construction projects, as up to 2,500 tonnes of materials could be transported by each train.
- We launched an ambitious cross-industry plan to grow freight in Scotland by 7.5 per cent in CP6.
- We held a successful conference for our charter operators in October. Items discussed included the working together to secure pathways in CP6 and the eradication of effluents from the network.
- We have worked with our customers to secure new traffic flows including a service carrying aviation fuel from the Isle of Grain to Colnbrook, which supports aviation at Heathrow Airport.
- Our charters team have worked with new operators Vintage Trains being awarded a track access contract to successfully run mainline steam services including the Shakespeare Express.

In the year ahead

Start of CP6

We continue to work with customers and internal stakeholders to deliver key outputs and commitments from the FNPO Delivery Plan and these were developed through the PR18 process.

These include a £22m safety improvement programme, freight growth targets across all routes and agreed performance metrics. Our customers and stakeholders have been involved from the beginning of the plan and will be integral to the successful delivery of that plan.

Our people

Our people strategy focuses on further developing our people capability and helping our people deliver to the best of their ability. We will continue to identify people with key skills and high potential in order to drive business performance across FNPO by developing, deploying, engaging and retaining talent. We will seek to improve the health and wellbeing of our employees as well as further improving the gender diversity, which currently sits at 38 per cent female, which is well above the company average.

HS2

In the year ahead, we will work closely with HS2 Ltd to further understand their main works civils contractors aspirations to carry materials by rail. This represents both a challenge for FNPO in terms of safeguarding existing capacity on the network for our customers but also a potential opportunity for a step-change in capacity for the future. We have a dedicated post working on the implications for our customers.

Paul McMahon,

route managing director, Freight and National Passenger Operators

15 July 2019

New retail units at London Bridge station

Property

+4%	£232m	96.6%	+1.35%	+4.33%
Increase in income from Network Rail Property	Value of our investment property portfolio £3,317m – commercial property income	Occupancy rates at our business space estate – 2017/2018 95.3 %	Network Rail managed stations like-for-like retail sales growth annualised average YTD (April to December 2018)	Network Rail managed stations retail total sales growth annualised average YTD (April to December 2018)

We are experts in helping the railway grow and improve for passengers and creating great places for communities and businesses to thrive. Our work helps deliver regeneration, housing and economic growth by developing railway-owned land and property assets to help fund the railway, reducing the burden on the taxpayer, and providing great spaces for our passengers.

Delivering vital funds for the railway through asset disposals

This year we completed the delivery of our asset disposal programme, which included the sale of our commercial estate business in England and Wales, comprising over 5,200 property assets. The estate was sold to Telerail Trillium and Blackstone Property Partners for a gross sales premium of £1.46bn (£1.42bn after working capital adjustments). Additional asset sales generated a further £46m for railway investment.

Supporting the routes to deliver for our passengers

We work alongside the routes to ensure the efficient operation and future expansion of the network. This has included helping protect the railway and its heritage, while maximising the use of available land on major projects such as Network Rail's electrification programme and HS2, as well as providing support in times of major disruption.

New retail units at London Bridge station

This year, our property experts helped respond to the Loch Eilt derailment by coordinating access and permissions with local landowners to install the largest landslide barrier on Network Rail infrastructure.

Developing sites through partnerships and delivering land for housing

In the past year we have delivered £39.1m in development income and land for 1,081 homes. So far, we have delivered land for 5,037 homes, with a target to deliver land for 12,000 homes by 2020.

Our Development team helped secure outline planning permission for the York Central development which is one of the largest regeneration sites in England and includes 2,500 homes and a commercial quarter which will create up to 6,500 jobs.

Through Solum, our joint venture with Kier, we continue to deliver mixed-use regeneration including much needed new homes close to transport hubs. In May, we received planning consent to develop the Goods Yard site at Bishop's Stortford station, which will transform the surrounding area and deliver 586 new homes, 30,000sqft of office space and enhanced retail and amenities.

Helping to deliver great stations for passengers

We continue to help create world-class managed station environments for passengers, customers and communities, by working collaboratively with teams across Network Rail.

This year, our national Stations team worked with Network Rail and industry to devise strategies that improve overall passenger experience by mapping customer journeys.

Advice has also been provided to route teams in areas including wayfinding, operations, station transfers, soft services, master planning and customer service. Smaller station investment has also been secured via Access for All and National Stations Improvement funds. Funding for new stations has been secured via the New Stations fund.

We worked with the routes to introduce free water fountains and toilets in the majority of our managed stations and committed to ban retailers from supplying plastic cutlery and cups, implemented a coffee cup recycling scheme and expanded the roll out of coffee ground recycling to all managed stations by the end of 2020.

Our Retail team opened 47 new retail units and introduced 15 new brands, further enhancing managed station environments for passengers. We also awarded a £280m station advertising contract to JCDecaux on an improved five year deal. Between April and December 2018 our like-for-like sales increased by one per cent despite challenging conditions in the wider retail environment.

Key initiatives we have underway

We are supporting Network Rail's commitment to putting passengers first by devising a regionalised model for Property. This will be in place from the end of 2019, with responsibility for regional property activities fully transferred by summer 2020.

In Control Period 6 we will continue to champion our sustainable revenue model, create great places for passengers and communities, be more ambitious on large scale developments and deliver new streams of investment, while supporting the operational railway. We will focus even more on putting passengers first and continue to highlight the important role stations can play in our towns and cities as areas for positive growth and regeneration.

Group Digital Railway

In 2018/19 the Digital Railway programme continued to work with route colleagues to build the skills and capability needed to transform the network with digital forms of signalling and train control. During the year the first traffic management schemes on the network went live and the Secretary of State for Transport publicly endorsed Network Rail's digital railway strategy for modernisation over the next 15 years, when more than half of all existing traditional signalling systems will become obsolete.

- To support the delivery of the first major inter-city digital railway on the East Coast Main Line (ECML), we launched major procurement exercises to identify two strategic private sector supply partners. Firstly, a train control partner will be appointed to deliver digital train control systems on ECML under a framework agreement worth up to £1.8bn. Secondly, a railway systems integration partner will be nominated to work together on designs, plans, phasing, costs and realising benefits.
- A year to the day after signing the contract, the first traffic management system on Great Britain's mainline railway was commissioned on the Western route. The Luminate digital system helps to control trains between London Paddington and Bristol and is in use at both the Operations Control Centre in Swindon and the Signalling Control Centre in Didcot. The system is integrated with the scalable signalling control systems at Didcot and helps to reduce delays by identifying conflicts and allowing resolution before delays are caused.
- Traffic management systems went live in South Wales and on the Anglia route involving the ARAMIS system which provides real-time enhanced data to operators, flags potential conflicts and helps controllers proactively manage services.
- Both systems minimise the knock-on delays that can cause widespread disruption after an incident and allow real-time re-planning, so that services can quickly return to normal.
- In December 2018, the Rail Sector Deal (a cross-industry and government approach to boosting productivity and employment in the rail sector) was launched. We are leading the Rail Sector Deal Support Group on behalf of Network Rail, which aims to facilitate collaboration across the industry whilst ensuring that benefits for railway users are realised.

This year we have also put relentless focus on improving our data management and analysis, and telecommunications operational performance, putting passengers and freight outcomes at the heart of what we do. For example:

- Our asset information team continued to deliver the asset data, analysis and insight required to help the operational railway make better informed decisions. This year the plain line pattern recognition (PLPR) service increased live patrols to cover over 8,500 miles of track and a second inspection suite was opened in Derby, increasing the resilience of this service. PLPR is not only more effective and efficient at finding some types of track fault than the basic visual inspection approach it replaces, it also reduces the need for colleagues to be out on track.
- Our telecoms team successfully completed the operational and reliability trial of the version 4.0 interference resistant Global System for Mobile communications – Railway (GSM-R) cab mobile software and hardware, ahead of the national deployment programme, involving 11,800 cab radios, starting in autumn 2019. This £55m upgrade programme mitigates interference from public mobile network operators to the GSM-R network and will deliver significant safety and performance benefits as well as improvements to passenger experience. The trial involved over 100 driving cabs of differing classes, operating in different parts of the country and in January 2019, successfully reached the required number of 50,000 operational hours without attributable fault, proving the V4.0 solution meets its reliability target.

Control Period 6 (CP6)

During CP6, we will improve telecoms operational performance and safety for passengers and freight users by further improving GSM-R coverage and resilience as well as supporting the delivery of signalling schemes. We will also simplify and reduce cost and complexity of our operations by migrating from legacy telecoms networks to our next generation optical internet protocol (IP) telecoms network.

In addition, we will continue to work closely with industry to support the adoption of digital railway schemes where benefits to increase sustainability, capacity and reliability can be realised. A traffic management partner will be appointed to support the introduction of digital train control as part of the Transpennine Route Upgrade and the East Coast transformation programme.

Putting people first

The development of our people strategy for the next five years, has identified nine key people outcomes for Network Rail that will guide and focus our further devolution. Aligning to the overarching vision of putting passengers first, there is a clear synergy to our people. As transformation of Network Rail continues, we are proud that people are at the heart of this as we move to become a more customer, passenger and freight-user focused organisation.

One of Britain's best employers

What we look like – key facts and figures

Employees	Gender	Race	Sexual identity	Age
40,925 as of March 2019	Women **17.30%** Men **82.70%**	**8.51%** black, Asian and minority ethnic employees; **13.66%** unknown; **2.12%** prefer not to share, **76.21%** white	of those that share their data less than **1%** indicated that they were LBGT+	**3,002** people over 60; and **569** people over 65

People Strategy

This year work has continued to inform our people strategy. Following significant research across all stakeholder groups, our people committee – a subset of our executive leadership team – was created to help us make more people-focused decisions. The committee confirmed nine outcomes as shared success criteria for the organisation.

Network Rail is a place people are proud to work

Network Rail is one of Britain's best employers

Network Rail is leading the way in making the railway industry more diverse and inclusive

Network Rail prioritises mental health and employee wellbeing, and supports and develops resilience in its people

Network Rail attracts, develops and retains dedicated and committed people

Network Rail leads the industry in planning for, and developing, leadership and skills to meet the future needs of the railway

Network Rail is a place people feel safe, looked after, and treated with dignity and respect

Network Rail encourages great leadership, and is a place where there is mutual trust and respect between line managers and employees

Network Rail's environment enables everyone to reach their full potential

Putting people first continued

Making us more diverse

20by20 initiatives

- **20by20** – Our initiative, launched in 2017, to increase the percentage of women working at Network Rail from 17 per cent to 20 per cent by 2020.
- **Facilities** – Our commitment to improve the toilet and wash facilities for both men and women working on track and in depots is moving at pace. We've piloted new port-a-loos in LNW, and in Scotland, we have introduced welfare packs which include seat covers and hand sanitisers which are available to anyone on the front line.
- **Gender diverse recruitment panels** – we have made concerted efforts to have a more diverse range of people on our interview panels including having more women involved.
- **Women in rail** – we continue to support this initiative and have been pivotal in the regional developments in the South East, Wessex and the North.
- **Access and inclusion** – we're improving the accessibility of our stations and built environment, with significant changes in passenger assistance. We're proud of our built environment accessibility panel (BEAP) made up of disabled people who act as our access consultants.

  The BEAP meets every month to review our projects and plans and are helping us to put the passenger first. Examples of projects they have recently reviewed include London Bridge and Waterloo stations.
- **Disability confident leader organisation** – this sees us participating in the Department for Work and Pensions (DWP) business leaders' group to improve access to employment for disabled people. Being a disability confident leader means that we guarantee interviews to disabled applicants who meet the essential criteria.
- **Employee networks** – the membership of our six employee networks (Archway, CanDo, Cultural Fusion, Inspire, Multi-Faith, Myriad) went up to 3,000 people this year. Our networks make an important contribution to our business by being involved in consultation on policies, such as reasonable adjustments and flexible working. The members are also important ambassadors for Network Rail attending science, technology, engineering and maths (STEM) events and career fairs, like the Reach society, for black, Asian and minority ethnic students, where over 1,600 young people attended.

Planning and developing skills to meet the future railway needs

STEM Ambassadors

To support the UK industrial strategy, and to help build our talent pipelines for the future, we have developed a schools' outreach programme for both primary and secondary school students. We have trained more than 100 employees to deliver primary school activities.

Stay safe with Thomas

For our younger audience, we teamed up with British Transport Police (BTP) and Thomas the Tank Engine to help children learn how to safely use the railway and to enable parents to discuss rail safety with their children. The free e-book version is available to download from the Network Rail website.

The Big Bang Fair

The Big Bang Fair is the UK's largest celebration of science and engineering for young people, where 80,000 children attend over four days. Network Rail is proud to support this fantastic initiative to encourage children of all backgrounds to get involved in science and engineering. In addition to having a stand at the main Big Bang Fair, Network Rail sponsored the Innovation in Collaboration award. This award recognises excellence in collaboration and innovative thinking, within the fields of transportation, the environment and digital technologies. This year the Network Rail stand was designed as a station platform with a variety of interactive activities. Rail industry partners joined us to create an overarching theme of innovation and sustainability. Over the course of the four days, 1,170 children completed the 'My Skills, My Life' quiz and thousands more engaged with Network Rail. The feedback from both children and volunteers was excellent.

"Knock your socks off" - work experience programme

"Knock your socks off" is a work experience programme run by LNW, showcasing the variety of opportunities offered at Network Rail.

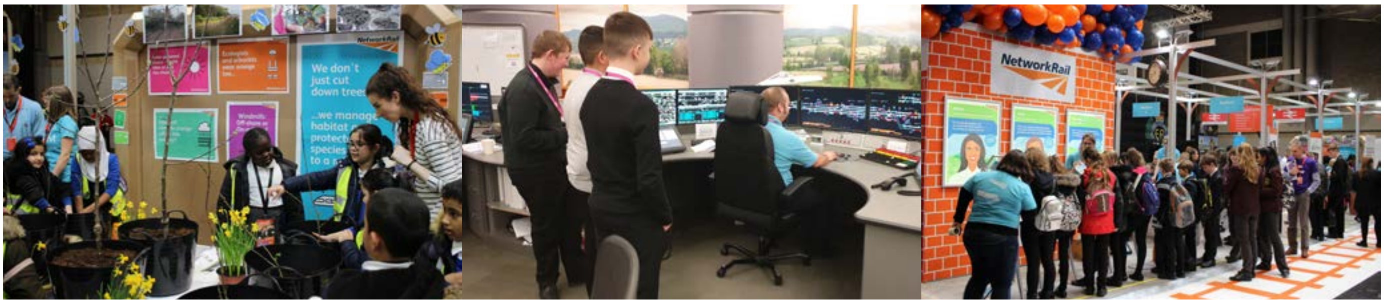
"Knock your socks off" was developed with two key objectives; to fill specific skills gaps and promote STEM as part of our strategic workforce planning, and to focus on the people outcome 'Network Rail attracts, develops and retains dedicated and committed people'.

It is a week-long programme that runs 12 times a year for 14-17 year olds, covering areas from Cumbria to the West Midlands. More than 100 students have participated in the programme and more than 20 of those in their final year of college have applied for our 2019 apprenticeship programme.

Work experience with the Prince's Trust Wales

In partnership with the Princes Trust and Absolute Training, the Wales Route ran two pilot 'Get into Railways' pre-apprenticeship programmes in October and November 2018 for 30 young people from disadvantaged and under-represented groups. Both pilots lasted two weeks, with one cohort based around Pontypridd in South Wales and the other around Wrexham in North Wales. While both groups were of mixed gender, we specifically targeted female applicants to form around 65 per cent of each cohort. The programme was very well received, and plans continue to run this programme in 2019.

Putting people first continued



Attracting and developing committed people

Apprenticeship facts

In 2018/19 825 apprenticeships started on 20 different Network Rail programmes. We introduced five new apprenticeships, including civil engineering degree, learning and development practitioner, and level four engineering advanced technician. Apprenticeship starts were comprised of 20 per cent women (with more than 10 per cent of new entrant engineering starts being women), and 30 per cent BAME, which was consistent across new entrants and upskilling (providing existing colleagues with development and qualification opportunities).

Since 2016, 1,282 engineering and 762 non-engineering apprenticeships have been taken up. The investment in developing our employees over the apprenticeship programmes totals more than £45m.

Graduate facts

Network Rail recruited 152 graduates across nine different schemes in 2018. The focus on attracting more women into the industry showed great success in the graduate recruitment – with women accounting for 33 per cent of the intake, which was a seven per cent increase from 2017.

Enabling people to reach their full potential

'Returners' programme

The 'returners' programme, run in the Property function, won the 2018 WISE Career Award, in recognition of the work they have done to attract women returners back to STEM roles. The programme addresses challenges with diversity and skills shortages, and supports qualified individuals to come back into work while bridging gaps in knowledge or confidence. The diversity of the Property team increased from 36 per cent at the start of the 'returner' programme in January 2017, to 39 per cent.

Mutual trust and respect

Gender pay gap reporting

In December 2018, ahead of the UK government's deadline, we shared the outcome of our gender pay gap reporting. It showed an incremental reduction from 11.5 per cent (reported in 2017) to an 11.2 per cent pay gap reported in 2018. Our 20by20 project is enabling us to focus on areas that will, in the long term, see this gap reduce. However, as some of this focus is on increasing our graduate and apprentice populations, in the short term, we may see an increase in our pay gap in coming years due to the lower level pay for these roles.

Communications

Our internal communications reach improved significantly as we launched a new intranet in 2018, accessible for the first time to our employees on mobile devices. The new intranet platform runs on Microsoft 365, enabling a whole suite of online support for employees. Yammer is embedded in the intranet, which has enhanced colleagues' ability to comment and interact on news stories.

A place where wellbeing and safety matter and people are proud to work

Menopause support programme

Our menopause support programme, piloted in 2017/18, has received some excellent recognition. The Chartered Institute for Personnel and Development (CIPD), the professional body of HR, has not only supported and endorsed our programme, but it has rolled it out to its members as best practice.

Employee engagement

'You said. We did' continues to be a positive theme across Network Rail, encouraging feedback and action from employees to managers alike and inspiring great stories. Our route businesses and functions use this to positively engage with their teams. The importance of the whole employee experience came to the fore in 2018, along with our people strategy, and is embedded in our Control Period 6 plans.

Being responsible

Environmental Management

Biodiversity

In May 2018, our essential vegetation management activities attracted extensive media attention culminating in the Rail Minister requesting all non-safety critical tree felling to stop and a review of Network Rail's vegetation management practices across England and Wales.

Chaired by John Varley and supported by RSSB, the 'Varley review' report, 'Valuing nature – a railway for people and wildlife' outlined six recommendations including: creating an ambitious vision for the management of the lineside estate, managing our lineside estate as an asset, and vastly improving communication with our neighbours and stakeholders.

We have already improved the way we check for breeding birds through briefing staff and contractors in advance of the 2019 'nesting season'. We are finalising our response to Government on the cost of implementing the recommendations of the review with work on any accepted recommendations to start in CP6.

Waste

We are a major recycler of waste and generate a wide range of waste types including construction, commercial and hazardous wastes. In 2018/2019, we generated over 2.1m tonnes of which 98 per cent was diverted from landfill – exceeding our 95 per cent target. A key initiative this year was the launch of the Surplus App where sites can sell unwanted items to other Network Rail sites allowing them to be reused rather than sent to landfill. Since launching in January 2019, over 470 employees have trialled the app.

We have worked closely with our waste contractors to improve our waste management performance by carrying out site audits to identify and implement solutions to increase our recycling rates and to reduce the amount of waste we send to landfill.

	2018/19	2017/18
Waste diverted from landfill	98%	94%
Re-used	46%	710,818 tonnes
Recycled	48%	1,197,820 tonnes
Recovered (e.g converting waste material into energy)	4%	106,556 tonnes
Disposed	2%	120,852 tonnes

Environmental incidents

Network Rail has a significant interaction with the environment. In 2018/2019, there were 634 environmental incidents recorded. Eight of these incidents were category 1 (major environmental incident) and 12 were category 2 (significant impact). Seventy environmental incidents were category 3 (minor incident) and 482 were category 4 (negligible environmental impact). Of the environment incidents recorded 423 were spillages (e.g. oil or chemicals) and six were related to protected sites and species. Four environmental incidents were related to noise and 90 were related to fly-tipping. There were 10 environmental incidents that were categorised as 'other'.

There were 7,756 environmental close calls reported in 2018/2019.

In 2018/19 we had a total of 491 incidents recorded, compared to 739 in 2017/18, a reduction of 44 % . During 2018/2019 we reviewed the reporting and investigations process and identified areas of improvement which are currently being embedded. We plan to follow up this work to identify further control measures including working closer with TOCs/FOCs and contractors. We have pilot training in place in Western Route, which has seen local improvements and we plan to roll this out further. We are currently updating our standards and the new prevention of pollution to land and water level two standard will further improve reduction in, and management of, environmental incidents.

Being responsible continued

Energy and Carbon

Network Rail provides the energy needed to keep the railway running and it is therefore a core part of our business. Reducing our energy use reduces operating costs, as well as our carbon footprint and improves our environmental impact.

In 2018/19 we reduced non-traction carbon emissions by 8.3 per cent compared to the previous year, with total reductions against the CP4 exit baseline of 16.8 per cent exceeding our 11.2 per cent regulated target for CP5.

Our Strategic Business Plan commits us to reducing non-traction energy consumption by 18 per cent over the course of CP6 – this new target complements one to reduce carbon emissions by a further 25 per cent over the same timeframe. We are also working to develop long-term science based targets, demonstrating our commitment to tackling climate change and our aim to deliver a low-carbon railway.

We continue to develop strategies and design practical solutions to decarbonise rail and work in partnership with the wider rail industry through the Decarbonisation Taskforce to respond to the Government's rail decarbonisation challenge.

Weather Resilience and Climate Change Adaptation (WRCCA)

Many rail assets are vulnerable to weather and controls are in place to mitigate the impacts, ranging from speed restrictions during high temperatures and winds to investments in improving the condition of high risk assets. In 2018 extreme cold weather earlier in the year and the summer heatwave impacted many passenger journeys. We are improving our seasonal planning and improving our understanding of how climate change could amplify weather related performance and safety issues.

The focus this year has been on developing guidance and tools to support assessment of climate change impact. Routes are updating their climate change adaptation plans and the chief engineers asset teams agreed to develop action plans for integrating climate change within policies, standards and processes. The foundations are in place for a significant shift in the way we manage WRCCA during CP6.

Social Performance

Network Rail is committed to doing business in a responsible way, which includes a commitment to do all that we reasonably can to prevent all forms of modern slavery in any part of our business and our supply chains. The steps taken to prevent modern slavery are described in our modern slavery statement, which can be found on Network Rail's website: www.networkrail.co.uk. Network Rail does not tolerate any form of bribery in its business; our Anti-Bribery policy is also available to view on the website.

Measuring social value

We continue to improve our social performance, recognising our duty to spend taxpayers' money in a socially responsible way that benefits our passengers and the communities we serve. This year we launched the Network Rail Social Impact Tool, based on the rail industry's Common Social Impact Framework, as a way of recording and reporting social impact activities. It allows us to evaluate the social value of our work and identify new opportunities to improve passenger experience and create benefits for communities living and working around the railway. The CP6 social performance strategy expands on this by ensuring capital delivery projects have social value plans in place, and by driving innovation through community use of underutilised land, volunteering and charitable giving.

Volunteering

This year 11 per cent of Network Rail employees used at least one of their five days of volunteer leave, supporting charities and community groups across the UK. This is a 15 per cent increase on last year with over 8,300 days spent investing in local communities, supporting vulnerable people and local causes. Contributions include careers workshops in schools promoting Science, Technology, Engineering and Maths (STEM) subjects to young people, community support to foodbanks and homeless shelters, and planting trees in major cities to improve urban access to green spaces. Northern Programmes colleagues volunteered to engage 388 primary school students on the topical issue of plastic pollution as part of World Environment Day encouraging students to recycle their own plastic by creating useful and fun items with waste from their homes.

	2018/19	2017/18	2016/17
Number of days spent volunteering with charities and community groups	8,304	6,748	3,895

Being responsible continued

Charitable Giving

Our two-year charity partnership with Barnardo's ended in March 2019, having fundraised over £209k. Our new charitable giving programme 'Routes out of Homelessness' launched in April 2019 and focuses on tackling rough sleeping and homelessness across Great Britain for the duration of CP6. We will launch a series of national and local partnerships over the coming year with the aim of supporting vulnerable people seeking shelter around Britain's railways. In addition to our corporate charity campaigns, 2018/19 saw 4,600 people using our Payroll Giving scheme to donate to their chosen charities; this year Network Rail employees have donated on average £51,300 to charity per month. Train passengers have donated a further £1.5m through charity bucket collections at our managed stations.

Keeping Communities Safe

Our community safety campaigns to reduce trespass on the railway across Great Britain intensified this year. Working with industry partners, we launched the You Vs Train campaign targeting the more than 25 per cent of trespass incidents reported to involve young people. Massive media coverage and social media support meant we reached 174m people in the first four months. In schools, our award-winning partnership with LearnLive has already reached 950,000 students and new sports, education and community partnerships have been arranged for CP6.

Changing societal attitudes require a long-term approach, reaching all age groups. We launched and distributed 200,000 'Stay Safe with Thomas' publications featuring Thomas the Tank Engine to engage younger minds, and those of their parents, in our important safety messages.

Suicide Prevention

268 suicides took place across the rail network in 2018/19, a 7.2 per cent increase on the previous year, but 3.5 per cent less than the rise experienced at the end of 2017/18. There is now a consistency around the number of people taking their lives on the railway each year allowing the impact of new prevention methodologies to be understood more fully in the industry's ongoing commitment to support the government's stated desire to reduce the national suicide rate by 10 per cent by 2020.

The industry worked closely with local authorities and health agencies to promote early intervention for those in emotional crisis, whilst at the same time deploying physical and psychological suicide prevention measures at known high risk locations across the network. Its partnership with Samaritans and a specialist British Transport Police unit continues to grow as does leadership of the transport sector's response to suicide in the wider community, through campaigns such as, Small Talk Saves Lives, and ground-breaking anthropological research at suicide 'hotspots'.

A key activity has been training staff and passengers to intervene in suicide attempts. In 2018/19, 2,270 interventions were made – 33 per cent more than 2017/18. Of those, 22 per cent were by rail staff and nine per cent by the public.

In the Queen's Birthday Honours, 2018, Ian Stevens, the industry's lead for suicide prevention was awarded an MBE for his work in this area.

Level Crossing

Level crossings remain one of the greatest risks to public and passenger safety on the rail network. In 2018/19, working with local communities and private landowners, we closed a further 55 level crossings as part of our dedicated programme to improve community safety. This takes the total number of closures since 2009 to 1176. We further improved safety through level crossing upgrades and wider deployment of technology. We have promoted safety and awareness through targeted media campaigns, reaching broad audiences through social media and radio. By significant further rollout of red light safety equipment, our colleagues in British Transport Police are extending the impact of identifying, re-training and holding to account those who flout road traffic legislation.

We're nearing completion of our work with ORR and DfT to improve signs for footpath, bridleway and user-worked level crossings. We made good progress developing technology to improve safety at both passive and automatic half barrier level crossings ready for deployment in the next Control Period.

Socio-Economic Impact

This year we worked directly with over 3,936 suppliers, 71 per cent of whom were SMEs, spending £1.1bn directly and around £5.4bn indirectly.

Diversity & Inclusion

Our 20by20 project focuses on increasing the number of women in Network Rail and improving progression of women into more senior roles. Now at 17.35 per cent the target is to increase to 26 per cent by March 2024.

Our 'Race Matters' project aims to increase representation from black, Asian and minority ethnic people in Network Rail and improve progression into senior roles. This will link to our work on ethnicity pay gap reporting. Our diversity and inclusion strategy for CP6, 'Everyone Matters' builds on the 'Everyone' strategy and describes our plans, outcomes and how we will measure them for the next five years.

Our approach to risk management

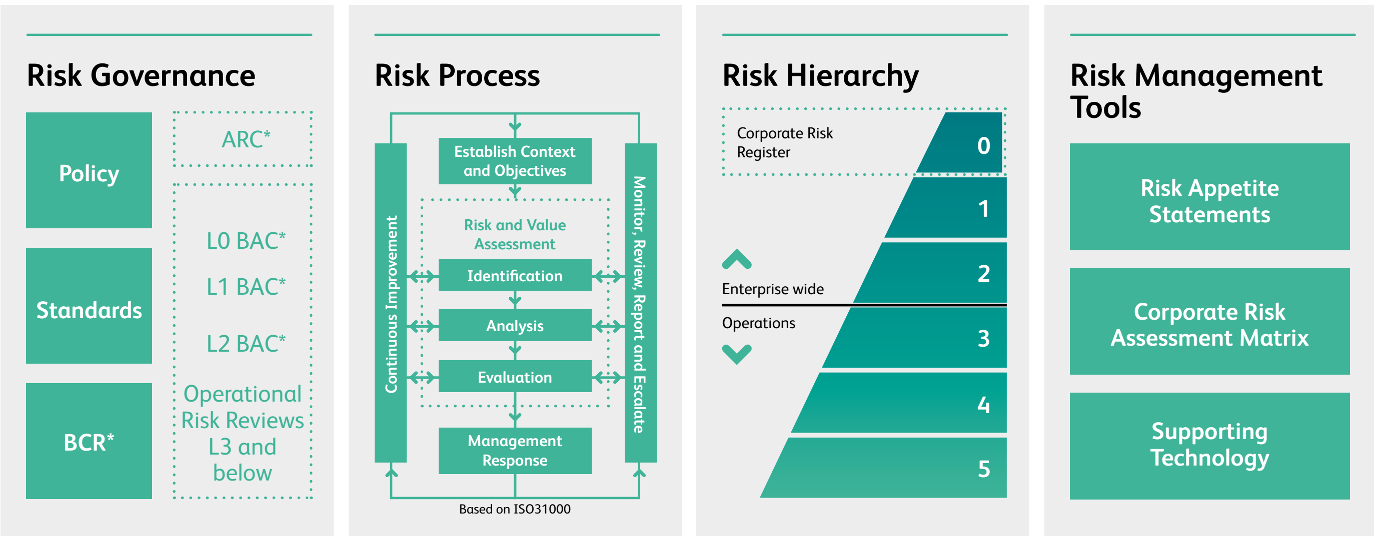
Our approach to risk management across Network Rail balances the risks associated with our operational environment with identifying opportunities to improve performance through careful acceptance of some risk. We recognise our status as a regulated rail network infrastructure provider and the importance of maintaining essential service provision.

The operational railway is continuously susceptible to changing environmental conditions. The success of the railways in the UK, measured by the growth in passenger numbers, and the continued drive for efficiency mean that we must be both flexible and innovative in our risk mitigation strategies. Our enterprise approach to risk management provides multiple opportunities to review, monitor and enhance mitigations depending on the changing conditions and challenges.

Our principal risks are outlined in the 'key strategic risks' section starting on page 70.

Embedded risk management processes

*BCR - Business Critical Roles
*ARC - Audit & Risk Committee
*BAC - Business Assurance Committee



Risk Management Culture

Risk Capabilities and Training

We take an enterprise-wide approach to risk management and have an enterprise risk management (ERM) framework in place for the identification, analysis, management and reporting of all risks to strategic objectives. The purpose of our ERM process is to identify and mitigate risks to the delivery of a safe, reliable, efficient service for passengers and freight users. Our ERM framework supports all areas of the business to recognise both threats and opportunities early. Early recognition of risk allows us to work collaboratively and proactively with customers, stakeholders and suppliers to manage our extensive portfolio of work better.

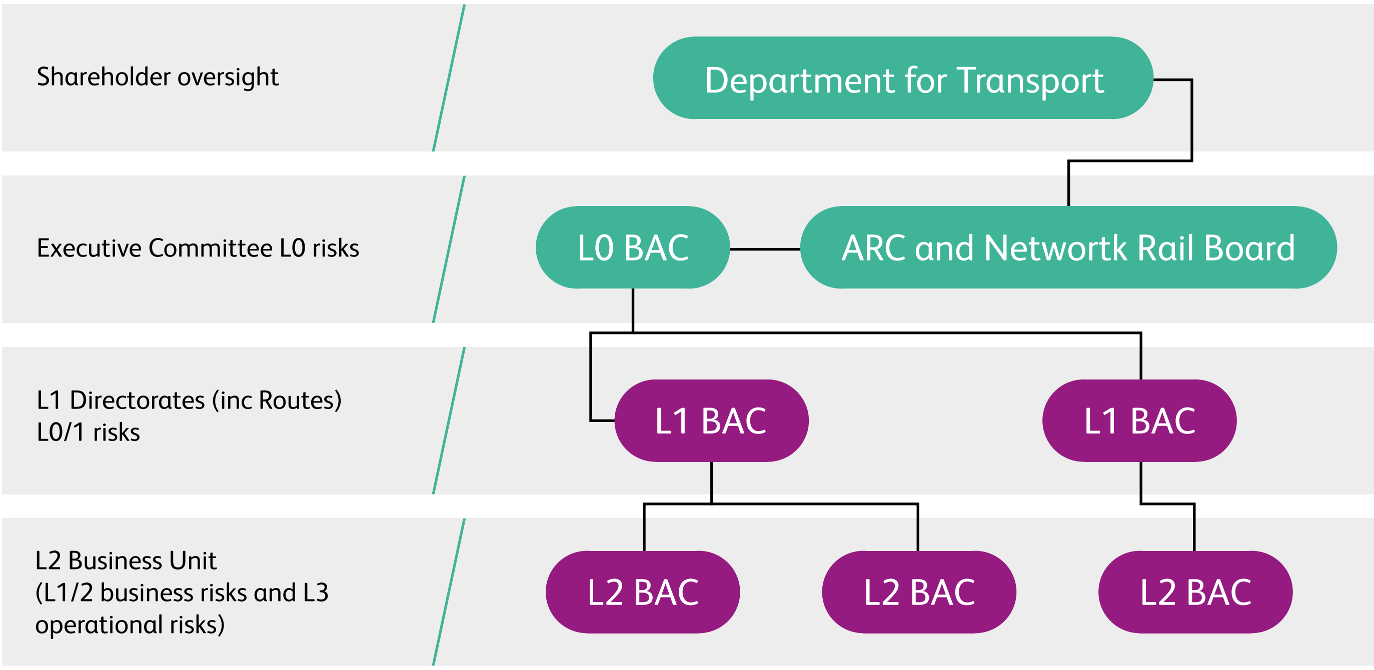
Putting passengers first means we need to continuously look at areas where we can improve our service. By careful consideration of risk we can focus on those opportunities that have the greatest potential to increase efficiency and provide a better experience for passengers.

The risk processes within our ERM framework provide tailored approaches for specialist areas such as safety, project management and information security. The use of a standard risk assessment matrix and defined risk appetite enables integration of operational and strategic risks.

Risk management continued

Line of sight and links between risks are documented and visualised through our award-winning risk visualisation approach. Strategic risks are linked to our corporate scorecard and business plans are required to document and assess risks to delivery.

Whilst the ultimate responsibility for risk management rests with the Board, it delegates the more detailed oversight of risk management and internal control principally to the audit and risk committee, which reports the findings of its reviews to the Board. The audit and risk committee receives regular reports from the internal and independent auditors and reviews progress against agreed action plans to manage identified risks. Detailed oversight of safety related risks is delegated to the safety, health and environment committee.



The assessment of risk is informed by the agreed performance targets and the company's risk appetite statements. Each risk is appointed an executive leadership team owner.

Network Rail has defined its risk appetite as follows;

Network Rail has no appetite for safety, health or environmental risk exposure that could result in serious injury or loss of life to public, passengers and workforce or irreversible environmental damage. Safety drives all major decisions in the organisation. Network Rail will consider options to reduce safety risk where the business case goes considerably beyond our legal obligation to reduce risk so far as is reasonably practicable.

Where trade-offs are required in order to maintain critical service provision the company will tolerate low to moderate gross exposure to delivery of operational performance targets including network reliability, capacity, asset condition, breakdown in information systems or information integrity.

In the pursuit of its objectives, Network Rail is willing to accept, in some circumstances, risks that have high potential for positive return but may result in some financial loss or exposure including a small chance of breach of funding provision as set out in the business plan. It will not pursue additional income generating or cost saving initiatives unless returns are probable (85 per cent CI for income and 60 per cent CI for cost reductions where potential returns are high).

The company wants to be seen as best in class and respected across industry. It will only tolerate low to moderate exposure that may result in short term negative impact on reputation and stakeholder relationships and is easily recoverable, i.e. minimal negative local or industry media coverage, and/or minor employee experience and political impact. This will continue to be balanced by regular positive media coverage at national and local level.

Categories of risks (i.e., safety, performance, value) and who manages them

All principal risks are mapped to performance reporting and strategic objectives.

Risk area
Safety

Britain's railway is one of the safest in Europe, however we are not complacent. Network Rail continues to assess and monitor all areas of safety and continues to invest in preventive measures to keep likelihood of safety incidents to a minimum.

Train Accident

Failure to prevent a major avoidable train accident (collision, derailment etc.) which results in multiple injury/fatality to members of the public/passengers resulting in loss of reputation, finance and reduced performance.

Early Warning Indicators (EWIs)

- Risk increase levels of Precursor Indicator Model.
- Number of HIPOs (and WSF 50+).
- Significant level crossing events.
- Number of operational close calls.

Risk Movement 2018

No change in risk impact, likelihood, financial exposure or control rating in 2018.

Key mitigations

Completed 2018/2019

- We introduced leading indicators for our road vehicle speed warning system and reporting on vehicle utilisation.
- We have produced fatigue guidance and information.
- We have continued to develop the signal-controlled warning system technology and have introduced more than 300 pieces of additional protection equipment to make line blockages safer.
- We have introduced HSE scorecard for our contractors in IP.
- We have reviewed and updated all work activity risk assessments (WARAs).
- We have improved our first aid standards and training, and made access to first aid equipment easier.

Workforce Safety

Failure to safeguard our workforce resulting in single and/or multiple fatalities to Network Rail staff (employees and contractors).

Early Warning Indicators (EWIs)

- Ratio of close calls raised against operational close call events.
- Number of near misses occurring.
- Number of 60 and 72 hour exceedances.
- Ratio of close calls raised against specified RIDDORs, lost time injuries and non-lost time injuries.
- Speeding events (plus 10mph or more and plus 20mph or more) as recorded by Network Rail road vehicle telematic systems.

Key mitigations

Completed 2018/2019

- We introduced leading indicators for our road vehicle speed warning system, overseen by a committee involving the trades unions.
- We introduced reporting on vehicle utilisation.
- We have developed requirements for the integrated planning tool.
- We have developed and introduced a single source of information regarding task risk and have reviewed all risk assessments.
- We have produced fatigue guidance and information and have published the first modules of the new fatigue management standard.
- We have reviewed the tender applications for the supply of the new health and safety passport scheme.
- We have continued to develop the signal-controlled warning system technology and have introduced more than 300 pieces of additional protection equipment to make line blockages safer.
- We have introduced HSE scorecard for our contractors in IP.
- We have reviewed and updated all work activity risk assessments (WARAs).
- We have trained a high number of facilitators for safety hour sessions to improve the quality and impact of these meetings.

Risk management continued

Risk Movement 2018

Risk likelihood increased in 2018. In the last 12 months we have seen an increase of safety events which have resulted in a number of near misses (members of the workforce being struck by trains).

Workforce Safety continued

Key mitigations

- We have improved our first aid standards and training and made access to first aid equipment easier.

Passenger Public Safety

Failure to have suitable and sufficient infrastructure, systems and controls in place to safeguard passengers and public at the interface with trains and the railway (excluding train accident risk), resulting in a fatal or major injury.

Early Warning Indicators (EWIs)

- Number of public interface incidents reported in SMIS (trespass) for last period.
- Number of public interface incidents reported in SMIS (route crime) for last period.
- Number of lifesaving interventions for suicide.
- Number of public interface incidents reported in SMIS (suicide) for last period.

Risk Movement 2018/2019

Increased financial exposure during 2018.

Key mitigations

Completed 2018/2019

- 51 level crossings permanently closed in year 5; 372 permanently closed in CP5 to date. A further 29 level crossings have been reduced in status in CP5.
- 15 (87 schemes remained planned however this includes CP6 enabling activity) commissioned asset improvements at level crossings in year 5; 123 asset improvements to date in CP5.
- Four crossings temporarily closed, removing risk, whilst permanent risk reduction measures are developed in year 5; 64 temporarily closed in CP5 to date.
- GRIP Stages 1-4 of the Anglia Transport and Works Act Order (TWAO) to including the completion of public inquiries in Cambridge, Suffolk and Essex.
- Developed and commissioned the level crossing decision support tool. A targeted pedestrian level crossing safety/education campaign development, publication and distribution of the, Stay Safe with Thomas, story and sticker books promoting railway safety in partnership with Mattel and British Transport Police.

Cyber Security

Hostile or malicious acts exploiting vulnerabilities in Network Rail's cyber systems leading to loss, compromise or disruption impacting the operational railway, business services and supporting processes.

Early Warning Indicators (EWIs)

- External high risk vulnerabilities.
- Internal high risk vulnerabilities.
- Key defence effectiveness.
- Cyber specific threat briefs.

Risk Movement 2018/2019

No change in risk impact, likelihood, financial exposure or control rating in 2018.

Key mitigations

Completed 2018/2019

- Cyber Assessment Framework (CAF) of in-scope systems.
- Security management system in place including establishing and implementing a set of cyber security policies.
- Integration of security risk management and assurance framework into IP IMS and system engineering standards.
- Security monitoring and vulnerability management established.
- National railway security programme implementation plan delivered.

Risk area

Performance

Managing train service reliability to meet performance targets remains extremely challenging, with a higher than desirable likelihood of the risk materialising. Introduction of new metrics for performance alongside renewed Network Rail focus and a programme to professionalise performance management across the industry mean we remain confident that over the longer term we will reduce risks in this area to within acceptable levels.

Delivery of our extensive enhancement and renewals portfolios is a key priority for us. New controls and governance arrangements are proving beneficial, in terms of overall infrastructure delivery with us delivering 98.8 per cent on-time handback. However, we are acutely aware of the impact when we fail to complete works to schedule. We are placing added emphasis on assuring that infrastructure readiness, timetable readiness and operational readiness are fully assessed as part of the entry into service process as well as continuing to implement improvements to project delivery.

By investing in our staff and attracting young talent to the rail industry we are managing risks to recruitment and retention and have low staff turnover. We understand change is unsettling and will continue to work closely with staff and unions to minimise adverse impact.

We are investing in our recovery and business continuity planning to reduce the long-term impact of business interruption. This includes further controls in the areas of physical and cyber security.

Train Service Reliability

Not achieving TOC/FOC performance targets as agreed with stakeholders, resulting in loss of reputation and financial penalties.

Early Warning Indicators (EWIs)

- Number of TSRs.
- Number of TOCs missing PPM MAA target by >1 per cent (from 23).
- Number of routes on target YTD for Network Rail delay.
- Forecast to miss Year-End PPM MAA Target (Regulatory trigger) by >2 per cent for 20 TOCs.

Risk Movement 2018

No change in 2018/2019.

Key mitigations

Completed 2018/2019

Seasons management:

- Application of a rigorous stage gate review process to ensure preparation for seasons is in line with standards.
- Joint autumn plans with operators. Agreed plans submitted 31 May 2019.
- Reviewing and implementing recommendations and best practice that falls out of autumn route reviews. Completed annually by end of February (paper published for National Task Force in March 2019).

Trespass and suicide:

- Industry-wide suicide prevention scheme, including partnership with Samaritans.
- Joint working with British Transport Police to tackle nationwide issues of trespass and vandalism.

Safe and resilient timetable

Network Rail is unable to produce a resilient timetable in line with license obligations, contractual commitments or political demands. This may result in a financial and reputational impact.

Early Warning Indicators (EWIs)

- Levels of late change to the access plan.
- Number of vacancy gap greater than five per cent.
- Volume of timetable change.

Key mitigations

Completed 2018/2019

- Creation of a project management office (PMO) to oversee the implementation of the timetable and manage the process risk.
- Established late change panel.

Risk management continued

Risk Movement 2018

Reduced likelihood due to adoption of the PMO as an intrinsic Network Rail means of assuring and de-risking iterative WTT change cycle through review of timetable participant aspirations and the operational readiness of all parties. We also saw positive implementation of December 2018 timetable change with improvement to PPM.

Safe and resilient timetable continued

Key mitigations

- Established effective assurance of rolling stock delivery and cascade plans at D55 (notice of significant change) to minimise the risk of abortive timetable development work.
- Introduction of a timetable performance risk assessment process as part of Standard 031.

Delivery of capital projects to time and cost

Schedule slippage and/or cost growth could occur on individual or multiple infrastructure projects/programmes due to unforeseen internal/external factors resulting in delayed benefits and stakeholder dissatisfaction.

Early Warning Indicators (EWIs)

- Investment - schedule adherence.
- Financial performance measure – enhancements.
- Financial performance measure – renewals.

Risk Movement 2018/2019

No change in 2018/2019.

Key mitigations

Completed 2018/2019

- Continue holding quarterly business assurance committees (BACs) in regions and programmes, as part of the capital delivery risk management process.
- Further strengthening of the capital projects assurance group within the programme management team, to provide assurance for major programmes, including peer reviews and tender reviews on behalf of the executive team.
- Developing agreement with the DfT regarding approach to risk funding levels and the application of portfolio methods for risk allocation.
- Independent audits of the professional capabilities within the capital projects teams, including programme management, programme controls and risk management functions.
- Ongoing implementation of the tripartite integrated assurance process with DfT and ORR; informed by regular peer reviews of major programmes.
- Integrated planning processes to assign critical resources at times of peak demand, e.g. bank holidays, with continuing focus on delivery governance and assurance.
- Continue to review and award contracts for CP6 renewals to the supply chain through the public procurement process with associated risk controls.
- Procurement and supply chain risk monitoring to ensure supply chain continuity and flexibility.

Risk management continued

Business Continuity Management

Severe prolonged business interruption caused by poor business continuity planning and exercising, resulting in a failure to reinstate the operational railway, loss of customer confidence and potential breach of licence conditions.

Early Warning Indicators (EWIs)

- Completed and reviewed business impact assessments.
- Business continuity (BC) plans in place.
- Trained and competent business continuity management (BCM) leads to develop, deliver and manage BC plans.
- BCM exercise programme (Tier 1 BCM exercises annually).

Risk Movement 2018/2019

Following successful design, development and implementation of the BCM framework all business areas now meet the requirements of the BCM policy. The central team is in situ and will continue to monitor compliance and assess the quality of plans as well as support the business in maturing BCM capability. The continued development of the BCM framework and compliance monitoring is now a ‘business as usual’ activity and covered in business assurance committees.

Key mitigations

Completed 2018/2019

- Critical systems and assets identified across the business.
- BC plans developed for critical assets.
- Resilience risks identified, documented and reviewed at business assurance committees.
- Testing schedule agreed for critical assets.
- Desktop testing of all asset recovery strategies.
- Full scale scenario based testing of emergency response plans.
- Central BC team resourced and in place to support the delivery of the BCM framework and provide expertise and advice.
- In-depth review of impact of a ‘No Deal’ Brexit scenario across all key areas including supply chain, infrastructure projects, labour, freight disruption and critical utilities.
- Planned contingency arrangements agreed and resourced for Brexit outcome with or without a withdrawal agreement.

Talent management and succession planning

Failing to attract, retain and develop the full potential of our pipeline of talent for key roles, resulting in sub-optimal leadership capability, worse business outcomes and a compromise of our ability to deliver a better railway for a better Britain.

Early Warning Indicators (EWIs)

- Number of business critical roles left unfilled for more than two months.
- Turnover in business critical roles over a two year period.
- Number of apprentice and graduate leavers year on year.
- Number of contractors filling business critical roles.

Risk Movement 2018/2019

Increased impact and financial exposure.

Key mitigations

Completed 2018/2019

- Network Rail as an employer of choice to emerging talent.
- Corporate business critical roles have been identified and succession plans developed accordingly.
- Heads of professions have been appointed.
- A standardised model has been rolled out to enable us to better understand and measure the potential of our talent.
- Succession planning strategy has been finalised, communicated and we are currently embedding across the organisation
- Training material has been designed and delivered based on the potential model for managers and HR along with a process for critical role succession planning.
- Strategic workforce planning (SWP) tool finalised, tested and piloted ahead of launch to all regions and routes.

Risk management continued

Information Management

We fail to effectively manage our data, information and knowledge resulting in poor decision making and waste of resources.

Early Warning Indicators (EWIs)

- Percentage of business areas that have information champions.
- Percentage of information management policies and standards current and not requiring a review.
- Number of business areas that have an information management asset register.
- Number of business areas failing to define and embed information management objectives.

Risk Movement 2018/2019

No change in 2018/2019

Key mitigations

- Information governance maturity model IM 17.0 rolled out.
- Ownership defined at executive level.
- Stand up appropriate information champions to champion and support departmental information governance.
- Roll out and support self-service maturity assessment.

Digital Railway

Failure to be ready to deploy 'Digital Railway Train Control and Signalling Systems' to deliver the requirements for the targeted schemes within CP6.

Early Warning Indicators (EWIs)

- CP5 funding: Funding approval (grant letter) for business case development by DfT versus CP5 milestones.
- CP6 funding: Monitor key funding milestone (per cent) for Digital Railway.

Risk Movement 2018/2019

Control rating improved while the likelihood and financial impact both reduced during 2018/19.

Key mitigations

- Digital Railway strategy published.
- Cross-industry business requirements aligned to technical capabilities of systems; refocus the requirements to reflect the evidence/outcome performance.
- An agreed structure within the team has been established with leads responsible for engagement and communications across: government/public affairs; industry; Network Rail and programme.
- Defined system assurance and strategy, continued adoption of system engineering lifecycle.
- Investment process allows the programme to highlight the need for funding to continue the programme and facilitate internal discussion prior to delivering proposals to DfT for potential funding at the next Budget Statement.

Brexit

Failure to identify, communicate and manage risks and opportunities to Network Rail (and the industry) as Brexit negotiations proceed or during subsequent implementation.

Early Warning Indicators (EWIs)

- HMG negotiating position fails to recognise industry needs.

Key mitigations

- Regular bi-monthly engagement between key internal Brexit leads.
- Maintained active and influential role in EU and with EU groups.

Early Warning Indicators (EWIs)

- Network Rail involvement and influence in European groups falls.
- Missing or ineffective responses to consultation exercises.
- Industry positions set without enough Network Rail input.

Brexit continued

Key mitigations

- Building and maintaining the map of expert Network Rail contacts and leads.

Risk Movement 2018/2019

Increased financial impact to £50-£250m due to possible import inflation from a new customs arrangement.

HS2 Integration (opportunity)

Effectively integrate all phases of High Speed 2 (HS2) with the existing rail network in order to maximise the national social and economic benefits, and opportunities, presented by HS2 to railway users and stakeholders.

Critical Success Factors (CSFs)

- Integration outputs identified, prioritised and agreed with stakeholders.
- Integration plan (Level 0) milestones achieved on time and in full.
- Integration benefits identified and forecast to be realised.
- Integration stakeholder interviews provide confidence in current progress.

Risk Movement 2018/2019

No change in 2018/2019.

Key mitigations

- Mapped out the key objectives of the Strategic Vision for Rail and linked through to the opportunities presented by HS2 and existing network integration.
- Shared purpose for integration between Network Rail, DfT and HS2 Ltd developed.
- Industry mandate for the system operator to lead the existing network and HS2 integration programme.
- Outlined a ‘statement of intent’ on how delivery of an integrated existing network and HS2 network can be achieved.
- Agreed cross-industry roles and responsibilities related to existing network and HS2 integration.
- Benefits framework for existing network and HS2 integration, complementary to the core HS2 equivalent - including baseline values for the existing network.

Supply Chain Vulnerability

A gap in critical service provision due to loss (for either financial, safety, ethical, reputational or political reasons) of strategic or critical suppliers to Network Rail and a lack of preparedness to fill the service gap leading to reputational damage and financial loss.

Early Warning Indicators (EWIs)

- Per cent of strategic and critical contracts with a contract management plan (exit strategy). (Route services).
- Per cent of strategic and critical contracts where a profit warning has been issued. (Route services).
- Per cent of strategic and critical contracts where supplier is being monitored financially. (Route services).

Key mitigations

- Process in place for developing detailed alternative supply plans for strategic and critical supplier.
- Crisis management capability in place.
- Developed strawman supplier insolvency crisis management and responsibility framework.
- Contacts and procurement competence framework in place.

Risk Movement 2018/2019

New risk for 2018.

Risk management continued

Risk area
Value

Network Rail is committed to delivering value for money through robust planning and supplementing funding through selling non-core assets. Network Rail is undertaking an ambitious programme of transformation to enable the business to be well placed for CP6. This brings opportunity, but change is disruptive, and any destabilising effect must be well managed.

Current and Future Funding Arrangements

Failure to: Agree CP6 funding envelope, deliver within our funding envelope and deliver efficiency savings programme.

Early Warning Indicators (EWIs)

- Funding outlined in the Draft Determination as a total of the strategic business plan submission.
- Financial model indicates no borrowing headroom for England and Wales in CP5.
- Financial model indicates no borrowing headroom for Scotland in CP5.
- Forecast for in-year cash requirement exceeds budgeted and DfT notified limit.
- Variance to £0.8bn asset disposal portfolio.
- Divestment options do not meet government balance sheet requirements (PSND, PSNB).

Risk Movement 2018

Risk likelihood decreased during 2018/2019.

Key mitigations Completed 2018/2019

- Completed the commercial asset sales programme to meet the targets agreed with DfT and HMT.
- Collateral facility specifics were agreed with DfT in April 2018.
- Completed CP6 Final Determination process.
- More sophisticated cashflow forecasting tools and key performance indicators have encouraged devolved businesses to take accountability for cash forecasting.

Destabilising effect of change

Network Rail not embedding and sustaining the right change initiatives at the right time, in the right way, to deliver the right benefits aligned to key business strategies and external reports.

Early Warning Indicators (EWIs)

- Milestones not being delivered on schedule.
- Projects/change commitments made without adequate costing.
- Inability to recognise and track benefits.
- Governance structure is not fit for purpose.

Risk Movement 2018

No change in 2018/2019.

Key mitigations Completed 2018/2019

- The transformation portfolio has been reviewed and refined to focus on the six or seven most significant programmes for the business.
- A detailed benefits health check has been carried out across the portfolio to understand the likelihood of the declared benefits being realised by the business. Forty actions are in place across the business to support this.

Viability statement

The Directors have assessed the viability of Network Rail to maintain the UK's rail infrastructure over a three-year period, taking account of Network Rail's current position and the potential impact of defined scenarios on its principal risks and financial viability. Based upon this assessment, the Directors have a reasonable expectation that the company will be able to continue in operation and meet its liabilities as they fall due over the period to March 2022. This longer-term assessment process supports the Board's statements on both viability, as set out below, and going concern, made on page 125.

Network Rail is funded in five-year blocks called control periods. This five-year block runs from 2019-2024 and the next runs from 2024-2029. The Office of Rail and Road (ORR) determines charges and outputs before the start of each five-year period. In doing so the ORR has statutory obligations with regard to producing a settlement that is equitable to the licence holder, Network Rail. This allows Network Rail a high degree of certainty regarding funding for its operations and investment activities.

The regulatory process towards setting charges and outputs allows stakeholders to define their required outputs from the network, and governments in Westminster and Holyrood to set out the funding they have available. These are built into Network Rail's strategic business plan. Once the ORR has determined outputs and charges, Network Rail produces a Delivery Plan. This plan is refreshed by bottom up forecasts on a quarterly basis to manage outputs within the resources available.

Network Rail is not expected to undertake any new borrowing during 2019-2024. Instead its activities are largely funded by grants from the Department for Transport and revenue from customers. Network Rail has secured a £32.3bn loan facility with the Department for Transport (DfT), which it intends to draw upon to specifically refinance its existing debt with DfT of £29.9bn and legacy commercial borrowing of £2.4bn in the period to March 2024. This facility remains within its parameters.

Network Rail has eight separate grant agreements in place with DfT and Transport Scotland (TS) to fund activities in the period 2019-2024. These grants are:

- With DfT: Network Grant; Enhancements Grant; British Transport Police Grant; Financing Costs Grant for DfT interest; Financing Costs Grant for external interest (bonds and swaps); and Corporation Tax Grant.
- With TS: Network Grant and Enhancements Grant

Network Rail is also investigating methods of attracting third party capital to finance enhancements to the railway network.

Business plans and financial models are used to project cash flows and monitor financial risks and liquidity positions, forecast future funding requirements and other key financial ratios, including those relevant to our network licence. Analysis is undertaken to understand the resilience of the group and its business model to the potential impact of the group's principal risks, or a combination of those risks. This analysis takes account of the availability and effectiveness of the mitigating actions that could realistically be taken to avoid or reduce the impact or occurrence of the underlying risks. In considering the likely effectiveness of such actions, the conclusions of the Board's regular monitoring and review of risk management and internal control systems, as described on pages 68 to 69, is taken into account.

In addition, as Network Rail is a central government body and a member of the DfT Group for consolidation purposes its creditors can rely on Her Majesty's Government security, and the statutory obligations on the Secretary of State for Transport with regard to settling liabilities.

We have set out the details of the principal risks facing Network Rail on pages 70 to 77 described in terms of our ability to meet our strategic objectives. We identify our risks through a robust assessment that includes a continuous cycle of bottom up reporting and review. In making this statement the directors have considered these principle risks and Network Rail's ability to withstand severe but plausible scenarios based on them. This included consideration of the political environment, industrial relations and the safety of the rail network. The scenarios were considered in terms of the impact on the financial resources of Network Rail and the impact on delivery of future improvement work.

The assessment considered Network Rail's current financial position and any headroom in its current forecasts, it also considered other sources of funding or actions such as deferral of improvement work.

Several mitigating actions were identified including the adequacy of the financial risk buffer, coupled with the ability to safely defer works, the plans to improve performance, and the group's insurance arrangements.

Viability statement continued

The approach was to assess three severe, but plausible, scenarios covering seven of the principal risks. Note that these scenarios augmented scenario assessments made in previous years:

Scenario 1

A mainline station train derailment occurs because of an attributable error to Network Rail which leads to injuries and fatalities to members of the public.

Risks: Train Accident; Passenger / Public interface; Business Continuity Management; and Workforce Safety.

Scenario 2

Significant adverse disruption to the timetable due to a prolonged severe weather event.

Risks: Train Service Reliability; Business Continuity Management; Asset Management Excellence; and Weather Resilience and Climate Change Adaptation.

Scenario 3

Network Rail is unable to deliver funded planned improvements, and / or manage the effect of capacity change on the network, due to inaccurate planning.

Risks: CP6 Funding Arrangements; CP6 NR Plan; Ready to Deploy Digital Railway; DfT Loan Cap; Business Plan Governance & Control; and Future Funding & Outputs Framework.

On the basis of this robust assessment of the principal risks facing the group and on the assumption that they are managed or mitigated in the ways disclosed, the Board's review of the business plan and other matters considered and reviewed during the year, and the results of the sensitivity analysis undertaken and described above, the Board has a reasonable expectation that Network Rail will be able to continue in operation and meet its liabilities as they fall due over the period to March 2022.

Directors' approval statement
The strategic report has been signed on behalf of the board of the company.

Sir Peter Hendy CBE,
chair

15 July 2019

Corporate governance

Corporate governance

- 81 Our board of directors
- 85 Corporate governance report
- 94 Safety, health and environment committee report
- 97 Audit and risk committee report
- 106 Treasury committee report
- 108 Nomination committee report
- 110 Directors’ remuneration report
- 124 Directors’ report

Our board of directors

Sir Peter Hendy CBE
Chair

Skills and experience
Sir Peter was commissioner of Transport for London (TfL) from 2006 -2015, having served since 2001 as MD of TfL's surface transport. He led and played a key role in preparing for the successful operation of London's transport for the 2012 Olympic and Paralympic Games. Prior to 2001 he worked for FirstGroup plc and CentreWest London Buses.

Sir Peter's experience in successfully leading urban transport in a world city is critical to understanding Network Rail and managing its complex relationships with stakeholders.

Sir Peter is the international president of the Chartered Institute of Logistics and Transport for 2019, a fellow of the Chartered Institute of Highways and Transport and a fellow of the Institution of Civil Engineers. He was knighted in the 2013 New Year's Honours List, having been made CBE in 2006 for services to public transport and the community in London.

Current external appointments
Chair of the London Legacy Development Corporation; chair of London Freight Enforcement Partnership; trustee of London's Transport Museum and vice president of the London Bus Museum

Committee membership
Safety, health and environment committee; nomination committee; remuneration committee.

Appointed to the Board | **2015**

Andrew Haines OBE
Chief executive

Skills and experience
Andrew was previously chief executive of the Civil Aviation Authority from 2009-2018. Prior to that Andrew had a wide ranging career in the rail industry, including spells working for British Rail, Railtrack, South West Trains, where he was ultimately managing director, and First Group where he led the rail division which included intercity, commuter, rural, freight, open access and tram services in England, Scotland and Wales. He has also been a non-executive director at a rolling stock leasing company.

Andrew was appointed OBE in the 2016 New Year's Honours list for services to transport and is a fellow of the Chartered Institute of Logistics and Transport, the Royal Aeronautical Society, the Institute of Railway Operators and the Permanent Way Institute.

Appointed to the Board | **2018**

Jeremy Westlake
Chief financial officer

Skills and experience
Jeremy was formerly senior vice president for finance at Alstom Transport in France, responsible for investor management, financial performance and control, and project finance. Previously he spent 14 years at Rolls-Royce in a range of senior finance and supply chain roles in the UK and the United States.

Jeremy is a fellow of the Institute of Chartered Accountants in England and Wales and has a master's in manufacturing from University of Cambridge.

Appointed to the Board | **2016**

Board of directors continued

Rob Brighouse

Non-executive director

Skills and experience

Rob has 40 years' experience in the rail industry and was formerly managing director of Chiltern Railways, where he was responsible for the operation and safety of the passenger rail service between London and the West Midlands. Rob first joined the rail operator in 2000 as projects director, where he led the Evergreen 1 and 2 infrastructure projects as well as the building of Chiltern's Wembley depot. Rob brings rail industry experience to the Board and understands the complexities facing the train operating companies.

Rob is a fellow of the Institution of Civil Engineers and the Institute of Directors and is a chartered director. Rob holds an MBA from Aston Business School.

Current external appointments

Chairman of the East West Rail Company; chairman of the Advisory Board at Aston Business School; honorary trustee of LIFE Trust; and chairman of Snap Travel Technology Ltd.

Committee membership

Safety, health and environment committee; audit & risk committee.

Appointed to the Board | **2016**

Richard Brown CBE

Special director and non-executive director

Skills and experience

Richard was chief executive of Eurostar UK from 2002 to 2011, and the chair until June 2013. He was previously commercial director and main board member of National Express Group plc, where he set up its trains division, which at the time was the largest UK passenger franchise operator. Richard has over 40 years' experience in the rail industry and was a director of Intercity before privatisation. Richard brings wide experience of planning and operating railways.

Richard has honorary doctorates from the Universities of Derby and Westminster. He was appointed CBE in 2007 for services to transport.

Current external appointments

Chair of Catalyst Housing Limited; deputy chair of HS2 Ltd; vice president of the Chartered Institute of Logistics and Transport.

Committee membership

Nomination and remuneration committee.

Appointed to the Board | **2015**

Sharon Flood

Non-executive director

Skills and experience

Sharon has experience in a number of senior finance and strategy roles, most recently as a group chief financial officer of Sun European Partners LLP, an international private equity investment advisory firm. From 2005 to 2010 she was finance director of John Lewis department stores. Sharon therefore strengthens the finance experience and customer focus on the Board.

Sharon holds an MBA from INSEAD and is a fellow of the Chartered Institute of Management Accountants.

Current external appointments

Non-executive director of Crest Nicholson Holdings plc; trustee of the Science Museum Group; board member of Pets at Home and a member of the Cambridge University Council.

Committee membership

Chair of audit & risk committee; chair of treasury committee.

Appointed to the Board | **2014**

Board of directors continued

Chris Gibb
Non-executive director

Skills and experience
Chris has worked in the rail industry for over 37 years. After a career of operational roles in England, Scotland and Wales he became managing director, Wales & Borders Trains. He joined Virgin Trains as managing director of CrossCountry, before becoming chief operating officer in 2007, responsible for Virgin's West Coast safety, operations, stations and customer service. He retired from this role in November 2013. Chris brings broad industry-specific experience to the Board.

Current external appointments
Chairman of Thameslink 2018 Industry Readiness Board; member of HS2 Independent Assurance Panel; member of Transport Strategic Advisory Board, Welsh Government; visiting lecturer at University of Birmingham.

Committee membership
Chair of safety, health and environment committee; chair of Network Rail Property Board.

Appointed to the Board **2013**

Silla Maizey
Non-executive director

Skills and experience
Silla has extensive experience in the aviation sector, built up over 34 years. Silla was most recently British Airways' (BA) Managing Director of Gatwick, and she was part of BA's executive leadership team. Previously, Silla was BA's Customer Director.

Silla brings a range of experience and insights to the Board, from operations to procurement, the shaping of the customer proposition and business reorganisations.

Silla is a fellow of the Chartered Association of Certified Accountants and a fellow of the Chartered Institute of Purchasing and Supply.

Current external appointments
Chair of NHS Business Services Authority; non-executive director of John Menzies plc; Crown Commercial Services and Saffron Solutions Limited.

Committee membership
Audit & risk committee; treasury committee.

Appointed to the Board **2016**

David Noyes
Non-executive director

Skills and experience
David has spent his career working in the leisure and transport sectors. Having joined British Airways as a graduate trainee some 30 years ago, he held various senior positions, including heading up BA's UK Regional operations. He was director, Customer Services when he left in 2008. Most recently David was CEO of Cunard and P&O Cruises.

David is experienced in leading corporate transformations with a focus on improving customer service whilst driving cost efficiency, and is also skilled in managing devolved businesses in a safety critical industry.

Current external appointments
Non-executive chairman of Grays of Cambridge (International) Ltd.

Committee membership
Nomination and remuneration committee; safety health and environment committee.

Appointed to the Board **2018**

Board of directors continued

Mike Putnam
Non-executive director

Skills and experience
Mike has worked across the development, construction and services sectors. He has over 25 years' experience at senior management level.

Mike was president and CEO of Skanska UK plc from October 2009 until May 2017. He was previously executive vice president and board director of Skanska UK plc from June 2001 to September 2009. He was responsible for leading the infrastructure and then building and construction businesses.

Throughout Mike's career, he has been closely involved with the successful delivery of high-profile projects and programmes.

Mike is a Chartered Engineer and a fellow of both the Institution of Civil Engineers and the Royal Institution of Chartered Surveyors.

Current external appointments
Non-executive director of Southern Water Services; member of the Supervisory Board of Arcadis NV, member of the Construction Leadership Council; and member of Association of Consulting Engineers Advisory Board.

Committee membership
Safety, health and environment committee.

Appointed to the Board **2018**

Bridget Rosewell CBE
Non-executive director and senior independent director

Skills and experience
Bridget is an economist by background. She is Chair of Atom Bank, Chair of the DVSA and a commissioner for the National Infrastructure Commission. Past roles have included being chief economist and chief economic adviser to the Greater London Authority and executive chair of Business Strategies Ltd, which was subsequently sold to Experian. Bridget brings financial and economic expertise to the Board.

Bridget was awarded an OBE in 2013 and CBE in 2019 for her services to the economy and is a fellow of the Institution of Civil Engineers.

Current external appointments
Non-executive chair of Atom Bank; member of the With Profits Committee for the Royal London Group; Chair of the Driver and Vehicle Standards Agency; a commissioner on the National Infrastructure Commission; a member of the DfT's audit & risk committee; Senior adviser of Volterra.

Committee membership
Chair of nomination and remuneration committee; audit & risk committee; treasury committee.

Appointed to the Board **2011**

Stuart Kelly
Group general counsel and company secretary

Skills and experience
Stuart is responsible for the Legal and Corporate Services function. Stuart has extensive in-house legal and corporate governance experience gained within the listed environment, having joined the company from Severn Trent plc where he held the position of deputy general counsel.

Stuart started his in-house legal career with Network Rail, prior to which he was a solicitor in private practice. Stuart is also a qualified civil engineer having begun his career working for VolkerFitzpatrick.

Mark Carne stepped down as a director on 13 August 2018, and left Network Rail's employment on 4 September 2018.

Michael O'Higgins resigned as a director on 31 August 2018.

Corporate governance report

Network Rail believes that good corporate governance is essential to the success of the company and for delivering our strategy for passengers and stakeholders. During 2018/19, under the direction of our new chief executive and in response to a number of challenges and external reviews, we have assessed the appropriateness of our internal governance processes.

Route devolution and governance

Route devolution has continued to evolve during 2018/19 with nine devolved route businesses that operate independently, within a national framework. The nine routes are supported by central services that provide a national framework, such as technical standards and services where specialist expertise or economies of scale mean it makes sense to provide these from a central point.

We are customer focused. We run the company through devolved route businesses that understand how to meet local customer needs. They operate, maintain and renew infrastructure to deliver a safe and reliable railway for passengers and freight customers.

As part of the putting passengers first programme, Network Rail announced in February 2019, that the existing route structure would be revised. The new structure comprises 13 routes, which are part of five regions, designed to achieve the optimum size and scale necessary for devolution. It is believed that the new structure will increase autonomy and accountability for delivering for passengers and freight users in the regions and allow associated capabilities to sit within the regions. The 2019/20 annual report and accounts will reflect this new structure.

During 2018/19, Network Rail continued to work with key industry stakeholders and it has used the industry railway boards comprising Network Rail, train operating companies, Transport Focus and other key stakeholders as the forum for these discussions. The aim of these boards is to bring track and train closer together. Meetings were held in the Western route, Wales route, Anglia route, East Coast Main Line, West Coast Main Line and Chilterns and for the System Operator.

CP6 funding and readiness

Funding settlements for Network Rail and each of the routes for CP6 were agreed with the ORR in October 2018.

Timetable changes

Network Rail recognises that the introduction of the May 2018 timetable changes did not result in good outcomes for many passengers and other rail users. As a result, the causes of this disruption and Network Rail's management of the timetable process were subject to both an independent review led by Stephen Glaister (then Chair of the ORR) and a Transport Select Committee inquiry.

The Transport Select Committee published its recommendations on 4 December 2018 and the DfT formally responded on 30 January 2019. The Glaister Inquiry published its recommendations on 7 December 2018 and the DfT responded on 14 February 2019.

Network Rail has actively supported the ORR's investigation into why the implementation of timetable changes resulted in the scale of disruption to large numbers of passengers that it did. Network Rail has responded to the investigation's recommendations. Details about the Rail Review and the role Network Rail has in putting passengers first can be found in the introduction by our chair and message from our chief executive on pages 1 and 3.

Meeting today's challenges and future proofing the railway

The Board of Network Rail recognises that one of the largest challenges for the company is running an operational railway whilst carrying out maintenance and renewals work. Furthermore, Network Rail must operate a sustainable railway.

We are working closely with suppliers and operators to develop new innovations and solutions to deal with the issues the railway will face during the next 30 years. This includes the £245m research & development programme for CP6 and developing implementation plans for the rail technical strategy, the industry's vision for the future.

Overview of performance for CP5 and the outlook for CP6

Unfortunately, train performance during CP5 has continued to decline and Network Rail has failed to deliver its performance targets. This resulted in Network Rail receiving a performance enforcement order from the ORR. Our response to the performance order was submitted on 15 February 2019.

Looking ahead to CP6, there will be a focus on the vision, purpose and role of Network Rail so that our stakeholders, employees and the public understand what Network Rail stands for and how we put passengers, freight users, and our people at the heart of what we do. Network Rail has developed a common set of values and behaviours to support how Network Rail will strive to achieve its ambitions, deliver the expected train performance and create a culture of service excellence.

Building public trust

As part of Network Rail's commitment to transparency, minutes of the company's board meetings are available on Network Rail's website. Additionally, Network Rail voluntarily publishes a wide range of data on its website.

At Network Rail we also aim to communicate with our stakeholders as transparently as possible. Network Rail believes that transparency in both how we work as a company and how we work with stakeholders is integral to our success. Therefore, we have included transparency as a main theme in our Strategic Business Plan for CP6.

The Board has considered how the interests of key stakeholders and the matters set out in section 172 of the Companies Act 2006 (i.e. promoting the success of the company), have been considered in board discussions and decision making. Refer to the section 172 statement on page 20 for further details.

The Board acknowledges the importance of increased workforce engagement under the UK Corporate Governance Code 2018 (Code) The Board has engaged with the workforce by alternative arrangements to the three methods set out in the Code. This engagement has been through the putting passengers first programme and specifically a listening programme. The Board considers that such arrangements are effective to understand issues affecting our people.

Network Rail listened to a wide variety of stakeholders to help us understand what the company does well, but also where it needs to improve. As part of that process, Network Rail engaged with more than 300 colleagues (at all levels, across the country, whether frontline or office based), as well as external partners and organisations. The outcomes of this are being used to inform our putting passengers first work.

The Board also holds meetings in locations across the country and this provides an opportunity to engage with stakeholders.

The Nomination and Remuneration Committee considered the workforce engagement requirements under the Code and the alternative method(s) for workforce engagement, to achieve the Board's obligation. The three options suggested by the Code were considered by the Board, however, each was discounted as an appropriate way for Network Rail at this time, because Network Rail's workforce engagement activities exceed the requirements of the Code.

The Board is supportive for all of the workforce engagement activities to continue during 2019/20. The Listening Programme conversations with members of the workforce will be re-run, most likely in December 2019 and the biennial 'Your Voice' survey will be undertaken in Autumn 2019.

The Network Rail Board

During 2018/19, the board focused much of its time on:
- Train performance
- Transformation and efficiencies programme and the putting passengers first programme
- Strategic Business Plans and Final Determination for CP6
- Financial efficiencies
- CP5 financial performance
- Safety
- CP6 financial control framework
- Third party funding and financing
- Disposal of non-core assets

As part of the putting passengers first programme, the Board has sought to develop clear statements about Network Rail's purpose, role and vision. For more information, see page 9 in the About Us section.

During 2019/20, it is anticipated that the Board's focus will be on:
- devolution and embedding the new organisational structures to support the putting passengers first programme;
- managing train and financial performance for the first year of CP6; and
- further developing policies on diversity and inclusion.

Compliance with corporate governance requirements

The Board considers that the company has complied with the principles and provisions of the Code in 2018/19, save for the following provisions it is unable to comply with, due to its status as an arm's length government body:

- Provision 9 in respect of appointment of the chair. The Secretary of State will appoint the chair in accordance with the Governance Code on Public Appointments;
- Provisions 25 and 26: in respect of the appointment, re-appointment and removal of the external auditor. Under the terms of the Framework Agreement (FA) between the company and the DfT, the Comptroller and

Corporate governance report continued

Auditor General assisted by the National Audit Office acts an external auditor; and
- Provision 34: in respect of the remuneration for the chair. Under the terms of the FA, the remuneration of the chair is agreed by the Secretary of State.

The Code can be found on the Financial Reporting Council's website **www.frc.org.uk/directors/corporate-governance-and-stewardship/uk-corporate-governance-code**

The Board considers that the company was mindful of and complied with the Corporate Governance in Central Government Departments: Code of Good Practice. The Code of Good Practice can be found on the government's website **Corporate Governance in Central Government Departments: code_of_practice_2017**

Board leadership and company purpose

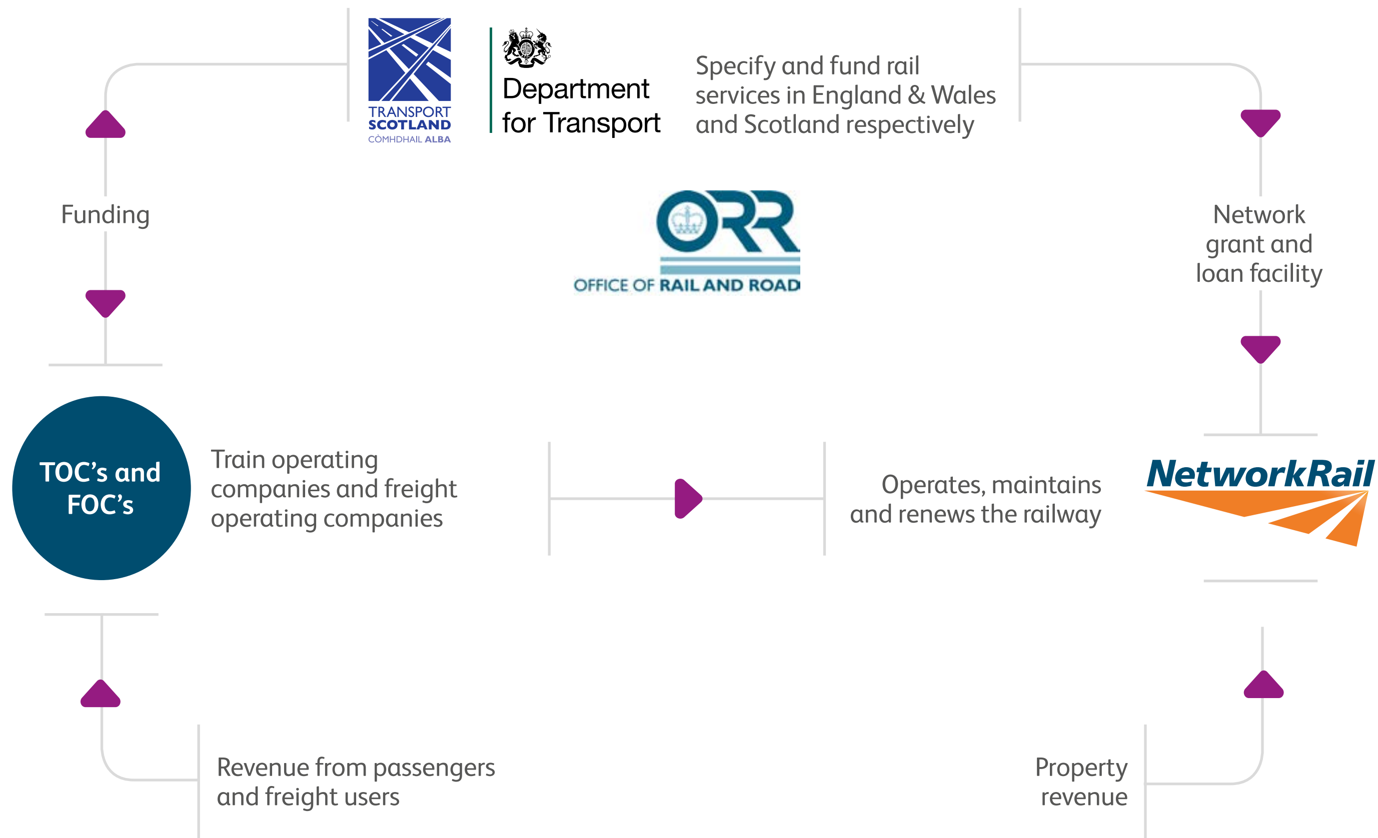
Network Rail is responsible for managing Britain's railway infrastructure within regulatory and control frameworks. Network Rail is an arm's length government body, and the terms of our financial management and corporate governance arrangements with the DfT are described in the Framework Agreement. A copy of the FA is available on our website **www.networkrail.co.uk**.

Michael Harrison, director of UK Investments at UKGI, has an invitation to attend meetings of the Board provide feedback to Network Rail and the Government on their views on the robustness and effectiveness of Network Rail's governance with the objective of strengthening those processes and building assurance around them.

The Board is accountable to the Secretary of State for Transport and the chair aims to ensure that the company's policies support the strategic policies of the Secretary of State and, for outputs on the Scottish rail network, the Scottish Minister.

Network Rail is regulated by the Office of Rail and Road (ORR) under its Network Licence, for its stewardship of the rail infrastructure and the network.

Network Rail works with the DfT and the ORR to agree what Network Rail must deliver during each five year control period. The ORR also sets the targets for Network Rail to achieve, it regularly monitors performance and determines the amount of money available for Network Rail to deliver its commitments for that control period.



Corporate governance report continued

The Board's role and responsibilities

As outlined above, the Board is accountable to the Secretary of State who is the sole member of the company. The Secretary of State is the Special Member of the company and an outline of their rights is set out below.

Rights	Detail of these rights being exercised in 2018/19
To appoint and remove the chair of Network Rail.	N/A
To approve the board's suggested candidate for chief executive of Network Rail.	During the year the special member approved the appointment of Andrew Haines OBE as chief executive.
To appoint a special director of Network Rail.	During the year the special member decided to appoint Richard Brown as special director for a further year.
To be consulted on non-executive director appointments.	Network Rail consulted with the DfT in relation to the appointment of David Noyes and the re-appointment of Rob Brighouse.
To hold regular meetings with the chair, to discuss corporate strategy and raise concerns.	The chair regularly meets with the SoS and the Permanent Secretary of the DfT.
To approve the three-yearly remuneration policy for executive directors of the company.	N/A
To set the pay for the chair and non-executive directors.	The remuneration of the chair of Network Rail was agreed by the DfT. Page 117 provides further detail.

Under the direction of the chair, the Board is responsible for developing and establishing the company's strategy to deliver the agreed outputs required in each control period and for ensuring that appropriate resources are in place to deliver this strategy.

The remit of the Board is described in the list of matters reserved for the Board, which can be found on Network Rail's website: www.networkrail.co.uk.

The Board has been mindful of and considered the principles set out in the Code of Conduct for Board Members of Public Bodies, the 7 Nolan Principles of Public Life and the Civil Service Code, as part of its decision-making process and the importance of delivering value for money. The 7 Nolan Principles of Public Life can be found on the Government website http://gov.uk/government/publications/the-7-principles-of-public-life.

The Board is aware of the Code's requirement to describe how the opportunities and risks to the future success of Network Rail have been considered and addressed, the sustainability of the company's business model and how its governance contributes to the delivery of its strategy. Details about what is being done around risks and opportunities are covered in the risk report on pages 68 to 77 and sustainability is addressed in the viability statement on pages 78 to 79.

Board committees

The Board has delegated a number of its powers to its four committees. The full powers of these committees are set out in the terms of reference, which can be found on Network Rail's website: www.networkrail.co.uk and a summary of the key elements are included in each committee's report on pages 94 to 123.

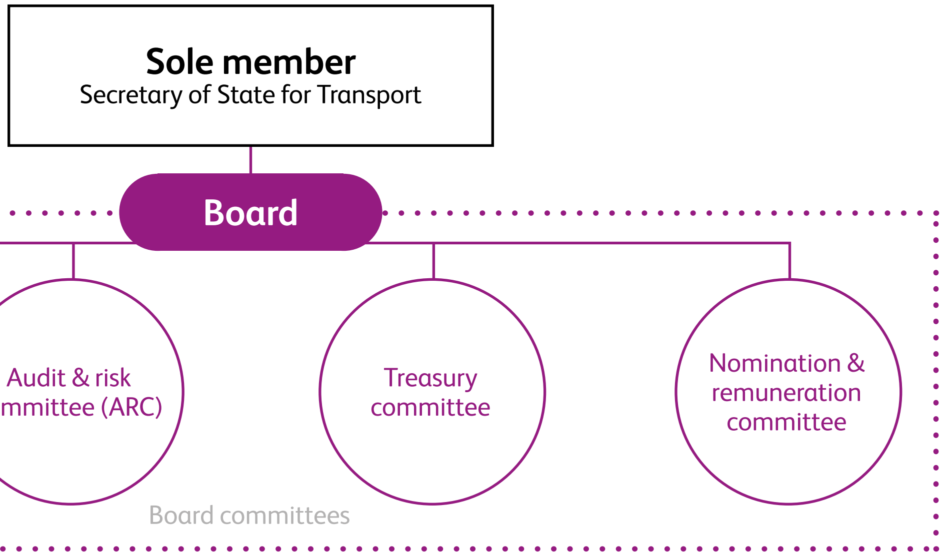
The audit and risk committee reviews the group's risk management strategy, risk profile and the company's risk appetite. It also monitors and reviews key financial reporting elements, internal control structure and processes and the effectiveness of these controls. The audit and risk committee's report is included on pages 97 to 105.

The nomination and remuneration committees were previously separate committees; however, they were combined in September 2018 and this joint committee operates under a single set of terms of reference. The reports for the nomination and remuneration committees are included on pages 108 to 123.

A summary of the activities considered by the safety, health and environment committee in 2018/19 is included in the committee report on page 94 to 96. The report for the treasury committee is on page 106 to 107.

Corporate governance report continued

Network Rail board and committee structure



The executive leadership team

In 2018/19 the Board was supported by the executive leadership team comprising the chief executive, chief financial officer and 17 other senior executives, including the route managing directors. The executive leadership team is responsible for the day-to-day management of the company and it meets regularly to consider strategic and operational matters.

Board composition and division of responsibilities

At the date of this report, the Board consisted of one non-executive chair, two executive directors and eight non-executive directors.

Photographs and biographies of the Board of directors, including details of their skills and experience can be found on pages 81 to 84.

Chair – Sir Peter Hendy CBE
Responsible for leading the Board; its effective functioning and promoting the highest standards of corporate governance. Encourages all directors to actively contribute to board meetings and sets the conditions for constructive relations between the executive and non-executive directors. Represents Network Rail at its highest level and works with the chief executive to develop strategic relationships with the customers of NR, DfT, HM Treasury, Parliament, the Cabinet Office, the NEDs, Transport Scotland, Welsh Assembly Government and other stakeholders. Reviews performance of the NEDs.

In respect of the chair's contractual time commitment to Network Rail, the Secretary of State agreed to alter the chair's contractual commitment to Network Rail to three days per week until 15 July 2019, to take into account the complicated range of issues that the company faces. This commitment will be reviewed later in 2019, however, Sir Peter Hendy CBE has confirmed that his other activities can be achieved without detriment to his duties to Network Rail.

Senior independent director (SID) – Bridget Rosewell CBE
Acts as a sounding board for the chair and serves as an intermediary for the other directors when necessary. Responsible for the chair's performance review. Available to the Secretary of State if they have concerns where contact through the chair has failed to resolve an issue or for which such contact is inappropriate. The Board is aware that Bridget Rosewell CBE has served on the Board for eight years and it is expected that she will step down upon her ninth anniversary as a director. The Board considered Bridget Rosewell CBE to be independent of the company.

The special director – Richard Brown CBE
Appointed by the Secretary of State. Responsible for communicating the views of the Secretary of State and the DfT's wider strategic statutory and fiduciary interests to the board, whilst acting in accordance with his duties as a NED.

Chief executive – Andrew Haines OBE
Responsible for setting the strategic direction of the company and for the company's performance. He keeps the board informed and brings to its attention all matters that materially affect, or are capable of materially affecting, the achievements of Network Rail. Provides clear and visible leadership in business conduct and promotes the requirement that all executive leadership team members and employees are exemplars of the company's values. Accountable to the board for all elements of NR's business, and specifically for safety performance. Additionally, he is the accounting officer.

In this role, the chief executive is personally accountable to parliament for safeguarding the public funds available to Network Rail, for ensuring regularity and propriety, value for money and feasibility in the handling of those public funds, for the day-to-day operations and management of Network Rail and for signing the accounts, the annual report and the governance statement. In addition, he is required to ensure that Network Rail is run following the principles, rules, guidance and advice set out in Managing Public Money.

The accounting officer is supported by the board for the discharge of his obligation in Managing Public Money, for the proper conduct of business and maintenance of ethical standards. The internal audit function also support the accounting officer. The director of Risk and Assurance provided his audit opinion to both the accounting officer and the audit and risk committee. The opinion detailed the overall adequacy and effectiveness of Network Rail's framework of governance, risk management and control. For further details on the internal audit function and on the audit and risk committee, see pages 97 to 105.

Chief financial officer – Jeremy Westlake
Responsible for leading NR's finance function which includes treasury, internal audit and risk, planning and regulation, long-term planning and legal and corporate services.

Independent non-executive directors
Rob Brighouse, Sharon Flood, Chris Gibb, Silla Maizey, David Noyes and Mike Putnam are considered by the Board to be independent of the company. The non-executive directors provide independence, external skills and challenge through broad business and commercial experience from the rail and other industries. They provide assurance that the executive directors are exercising good judgement in delivery of strategy and decision making.

The Board reviews the independence of its non-executive directors annually as part of its Board effectiveness process. It has considered if there are any circumstances which are likely to impair or could appear to impair the independence of a non-executive director.

When considering the appointment of new directors, the Board has taken into account the other demands on the proposed director's time. The Board requests that significant commitments and an indication of the time commitment, are disclosed to the Board, prior to appointment.

The Board notes that the Code includes guidelines on the meaning of 'independence' and it is appropriate to disclose that Rob Brighouse, Richard Brown CBE and Chris Gibb are beneficiaries of the Railway Pension Scheme (RPS). Over 100 companies from the rail industry participate in the RPS and the scheme is run by independent trust managers. Given this structure, the Board considers that Rob Brighouse, Richard Brown CBE and Chris Gibb are independent, as Network Rail is only one of the contributing companies to RPS.

The links to the statements of responsibility for each of the chair, chief executive, SID and the non-executive directors can be found on the Network Rail website www.networkrail.co.uk.

Group general counsel and company secretary – Stuart Kelly
Provides advice and support to the Board, the chair and the directors on legal and governance matters to ensure that corporate governance practices are complied with, in order for the Board to function effectively and efficiently. The appointment and removal of the company secretary is a matter for the Board as a whole.

Directors' attendance at meetings

The Board met nine times during 2018/19 and it also held one strategy meeting.

Directors' attendance at Board meetings for the year ending 31 March 2019, is shown in the table below. Non-executive directors are also required to attend various committee meetings and their attendance is specifically included in the respective Board committee reports on pages 94 to 123.

During 2018/19, there were a number of changes to membership of the Board. Mark Carne CBE, the former chief executive, resigned as a director on 13 August 2018 and left Network Rail on 4 September 2018. Michael O'Higgins resigned on 31 August 2018.

David Noyes was appointed to the Board on 6 July 2018 and Andrew Haines OBE was appointed to the Board on 14 August 2018.

	Total
Rob Brighouse	10/10
Richard Brown CBE	8/10
Mark Carne CBE[1]	4/4
Sharon Flood	9/10
Chris Gibb	10/10
Andrew Haines OBE[2]	6/6
Sir Peter Hendy CBE	10/10
Silla Maizey	9/10
David Noyes[3]	7/7
Michael O'Higgins[4]	4/4
Mike Putnam	10/10
Bridget Rosewell CBE	10/10
Jeremy Westlake	10/10

[1]Mark Carne CBE resigned as a director of the Board on 13 August 2018.
[2]Andrew Haines OBE was appointed to the Board on 14 August 2018
[3]David Noyes was appointed to the Board on 6 July 2018
[4]Michael O'Higgins resigned as a director of the Board on 31 August 2018

Corporate governance report continued

Board activities during the year

The chart below shows an overview of the key activities that the Board considered during 2018/19 and how the Board allocated its time.

Operations 47.45 %

Strategy 18.10 %

Finance 17.75 %

Governance 16.70 %

Composition, succession and evaluation

Board recruitment and induction

During the year, Andrew Haines OBE was appointed as chief executive and David Noyes was appointed as a non-executive director and a member of the safety, health and environment committee and the nomination and remuneration committee. Details of the appointment process for Andrew Haines OBE and David Noyes can be found in the nomination and remuneration committee report on pages 108 to 109.

A comprehensive induction programme is in place for newly appointed directors, which is tailored to the director to take account of their background knowledge, skills and experience. New directors are also provided with key corporate, strategic and financial documents to help them familiarise themselves with the company's business. The induction programme also includes individual meetings with Board members, the company secretary, senior executives and other key stakeholders.

Succession planning

The Board and the nomination and remuneration committee review the appropriateness of the appointment process and the approach to succession planning to support a diverse and sustainable pipeline of talent for senior roles within the business. The Board recognises that effective talent management programmes are necessary to improve diversity within all levels of the company and are essential for the delivery of the company's long-term strategy and objectives.

Board and executive diversity

The Board recognises the emphasis on diversity under the 2018 Code and that diversity and inclusion needs to remain an area of corporate governance focus in 2019/20. For example, work is being done to increase gender diversity to 20 per cent by the end of 2020. This project is as much about a change in culture; making Network Rail more open, diverse and inclusive, as it is about increasing numbers.

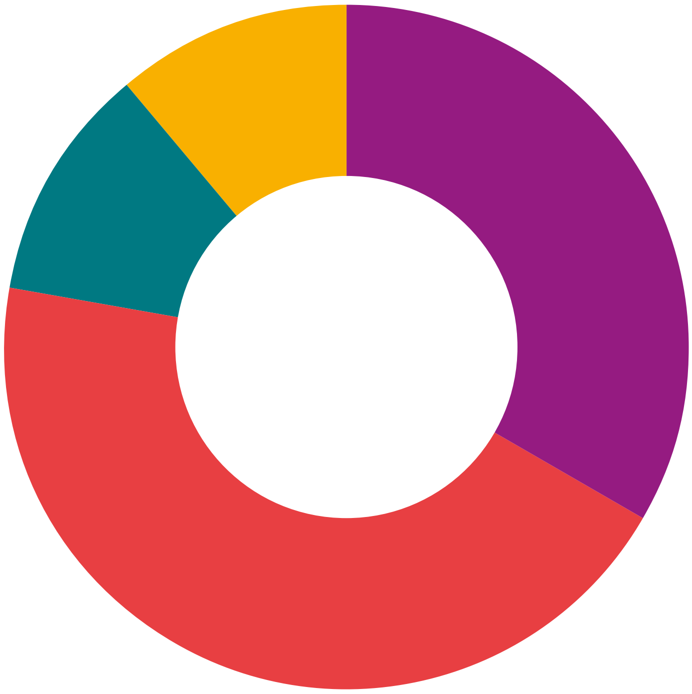
Each route business and function has a 20 per cent by 2020 lead and an action plan describing the necessary activities to achieve our female representation target.

The Board is aware that diversity extends beyond gender, and includes amongst other things age, social, ethnic, educational and professional backgrounds. Further details about Network Rail's diversity and inclusion policies and how these have been implemented in the year can be found in the putting people first section on pages 62 to 64.

The Board is comprised of nine non-executive directors and two executive directors. These individuals come from a variety of backgrounds and experience. The Board is 73 per cent male and 27 per cent female, however, when considering non-executive directors only, the split is 67 per cent male and 33 per cent female.

Corporate governance report continued

The following chart shows the length of service of the NEDs.



The executive leadership team is the senior management team responsible for the day-to-day operations of the company and it comprises individuals with a range of experience from rail and other industries. The executive leadership team is comprised of 68.5 per cent male and 31.5 per cent female.

Engagement with Network Rail's stakeholders

Network Rail, and indeed the wider rail industry, is facing some fundamental issues.

Andrew Haines OBE launched the putting passengers first programme in September 2018, to look at:

1. how Network Rail could provide the best possible service for passengers and freight;
2. how Network Rail ensures it is fit for purpose for CP6; and
3. how to deal with long standing issues around the way Network Rail works both internally and externally.

Network Rail started the putting passengers first programme by listening to the views of internal and external stakeholders to help us understand what is working and what is not. More than 300 colleagues, 200+ external partners, 108 organisations and three trade unions told us what they think.

Network Rail has listened to the feedback received and the Board is committed to ensuring that Network Rail is on the side of passengers and freight users; is easy to engage with and a dependable partner; a company people are proud to work for; instinctively recognised as an industry leader.

The outputs from the putting passengers first programme will enable us to achieve this vision.

The Board recognises the importance of Network Rail within the infrastructure supply chain and the volumes of work generated during CP5. Network Rail has worked collaboratively to develop its CP6 procurement pipeline with suppliers and stakeholders to enable successful delivery of these complex programmes, and help to give suppliers some certainty to make it easier for them to plan for the future.

Engagement with the workforce

The putting passengers first programme has facilitated engagement with employees and the Board has acknowledged the feedback received. A clear implementation plan to bring about the required changes is in place.

The Board has responsibility for the stewardship of the company, overseeing its conduct and culture, to create sustainable value for the benefit of a wide group of stakeholders, including its employees and the supply chain. The Board is instrumental in shaping the culture of the company, leading by example and embedding this culture across the entire company.

The ability to deliver the putting passengers first programme requires cultural change in the business, employee engagement and empowerment and a less bureaucratic and centric approach.

Corporate governance report continued

The delivery of the ambitious plans for CP6 will only be possible if Network Rail can attract, develop and retain the brightest and best people and be one of Britain's best employers. The Board wants to create an environment that will allow everybody to reach their full potential. Network Rail is working with others in the rail industry to enable it to become more diverse and inclusive and by the end of CP6 Network Rail aims to increase the number of women in our business by 50 per cent and have gender balanced recruitment of apprentices and graduates.

Network Rail actively encourages structured continuous improvement through its Better Every Day initiative, and the Board actively demonstrates its safety vision of 'everyone home safe every day'.

Board effectiveness

The Board is committed to complying with the highest standards of corporate governance. In line with best practice, Independent Audit undertook a review of the effectiveness of the Network Rail Board in early 2018. A report, including a number of recommendations was provided to the Board in March 2018.

The Board and the Company Secretary have considered the recommendations made in March 2018 and created action plans to address the issues raised in the effectiveness review. As appropriate, actions have either been completed or are being considered as part of the putting passengers first programme. An internal Board effectiveness review commenced in spring 2019.

Professional development, training and support for directors

The Board is offered a range of training and development opportunities each year, to support their continuing professional development and directors regularly receive corporate governance and legal updates as appropriate. Route managing directors and function heads regularly attend Board meetings to provide updates on the key issues affecting their areas of the business.

The directors have access to the advice and services of the group general counsel and company secretary, who is responsible for compliance with Board procedures and the provision of information to the Board in a timely manner. The directors have the right to seek independent professional advice at reasonable expense to Network Rail.

Election and re-election of directors

Each of the directors is subject to (re-) election at the 2019 AGM. The Board considers that all directors act in good faith, for the long-term benefit and success of Network Rail and they continue to perform effectively.

Directors' conflicts of interest

The Board operates a policy to identify and where appropriate, manage potential conflicts of interests that directors may have. Each Board meeting begins with disclosure of potential conflicts of interest. At the date of this report, the following key potential conflicts of interest have been declared:
- Rob Brighouse is chair of the East West Rail Company Limited;
- Richard Brown CBE is deputy chair and a non-executive director of HS2 Limited;
- Chris Gibb has been appointed chair of the Thameslink 2018 Industry Readiness Board;
- Bridget Rosewell CBE is a commissioner at the National Infrastructure Commission; and
- Sir Peter Hendy CBE is chair of the London Legacy Development Corporation.

Directors' and officers' (D&O) liability insurance

Network Rail maintains D&O liability insurance. Network Rail did not indemnify any directors during 2018/19.

The Annual General Meeting (AGM)

The formal business of the AGM is set out in a number of separate resolutions to be considered at the meeting. The company's sole member, the Secretary of State for Transport, is provided with a copy of the notice of meeting, alongside the annual report and accounts (as is the National Audit Office). The Secretary of State can vote either for or against a resolution or can withhold his vote (although a withheld vote is not considered to be a vote in law). Final voting figures are announced to the London Stock Exchange.

Sir Peter Hendy CBE,
chair

Andrew Haines OBE,
chief executive

15 July 2019

Safety, health and environment committee report

I am pleased to present the committee's report on its activities over the past year, alongside its anticipated activities for 2019/20, which show another year of overall improvements in safety performance on the railway network in England, Scotland and Wales.

While our targets for corporate safety were met, the strong performance on close calls raised actually represented a decrease on the previous year and was split across the functions of the business. This reduction did not necessarily represent poorer performance: as close call reporting behaviour has become established, we would have expected to see improved quality and less short-term focus on numbers.

While we saw fewer close calls raised, an improved close calls close-out rate was achieved. Approximately 90 per cent of close calls were closed within 90 days compared to a target of 85 per cent and last year's year-end figure of 82.2 per cent. It is important for the business to continue to check that close calls are only closed-out when the corrective action has been completed rather than simply planned.

The work and improvements on train accident risk continued the approach in earlier years focusing on proactive work and we significantly exceeded our targets for the year. Nine of the top-10 milestones to reduce level crossing risk were delivered by year end, and routes reduced the number of missing narrative risk assessments from 450 to 21 and improved timely reviews. Two accidental level crossing deaths were reported, fewer than in any other previous year.

Sadly, two workforce fatalities were recorded during the year interrupting a ten-year trend in which there had been none. One occurred at Bearsden station (Scotland) and the other at Stoat's Nest Junction (Surrey). Other safety events included a member of staff sustaining third degree burns at Godinton substation (Kent) and two other members of staff who sustained serious injuries in a rail vehicle collision at Cholmondeston (Cheshire).

Tragically, since the end of the 2019 financial year two of our colleagues in South Wales lost their lives while working on the track near Port Talbot. We are undertaking our own investigation and cooperating fully with the investigations under way by the British Transport Police and Rail Accident Investigation Branch.

We extend our sympathies to the relatives and friends of those who died, to those who were injured and their relatives and friends, and to all colleagues who were affected.

This year saw an increase in the number of high potential incidents involving workforce safety. October experienced the most recorded in one period since records began in 2016. The year also saw an increase in near-misses with staff, and two separate periods of the year recorded eight near-misses. The causes ranged from signaller error in simple line blockages with no additional protection, to ineffective or ad hoc systems of work being used by site staff.

On a more positive note, improvements in the workforce safety environment included a decrease of 18 per cent in the lost time injury frequency rate (LTIFR) from the previous year. Additionally, Hand Arm Vibration Syndrome compliance improved notably in relation to completion of the annual questionnaire, assessment by an occupational nurse, and referral to an occupational health physician, if required. All of these have improved significantly over the past two years.

Although trespass event numbers declined slightly during the year, the number of accidental trespasser deaths did not achieve the target we had set. Separately, the number of suicides on our infrastructure remained at similar levels to the previous year, falling from 204 to 203.

The Committee met four times in 2018/19, including a site visit to Eastleigh Delivery Unit and Long Welded Rail Depot, Eastleigh, Hampshire.

Chris Gibb,
Chair, Safety, health and environment committee

15 July 2019

Safety, health and environment committee report continued

Committee members	Formal appointment to the committee	Number of meetings attended during the year
Chris Gibb	Nov 2013	6/6
Rob Brighouse	Jan 2016	6/6
Sir Peter Hendy CBE	Oct 2015	6/6
Mike Putnam	Feb 2018	5/6
David Noyes*	Dec 2018	2/2

*David Noyes was appointed to the Board on 6 July 2018.

Committee attendees

The chief executive, the director of health and safety, the chief engineer for systems assurance, the managing director for Infrastructure Projects, the director of Risk and Assurance, the group general counsel or his nominee, the managing director Strategic Operations, and the director for Safety, Technical and Engineering and some of his direct reports attend meetings by invitation.

Mick Cash, general secretary of the RMT Union is invited to attend committee meetings and participates in discussions. This aids scrutiny and challenge and enhances transparency of the work of the committee.

Ian Prosser CBE, both chief inspector of railways and director, Railway Safety at the Office of Road and Rail (ORR), attends committee meetings twice a year to present the regulator's view on Network Rail's safety performance.

Role of the committee

The committee's role is to monitor the integrity of the methods of discharge of the safety, health and environmental responsibilities of Network Rail and to satisfy itself as to the adequacy and effectiveness of the safety, health and environment policies and strategies within the Network Rail group.

The committee's activities include:
- Reviewing the group's safety, health and environment strategies, systems, policies and practices.
- Considering significant corporate and individual safety, health and environment risks and whether management is managing these effectively.
- Reviewing the scope and results of any safety, health and environment audits on the effectiveness of the group's safety, health and environment strategies, systems, policies and practices.
- Considering the major findings of internal and external investigations and management's response to them.

Following each committee meeting, the chair provides a summary of the committee's activity to the next Board meeting and makes recommendations as appropriate.

The committee's terms of reference can be found on our website: www.networkrail.co.uk

Matters considered by the committee during the year included:
- Ongoing review of safety, health and environment performance for each of the 13 periods which comprise Network Rail's year.
- Discussion of changes to safety validation of organisational change in general but also specifically in relation to the Putting Passengers First programme, and the significant restructuring of Network Rail and its routes, the first phase of which will start in June 2019.
- The 2018/19 safety, health and environment (SHE) objectives and linkages to Control Period 6 (CP6) SHE objectives.
- SHE related incidents within Network Rail and contractor operations including lessons learned from incidents such as those at Bearsden station, Stoats Nest Junction, Godinton, and Cholmondeston.
- The delivery of infrastructure projects safely and the impact on that scorecard.
- Discussion of improvements to documentation and guidance in relation to safe systems of work which would be tailored to specific tasks, work schemes, roles, and locations.
- Presentations from a number of duty holders and route managing directors to demonstrate and discuss the adequacy and effectiveness of their safety, health and environment systems. These included; South East, London North West, Anglia and Wessex.
- Discussion of the current safety governance and assurance arrangements for the group in respect of safety leadership and close call reporting and close out and delivery of the required outcomes and improvement plans.
- Review of the findings from corporate-level audits and agreed action plans including the close out of overdue actions and the dissemination of issues and solutions across the network.
- Discussion of the social performance strategy and how value is created by Network Rail's business and supply chain managing the railway's impact on customers, lineside neighbours, employees and the general public.

Safety, health and environment committee report continued

- Deep dive reviews into, amongst other things:
  - Public safety
  - Devolution of safety management
  - Near-miss analysis and action plan
  - Train accident risk including the impact of human factors
- Discussion of fatigue risk management to reduce the number of fatigue-related accidents and injuries through better planning, improved employee wellbeing, improved understanding and awareness of fatigue, and better management of the associated risks.

- Discussion of the Network Change plan for the eradication of effluent discharge to track which will significantly improve the working environment for our staff.
- Examination and reference to lessons learned from international rail accidents and high potential incidents.

Particular areas of focus for 2019/20 will include:
- Prioritisation and implementation of workstreams to further reduce train accident risk building on work undertaken in 2018/19.
- Assurance that safety management procedures continue to be strengthened particularly in relation to the further devolution to region and route levels, and changes across the company.
- Improved controls to reduce near-misses between trains and track workers.
- Station safety performance and future plans to mitigate the risk of increasing passenger numbers.
- Reducing risk at level crossings through closure, upgrade and implementation of technological solutions.
- Prioritisation of Network Rail's responsibilities and implementation of workstreams for managing environmental matters including those in relation to the vegetation management review by John Varley.
- Ongoing examination of international rail accidents and high potential incidents and the opportunities for applying lessons learned.
- Public safety including measures to reduce accidents through trespass incidents and suicides.
- Presentations from a number of duty holders and route managing directors to demonstrate and discuss the adequacy and effectiveness of their safety, health and environment systems.

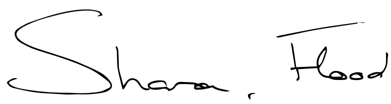
Audit and risk committee report

I am pleased to present the committee's report into the key activities undertaken during 2018/19, alongside its anticipated activities for 2019/20.

Summary of work of the committee

During 2018/19 the committee continued to focus on the audit, assurance and risk management processes within the business, and maintained its oversight of financial and other regulatory requirements. There was particular focus on the significant and emerging risks facing the business, to enable the committee to better understand the areas of concern and provide assurance to the Board on the effectiveness of the associated internal controls. These included deep dives on readiness for the December 2018 timetable change, continued scrutiny of timetable capability following the May 2018 timetable change and reviewing the introduction of a business controls framework to improve assurance activity across the group.

Sharon Flood,
Chair, audit and risk committee



15 July 2019

Composition of the committee

The committee met four times during 2018/19. Members collectively have a broad range of financial, commercial, aviation/transport and rail sector expertise that enables them to provide effective oversight of financial, operational and risk matters and to advise the Board accordingly. All members of the committee are independent non-executive directors, and the chair has recent and relevant financial experience.

Committee members	Formal appointment to the committee	Number of meetings attended during the year
Sharon Flood	Sep 2014	4/4
Silla Maizey	Nov 2016	3/4
Bridget Rosewell CBE	Jul 2012	4/4
Rob Brighouse	Jan 2016	4/4

Committee attendees

The chair of the Board, the chief executive, chief financial officer, director of risk and internal audit, group controller (finance), head of group risk and the group general counsel & company secretary attend meetings of the committee by invitation. Representatives from the National Audit Office (NAO) also attend each meeting and periodically meet with committee members without executive management present. Periodically the director of risk and assurance meets with the committee without executive management present.

Role and responsibilities of the committee

The terms of reference govern the structure and operations of the audit and risk committee, including its delegated responsibilities and authority. The terms of reference are reviewed regularly to ensure the activities of the committee reflect current regulatory and governance requirements and best practice. The terms of reference can be found at **www.networkrail.co.uk**

The role of the committee falls into the following broad areas:

Financial reporting

- Monitoring the integrity of the group's annual report and financial statements.
- Reviewing significant accounting judgements and policies and compliance with accounting standards.
- Reviewing the consistency of accounting policies both on a year-to-year basis and across the company; the methods used to account for significant or unusual transactions; applicable accounting standards followed or reconciled in the financial statements; and any other significant financial reporting judgements made by management.

Narrative reporting

- Considering whether the annual report and financial statements as a whole are fair, balanced and understandable.
- Providing information to shareholders to assess performance, business model and strategy.

Internal controls and compliance

- Reviewing the adequacy and effectiveness of financial reporting and internal control procedures.
- Reviewing and approving statements to be included in the annual report and financial statements.
- Reviewing compliance with statutory and regulatory requirements.
- Reviewing procedures for detecting fraud, malpractice and theft.
- Reviewing the adequacy and security of arrangements for employees and contractors to raise concerns.
- Reviewing systems and controls for preventing bribery.

Risk management

- Considering proposals for the level of risk appetite, tolerance and strategy, and reviewing the risk profile, current exposure and future strategy against the risk appetite.
- Considering management's report on potential major risks.
- Reviewing risk assessment processes, parameters and methodologies.
- Reviewing the capability to identify and manage new risk types.
- Reviewing the process undertaken and the associated work required to complete the viability statement.
- Considering the remit of the risk management function and to ensure its independence and adequate resourcing.
- Reviewing management's responsiveness to the risk findings and recommendations.
- Reviewing how risk mitigations and controls are tested.
- Advising the Board on the risk aspects of significant strategic transactions.

Internal audit function

- Reviewing the effectiveness of the internal audit function considering the need for independent reviews of its processes.
- Reviewing the internal audit programme and ensuring it is adequately resourced and is appropriately independent from management.
- Reviewing internal audit reports on the effectiveness of systems for internal financial control, financial reporting and risk management.
- Reviewing and approving the internal audit plan.
- Considering major findings of internal investigations and management responses.

External audit

- Reviewing the nature and scope of the independent auditor, its approach, and the level of fees. Considering the results of external audit work and how any weaknesses are to be addressed.
- Approving the terms of engagement and reviewing the management letter and management's response.
- Reviewing wider implications of the external auditor's work across the company.
- Annually assessing and reporting to the Board on the independence and objectivity, expertise and resources of the independent auditor.

Complaints procedures

- Reviewing the procedures for dealing with complaints relating to accounting, internal audit controls, or auditing matters.

Cyber security

- Providing assurance that cyber risk is being appropriately managed.
- Annually reviewing cyber resilience.

Following each meeting, the chair provides a summary of the committee's activities, main discussion points and findings to the next Board meeting and makes recommendations as appropriate.

Principal activities during the year

At each meeting the committee receives business updates from group finance, internal audit, group risk and the independent auditor. Updates are planned on a 12-monthly basis to coincide with key events within the financial reporting and audit cycle. If any matter is identified as in need of discussion sooner than 12 months, it is added to the agenda of a future meeting. In addition to regular updates, the committee undertakes deep dives on the emerging and principal risks facing the business and elevates these to the Board where necessary. The committee conducts an annual evaluation of its effectiveness, details of which are provided below.

The significant issues that the committee considered during 2018/19 were:

Accounting standards and judgements

The committee assessed whether suitable accounting policies had been adopted and whether management had made appropriate judgements and estimates. Following discussion, the committee was satisfied that neither IFRS 9 Financial Instruments nor IFRS 15 Revenue from Contracts

Audit and risk committee report continued

with Customers had any significant impact on Network Rail's accounts. The former because the changes largely relate to legacy activities regarding hedge accounting, the latter because the existing pattern of income recognition meets with the requirements of IFRS 15.

The changes in IFRS16 Leases are not expected to have a material effect on Network Rail's profitability, but will increase net debt and non-current assets and have budgetary implications that will need to be borne in mind when entering future leases. Further details can be found in note 2 to the accounts on page 141.

Fair, balanced and understandable

At the request of the Board, the committee considered whether, in its opinion, the annual report and financial statements 2018/19, are fair, balanced and understandable and whether they provide the information necessary to assess the company's position and performance, business model and strategy. The committee received an outline of the structure of the annual report and financial statements 2018/19 and a broad indication of its content in early stages. A full draft of the report was submitted prior to the meeting at which the committee was asked to provide its final opinion.

The assessment of such an opinion drew on work of the disclosure committee, the annual report and financial statements project group responsible for the coordination of content, verification, detailed review and challenge. Senior management confirmed that the content in respect of their areas of responsibility was fair, balanced and understandable.

The committee considered the following questions:

Is the annual report fair?

- Has the whole story been presented and has any sensitive information been omitted that should have been included?
- Is the messaging in the front half of the annual report consistent with the financial disclosures?
- Is the score card disclosed at an appropriate level based on financial reporting?

Is the annual report balanced?

- Is there an over-emphasis of matters that are not material?
- Is the narrative report in the strategic report consistent with the financial reporting in the accounts, and does the messaging reflected in each remain consistent when read independently of each other?
- Is there an appropriate balance between statutory and non-statutory measures and are non-statutory measures clearly defined?
- Are the risks in the narrative consistent with the committee's risks and issues and key areas of uncertainty and judgments?
- Are the key risks aligned with the audit report?

Is the annual report understandable?

- Is the document designed to suit the needs of the Department for Transport in its capacity as sole member?
- Is the report understandable to a reasonably informed reader?
- Are new messages and themes clearly articulated?

Following its review, the audit and risk committee stated that the annual report and financial statements 2018/19 present a fair, balanced and understandable overview, providing the information necessary to assess the company's position and performance, business model and strategy. The committee therefore proposed the document for approval to the Board.

Significant accounting judgements, key assumptions and estimates

With the support of the NAO, the committee assessed whether suitable accounting policies had been adopted, whether management had made appropriate estimates and judgements and disclosures were balanced and fair. The main areas of focus during the year are set out below.

Accounting judgements	How the committee addressed these judgements
Valuation of rail network and compliance with regulatory requirements The revaluation model used to measure the value of the rail network consists of a number of estimates and judgements made both by the company and the Office of Rail and Road (for example anticipated financial and operational outperformance in the control period).	Detailed reports from management were considered by the committee and the methodology applied to the revaluation model was also reviewed and agreed. The committee also challenged management and the independent auditors on: • The reasonableness of key judgements and estimates in respect of the forecast for CP6. • The appropriate level of disclosures in the annual report and accounts around the valuation process and the related assumptions and judgements.
Capital accruals	The estimate of cost of work done in a key judgement in Network Rail's accounts. The additions to Property, plant and equipment are valued at an estimate of the cost of work done (COWD) in the year to 31 March 2019. To the extent that the COWD is greater than the invoiced amount, fixed asset accruals are recognised based on expected amounts required to settle contractual obligations. To value the cost of work done on, capital projects, appropriately skilled commercial managers assess the progress to completion of the project at the expected cost. Both progress and expected costs have elements that are estimates and require accounting judgement.
Risk of management override of internal controls	Reports on managements approach to measuring cost of work done were reviewed alongside details of internal validation and the external auditors report on sample testing. It was noted that managements approach had a tendency towards optimism bias concerning estimates of progress and cost. When taken together these judgements were unlikely to cause a material misstatement. Management advised that improvements will be made towards eliminating bias in future estimates. The independent auditors have focussed attention on this area and provided satisfactory reporting to the committee on this matter.

Audit and risk committee report continued

Deferred tax It was considered whether it was still probable that Network Rail could expect to use its brought forward tax losses.	Reports indicated that the reclassification of Network Rail as a public body, when taken together with continued high levels of investment in the rail network, meant that it was hard to judge that Network Rail would return within a predictable period to the level of taxable profits that would allow for the utilisation of tax losses. It was agreed to derecognise deferred tax assets.
Valuation of investment properties Investment properties are stated at fair value. The valuations are based on assumptions and estimates that require judgement.	The committee agreed the appropriate methodology had been used. The methodology was consistent with prior years and included valuations and additional assistance from external valuation specialists. The valuations were reviewed by management and the external valuation specialists.
Hedge accounting and derivatives Forward starting interest rate swaps are accounted for as cash flow hedges where it is believed that future sterling issuances are highly probable.	The committee reviewed reports from management showing that all the forward starting interest swaps had now been utilised in hedging the borrowing rate on the DfT loan facility. The fair value at utilisation will amortise from the hedge reserve in line with the loan tranches to which they relate. The derivative portfolio will now reduce year-on-year and there are no plans to enter into new derivative hedging programmes.
Pension assumptions The group operates defined benefit and defined contribution pension schemes. Valuation of these schemes is dependent on certain key assumptions and complex calculations. External actuaries are engaged to assist in advising on key assumptions and determining the value of the pension obligations.	The committee discussed the key assumptions, including the degree to which these were supported by professional advice from the actuaries. The independent auditors also focused attention on this area and provided reporting to the committee on this matter.

The committee is required to review any correspondence received from regulators in respect of financial reporting. There has been no correspondence from the FRC in relation to Network Rail's financial reporting during the 2018/19 financial year.

External audit

Committee effectiveness

The committee continued to monitor and implement the action plan developed from the self-evaluation effectiveness review which had been completed in 2017/18. The review had shown that overall the committee was functioning effectively.

The approach taken to the appointment of the external auditor

The Comptroller and Auditor General (C&AG), Sir Amyas Morse CBE, supported by the NAO, was appointed as Network Rail's independent auditor in 2015. In addition to providing an opinion on the group accounts, the C&AG also audits the individual accounts of Network Rail Infrastructure Finance PLC, Network Rail Infrastructure Limited and Network Rail (High Speed) Limited.

PricewaterhouseCoopers (PwC) acted as the independent auditors for the remaining subsidiaries in 2018/19. The obligation to appoint the C&AG as Network Rail's independent auditor is a direct impact of the reclassification of Network Rail as an arm's-length government body and is in line with standard arrangements for other public sector bodies.

The company is, therefore, unable to comply with the Competition and Markets Authority's Order or the UK Corporate Governance Code 2018 in respect of tendering prior to the appointment of an auditor and this will remain the company's position for the foreseeable future.

Gareth Davies took over the post of C&AG from Sir Amyas on 1 June 2019.

Effectiveness of the external auditor

A review of the independent auditor's performance and effectiveness is undertaken as part of the overall effectiveness review of the auditing process. Following the conclusion of the reporting cycle, the auditing process was assessed. The independent auditor was also invited to comment on what worked well and where improvements could be made. The committee was satisfied that the independent auditor was fully effective and performed as expected in discharging its duties and obligations.

Objectivity and independence of the independent auditor

The NAO is independent of Network Rail in accordance with the ethical requirements relevant to the audit of financial statements in the UK, including the FRC's Ethical Standard as applied to listed entities/public interest entities.

The committee has put in place safeguards to maintain the independent auditor's objectivity and independence. To enhance independence and in line with established auditing standards, a new senior statutory auditor of the independent auditor is appointed every five years, with other key audit principals within that firm rotated every seven years.

The committee has established a policy whereby employment of the independent auditor on work for the company is prohibited without prior approval by the committee, other than for audit services or tax compliance services. Such requests are unlikely as the NAO does not offer non-audit services. The NAO does carry out value for money assessments for Network Rail, but this does not represent a service to Network Rail as it is performed under statute and on behalf of Parliament.

In 2018/19 the fee for audit services was £0.59m (£0.51m in 2017/18). This includes the NAO's cost of auditing Network Rail Infrastructure Limited, Network Rail Infrastructure Finance plc, Network Rail (High Speed) Ltd, the regulatory accounts and review of interim financial statements of Network Rail Limited and Network Rail Infrastructure Finance plc. It excludes the cost of the audit of some smaller subsidiaries which continue to be audited by PwC.

The fee to PwC for auditing the smaller subsidiaries was £90k in 2018/19.

Audit and risk committee report continued

Internal audit

The committee reviews the annual internal audit plan to ensure it aligns with the group's strategic priorities and key risks. At each meeting the director of risk and internal audit updated the committee on any changes to the plan and the reasons for deviation from the plan, notable audits, overdue actions, and themes and key issues arising from the internal auditor's work.

Our assurance processes have identified areas for improvement in our internal controls, and activities to address these are being monitored closely by the committee. Examples of these include:

– Cyber security risk
This was highlighted by internal audit as an area requiring focused, continuous improvement of control activity and the committee requested a deep dive into the risk. A detailed plan to mitigate identified weaknesses was then reviewed by the committee and it continues to monitor the risk.

– Commercial contract assurance
In response to commercial control issues identified, internal audit will run a standalone commercial contract assurance programme to assess contracts and transactions that may have a high fraud risk. By conducting the proposed work, we will be one of the first government agencies to run a comprehensive programme to detect fraud in high risk areas.

– Business continuity management (BCM)
In response to the business continuity risk identified by internal audit, development of an effective BCM framework is on track and work continues on embedding BCM activity into core processes.

– Business controls framework (BCF)
The work of internal audit found that controls were either not fit for purpose or not always operated as designed, usually due to the absence of clearly defined or up to date processes and controls. In response, a pilot was initiated in the South East route to test the concept of a business-wide BCF and understand how it could be rolled out across the business.

The committee approved the 2019 internal audit plan (the 2019 plan), which was developed through a review of the enterprise risk register, taking into consideration industry trends including technological change and disruption. The 2019 plan also follows up on the group assurance letter findings, focussing on control areas with a less than "substantial" rating. These areas include: (i) safety, health and environment risk, (ii) response to emergency situations, (iii) access to systems, (iv) critical systems and recovery, (v) change management and (vi) people systems and processes.

The committee also approved the internal audit charter, which defines internal audit's purpose, authority, responsibility and position within the company.

Evaluating the effectiveness of internal audit

As well as assessing the 2019 plan and receiving regular reports on the results of the internal auditor's work, the committee met with the director of risk and internal audit without the presence of management to assess the role and effectiveness of the internal audit function in the overall context of the company's risk management system, taking into account the actions management has taken to implement the recommendations of the function. The committee is satisfied that internal audit is operating effectively.

An independent review of internal audit effectiveness and processes was conducted by PwC in June 2018 and the committee considers it appropriate for the next independent review to be commissioned in the 2019/20 financial year.

Risk management and internal controls

The Board has ultimate responsibility for Network Rail's risk management and internal control systems, but delegates detailed oversight of the function to the committee, which then reports its findings and makes recommendations to the Board. This covers all material controls including financial, operational and compliance controls and risk management systems. The risk management systems and internal controls are designed to manage rather than eliminate risk and can only provide reasonable but not absolute assurance that the group's risks are being appropriately managed and mitigated. The delegated responsibilities for risk management and internal control are detailed in 'Role and responsibilities of the committee' on page 97.

The committee receives regular reports from the internal and independent auditors and reviews progress against agreed action plans to manage identified risks. Detailed oversight of safety related risks is delegated to the safety, health and environment committee.

Network Rail's approach to risk management and identification, its risk appetite, and an assessment of principal and emerging risks is provided on pages 70 to 77.

In addition to regular updates, the committee reviews the emerging and principal risks that require particular attention. During the year, these were:

- The risk of failure to attract, retain and develop the full potential of talent for business-critical roles;
- The risk of failure to secure support from our people and from trade unions for our programme of organisational change;
- The risk of failure to attract and retain suitably qualified and skilled individuals in executive and leadership roles;
- The risk of project and programme delays or increased cost;
- The risk of not securing funding for our preferred CP6 plan;
- The risk of a gap in critical service provision, due to loss of strategic or critical suppliers;
- The risk of failure to deliver the digital railway train control and signalling systems targets for CP6;
- The risk of prolonged business interruption caused by poor business continuity planning and exercising;
- The risk of cyber threats impacting the availability or integrity of systems that support key business processes;
- The risk of failure to effectively manage data, information, and knowledge management;
- The risk of failure to deliver a safe and resilient timetable.

In addition, the committee discussed the December 2018 timetable assurance process and the May 2019 timetable process and emerging assurance, and key milestones for both timetable introductions.

Evaluating the effectiveness of internal control and risk management systems

The committee regularly reviews the corporate risk profile, including the status of mitigating actions, and reviews and approves any changes to the Enterprise Risk Management (ERM) framework, which determines the design, implementation, monitoring and review and identification of risks. In advance of the new control period, the head of group risk undertook a thorough review of the ERM framework and the committee discussed the findings before approving the preferred option for developing the framework. The committee will continue to review the outcome of the changes.

During the year the committee also reviewed and approved changes to Network Rail's risk appetite statements and reviewed the remit of the risk management function to ensure it remained appropriate for the company's strategy. The committee was satisfied that a robust risk process was in place to manage and mitigate risks with appropriate plans and monitoring. Where risks had materialised, appropriate actions were being taken to manage the impact on passengers, customers and the organisation.

The committee had oversight of the process and assessment of the group's prospects to carry on its business under severe but plausible scenarios undertaken by the risk management and internal audit functions. Further details of the analysis/scenario testing for the viability statement can be found on page 79.

Whistleblowing

The committee reviews and makes recommendations to the Board on the company's whistleblowing procedures and any arrangements for the independent investigation and follow-up of such matters.

Over the year, the committee discussed reports on major findings of internal investigations (and management's response to them), reviewed the whistleblowing policy and procedures, and assured the Board that these were adequate and effective. This was supported by the findings of an independent review carried out by Protect (experts in whistleblowing), which stated that Network Rail is "an organisation with good policies and structures in place in relation to whistleblowing. Network Rail is well placed to build on current practice and reach best practice".

Network Rail's confidential reporting service and 'Speak Out' (whistleblowing) policy has been in place since 2012. The Speak Out service is run by an external company on behalf of Network Rail, and all reports undergo an initial review by our business integrity team.

The Speak Out policy provides guidance on when people should speak out, how they can do this, how concerns are handled and how confidentiality is maintained, alongside information on the most appropriate channels to report concerns related to safety or individual grievances.

Mandatory company-wide ethics training, which includes content on whistleblowing, has been fundamental in raising awareness of the Speak Out line. In January 2018, we launched two new ethics training modules designed to consolidate our people's knowledge and understanding of business ethics at Network Rail. To date, both new modules have been completed by over 24,000 people.

In 2018/19, 410 confidential reports were made to the Speak Out service. This represents a 39 per cent increase on the previous year and aligns with the launch of the new training modules, which raise awareness of potential ethical issues at work and include a reminder of our whistleblowing policy and how to report concerns. Each year, on average, 55 per cent of reports made are substantiated and action taken.

Audit and risk committee report continued

The Speak Out policy will be updated in 2019/20 to incorporate recommendations made by Protect following their review of Network Rail's whistleblowing processes and procedures.

Planned activities for the coming year

In the 2019/20 financial year, the committee will continue its oversight of the risk management and internal control systems and the internal audit function, monitoring the integrity of the financial statements including the interim statements, and reviewing the external audit process. Specific focus will be on ensuring that the structure and focus of the committee meetings adapt to the increasingly devolved nature of the organisation in CP6. This will include oversight of the risks specific to each new region; continued monitoring of the Putting Passengers First programme; and review of the CP6 assurance framework.

Treasury committee report

Throughout 2018/19, the committee continued to consider a range of financing, debt, risk and treasury matters.

In February, Network Rail completed the sale of its commercial estate portfolio. Proceeds from the £1.46 billion transaction will help fund the railway upgrade plan and reduce the need for taxpayers to fund the railway.

Network Rail's source of borrowing is via a Department for Transport (DfT) loan facility. As funding is limited, we are proactively seeking third party financing of rail enhancements in Control Period 6 (CP6).

The committee will continue to oversee these activities in the year ahead.

Sharon Flood,
Chair, treasury committee

15 July 2019

Committee members	Formal appointment to the committee	Number of meetings attended during the year
Sharon Flood	Sep 2014	3/3
Silla Maizey	Nov 2016	2/3
Bridget Rosewell CBE	Jul 2012	3/3

Committee attendees

The chair of the Board, chief financial officer, group controller, head of treasury, and the group general counsel and company secretary attend meetings by invitation.

Role and responsibilities of the committee

The terms of reference (ToR) govern the structure and operation of the treasury committee, including its delegated responsibilities and authority level. The ToR are reviewed regularly, to ensure the activities of the committee align with the needs of the organisation.

The most recent ToR were approved by the Board in April 2018. The terms of reference can be found at **www.networkrail.co.uk**

The committee's role is to:
- Review proposed treasury transactions including banking, cash management and cash forecasting, debt management, investment management and treasury risk management.
- Approve or recommend strategies in relation to treasury management, including liquidity management and forecasting, financing, bank relationships and regulatory requirements.
- Review the treasury function's financial reporting and internal control procedures.
- Approve specific transactions within treasury responsibility.

Principal activities during the year

The committee received detailed updates from the treasury team at each meeting. The chair then provided a summary of the committee's activities, the main discussion points and findings to the next Board meeting and made appropriate recommendations.

Some of the topics discussed during 2018/19 were:

CP6 financial framework

The committee discussed how Network Rail would be financed in CP6. Network Rail would transition from an annually managed expenditure to a departmental expenditure limit control framework and the committee considered how the transition would be managed at group

Treasury committee report continued

and route-level. The committee also reviewed changes to the operation of the government grant system.

Sale of commercial estate

The Hendy Review into Network Rail's investment programme recommended the sale of its non-core property assets. The transaction with Telereal Trillium and Blackstone Property Partners completed on 4 February 2019.

Proceeds from the sale will help to fund the railway upgrade plan, which is improving and growing the rail network for the benefit of passengers and the wider UK economy.

Open for Business

The Open for Business programme was established in September 2017 to expand third party financing and delivery of Network Rail schemes by making it easier for third parties to undertake these activities.

We have established business development teams in the routes to engage directly with third parties and enable local customer focus. We have published route-based pipelines to enable third parties to identify opportunities for funding, financing and delivery and put in place a clear and accessible process for industry to challenge our standards.

Examples of target projects for third-party investment in CP6 include the refurbishment of Leeds station, the Cumbrian coast line upgrade and the refurbishment of Victoria and Cardiff stations.

Treasury

Further matters considered by the committee during the year included:

- Cash forecasting and utilisation of the DfT loan facility, including risks to the cash position and loan utilisation.
- Future participation in the Government Banking Service and the impact on existing use of money market funds.
- Approval of the treasury policy manual and risk register.
- Regular summaries of treasury activities, including:
  - actual and forecast movements in debt, derivatives and investments;
  - risks of over or underspend of the DfT loan facility;
  - financing costs; and
  - intercompany loans.

Planned activities for 2019/20

The committee will continue to monitor the progress of the initiatives underway.

Particular areas of focus will include:

- The impact of the Williams Review conclusions on Network Rail's financing and treasury activities.
- Exploring alternative approaches to raising capital to fund enhancements.
- Monitoring the introduction of the CP6 financial framework.
- Assessing strategic or corporate finance opportunities that may be proposed to the Board.
- Monitoring cash flow and funding limits.

Nomination and remuneration committee report

I am delighted to present the nomination section of the committee's report into its activities during 2018/19.

From September 2018 the nomination committee and the remuneration committee were conjoined. The decision to amalgamate these committees reflected the limited remit of both committees given Network Rail is an arm's-length government body. The members of the two committees were broadly the same; Michael O'Higgins chaired the remuneration committee until he retired from the Board on 31 August 2018, at which point I assumed that role, becoming chair of the conjoined nomination and remuneration committee. I already chaired the nomination committee. Sir Peter Hendy CBE and Richard Brown CBE were members of both committees for the whole year.

Due to the nature of the committee's work and the associated reporting requirements, this report is presented in two parts. The first part covers the 'nomination' related activities. The second part is the Directors' Remuneration Report, the content of which is largely prescribed by legislation and regulation.

In the first half of the year, when the committee operated separately, the nomination committee's focus was on appointing (i) a successor to Mark Carne CBE as chief executive and (ii) an additional non-executive director with specific knowledge, skills and experience in leading business transformation, with a focus on improving customer service through devolution and delivering cost efficiencies.

Two separate recruitment programmes resulted in the appointment of Andrew Haines OBE as chief executive and David Noyes as a non-executive director.

During this period, the remuneration committee's focus was on the outturn of the 2017/18 performance related pay (PRP) scheme and fixing appropriate metrics and targets for the 2018/19 PRP scheme.

The second half of the year saw the conjoined nomination and remuneration committee focus its efforts on the Putting Passengers First programme (see page 7 for further information). This focus on extending devolution from the centre to the routes and regions has necessitated an organisational change, including changes to senior roles and reporting lines.

The Directors' Remuneration Report starts on page 111.

Upon the amalgamation of the nomination and remuneration committees, David Noyes joined the committee. We very much welcome David's perspective on the committee's remit, given his recent and relevant experience in a commercial, private sector organisation.

Bridget Rosewell CBE,
Chair, nomination and remuneration committee

15 July 2019

Committee members	Formal appointment to the nomination committee	Number of nomination committee meetings attended during the year	Number of nomination and remuneration committee meetings attended during the year
Bridget Rosewell CBE	Sep 2016	1/1	6/6
Richard Brown CBE	Oct 2015	1/1	3/6
Sir Peter Hendy CBE	Oct 2015	1/1	5/6
David Noyes[1]	Oct 2018	-	5/5
Michael O'Higgins[2]	Sep 2016	1/1	-

1. David Noyes was appointed to the Board on 6 July 2018; his appointment in October 2018 was to the conjoined nomination and remuneration committee
2. Michael O'Higgins resigned from the Board and Committee on 31 August 2018

Nomination and remuneration committee report continued

Committee attendees

The following people attend meetings of the committee by invitation: the chief executive, the group general counsel and company secretary, the group HR director and the head of reward and benefits.

Role of the committee

The role of the combined nomination and remuneration committee is to investigate or comment on Board appointments, Board and senior executive remuneration (or any other related matters that are referred to it or as may appear to it to be necessary), and to review matters related to Network Rail's culture and diversity.

The committee's terms of reference can be found on our website: www.networkrail.co.uk

Following each committee meeting, the chair provides a summary of the committee's activity to the next Board meeting and makes recommendations as appropriate.

Nomination matters considered by the committee during the year included:

Board succession planning and appointment of non-executive directors

In February 2018 Mark Carne CBE announced his plans to retire from Network Rail later that year. As such the committee discussed plans to appoint Mark's successor.

Spencer Stuart, an independent executive search firm, assisted with the selection and recruitment process, which included running a newspaper advertisement to help attract a diverse range of candidates. Spencer Stuart provided a long-list of potential candidates for review by Network Rail, following which Spencer Stuart interviewed a number of those candidates. Those interviews helped to identify a short-list of candidates, from which those interested in the role were interviewed by a panel from Network Rail, the Department for Transport and HM Treasury. Following the completion of this process, the role of chief executive of Network Rail was offered to, and accepted by, Andrew Haines OBE.

The committee also managed the search and selection of David Noyes as a non-executive director. That recruitment was supported by Korn Ferry, an independent executive search firm. The role was advertised in a national newspaper, and suitable candidates from that and from Korn Ferry's research were assessed by Korn Ferry and a long-list of candidates identified. That long-list was reviewed by Network Rail, and a short-list of candidates were identified and interviewed by Bridget Rosewell CBE. A final short-list of candidates was then interviewed by Sir Peter Hendy CBE, Bridget Rosewell and Chris Gibb. The appointment of Network Rail's preferred candidate was recommended to the Secretary of State for Transport, who approved that appointment.

Board evaluation 2018

The committee reviewed the recommendations arising from the 2018 Board evaluation review, alongside the proposed actions to address, where appropriate, those recommendations. The committee monitored progress towards delivering those actions.

Effects of the UK corporate governance code 2018

The committee was briefed on the corporate governance changes arising from the 2018 UK Corporate Governance Code. A number of matters were highlighted to the committee with recommendations made as to how they should be addressed. Those matters included stakeholder and workforce engagement.

Particular areas of focus for the nomination and remuneration committee in 2019/20 will include:

- Changes to performance scorecards as a result of the new operating model. The scorecards form the basis for determining whether or not targets have been met and therefore whether, and if so to what extent, any performance related pay has been earned;
- The 2019 Board effectiveness review outcome and plan to address any issues identified. This work will encompass:
  - a review of the committee's terms of reference; and
  - consideration of the Board's diversity policy and targets;
- A review of Board succession plans, which will include the search for and appointment of non-executive directors to replace those who have, or will soon have, completed their term on the Board;
- A review of Network Rail's pension schemes; and
- Preliminary discussions on the directors' remuneration policy which is expected to apply for the 2020/21 financial year.

Directors' remuneration report

- 111 Annual statement from the committee chair
- 114 Annual remuneration report
- 114 Single total figure of remuneration for 2018/19 (audited)
- 115 Executive director changes
- 115 Incentive plan 2018/19 – annual performance related pay (audited)
- 116 Pension (audited)
- 117 Non-executive directors' fees (audited)
- 117 Payments to former directors (audited)
- 117 Payments for loss of office (audited)
- 117 Outside appointments
- 118 Additional disclosures
- 118 Percentage change in remuneration
- 118 Performance graph and table
- 119 Relative importance of spend on pay
- 120 Consideration of directors' remuneration – remuneration committee and advisers
- 120 Key remuneration committee agenda items during the year
- 120 Committee members
- 121 Role of the remuneration committee
- 121 Executive directors' remuneration policy
- 123 Pay for performance structure for executive directors – aligned to what is important for customers

Annual statement from the remuneration committee chair

During the year, the committee reviewed the terms of reference as the remuneration and nomination committees were combined, and this has ensured that our commitments are fully up to date.

This is my first year chairing the remuneration committee and during the year 2018/19 we have widened our remit to cover a wider group than the executive directors and have taken on board all the reporting requirements for UK listed companies and the UK corporate governance code.

Our annual remuneration report outlines the outcomes for 2018/19 in respect of executive remuneration and will be subject to approval of our member, the Secretary of State for Transport. The 2018 report and the three year remuneration policy for executive directors (Policy) were approved respectively at the 2018 and 2017 AGMs by our member, the Secretary of State. The Policy sets out the framework and limits for how executive directors are paid. The Policy was included in the 2017 directors' remuneration report and can also be viewed on our website **www.networkrail.co.uk.**

The policy will be reviewed during this year for approval at the 2020 AGM.

Determining executive pay at Network Rail – best practice corporate governance

Developing policy:

Remco

Develops policy for approval

ORR

Network Rail's plan must create an appropriate framework of incentives to comply with any objectives that ORR may specify from time to time

Secretary of State

Approves policy

Implementing policy:

Secretary of State

Approves policy

Remco

Makes decisions within policy including individual salaries, setting and assessing performance targets, the outturn of performance related pay and arrangements for joiners or leavers

The key points to note and main agenda items from 2018/19 are:

- The new chief executive, Andrew Haines OBE, was welcomed during the year.
- Performance related pay (PRP) outturn was set at 45 per cent of maximum after adjustments. This is paid to all employees.
- Senior executive performance related pay is individually adjusted. The chief executive declined to accept a payment this year. The chief financial officer received a payment equivalent to 13.5 per cent of salary.
- The chief executive pay ratio this year has been disclosed ahead of the new regulations.
- The remuneration for new senior roles as a result of the new operating model agreed by the Board in January 2019 has been extensively benchmarked and discussed.

The rest of this statement explains how executive remuneration is determined at Network Rail, gives more information on the outcomes in respect of 2019, and summarises the Policy agreed in 2017.

Implementation of Policy in 2019

Decisions made by the committee during the year were all within the framework agreed as part of the Policy in 2017.

The policy is underpinned by four key principles which are:

1. **Simple:** the framework should be simple and transparent for all stakeholders to understand
2. **Competitive and fair:** attracting and retaining leaders of the necessary calibre requires remuneration arrangements that are reasonable in the markets in which we compete for talent and which fairly reflect the appropriate market rates for the skills and experience of the individual. At the same time, we always remain cognisant of the need to ensure value for money for the taxpayer and to reflect our status as a publicly funded body.
3. **Performance and safety:** there should be a performance related element of the package which rewards performance in areas that are most important for our stakeholders. There should be no reward for failure. The safety of our workforce, passengers and the general public is at the heart of everything we do and must be reflected in the remuneration framework.
4. **Aligned with employees:** where possible, remuneration structures will be aligned across the organisation. All Network Rail employees continue to be eligible for performance related pay determined using a consistent performance framework across the organisation.

The remuneration framework for executive directors agreed in 2017 is based on these principles and includes the following elements:

Salary	Salaries are set at a level which reflects the skills and experience of the individual as well as the scope of the responsibilities of the role.
Benefits and pension	Participation on the same basis as other managerial positions at Network Rail.
Performance related pay	Our plan based on the achievement of stretching annual performance targets aligned to the business scorecard.

All of the decisions and payments made to executive directors during the year were within the agreed policy framework.

The terms of the package for the new chief executive, Andrew Haines OBE, were within the scope of the policy. His package includes the core elements of base pay and PRP, and there are no additional benefits. The level of PRP, at a maximum of nine per cent of salary, is lower than the maximum permitted in the framework.

Remuneration report continued

2018/19 outcomes for executive directors

Business performance is measured through the business scorecards. These measure performance against key measures and targets agreed with customers and stakeholders. Performance related pay for senior employees is determined by the scorecard outturn and modified according to personal performance ratings, so the lower the performance, the lower the performance related pay.

Overall performance against the scorecard was 58.5 per cent. Targets were met or exceeded for our safety, asset management and local customer measures. However, further improvement is still required around financial and train performance which still fell below the targets set. Following the Board Remuneration Committee review of our performance, the final national scorecard out-turn was reduced to 45 per cent.

The maximum performance related pay for the executive directors is 20 per cent of salary for the chief financial officer and nine per cent of salary for the chief executive. In reaching the decision on their payments the committee took account of the input from the SHE committee and the recommendation from the chief executive for a downward adjustment.

Based on the 45 per cent out-turn, the percentage of salary payment for the chief financial officer is 13.5 per cent of salary. The chief executive declined to accept a PRP scheme payment in his first year.

Full details of the decision making and out-turn of the PRP scheme can be found on page 115.

Scorecards

The business scorecards evolved for 2019 and will continue to evolve to support the operating model and priorities. The national scorecard for 2018/19 reflected measures that are most important to passengers, the customers of our routes, our stakeholders and the ORR. All route scorecards are developed jointly with customers to reflect their differing needs, as well as those of passengers, within an overall framework of safety, financial performance, train performance, asset management, investment and local customer measures.

To reflect the devolved nature of the business, 60 per cent of the PRP for those in routes is determined by performance against the route scorecard and 40 per cent is determined by the national scorecard.

In 2020 we will review our PRP arrangements so they support the key objectives and priorities for CP6.

Bridget Rosewell CBE,
Chair, nomination and remuneration committee

15 July 2019

Annual remuneration report

This report has been prepared in accordance with the requirements of Schedule 8 of the Large and Medium-sized Companies and Groups (Accounts and Report) (Amendment) Regulations 2013. Where indicated, some of the disclosures in these sections have been audited.

Single total figure of remuneration for 2018/19 (audited)

The table below summarises all remuneration for the executive directors in respect of 2018/19 (and the prior year comparative). Further discussion of each of the components is set out on the pages which follow.

£'000	Salary		Benefits[1]		Pension[2]		Performance Related Pay (PRP)[3]		Total	
	2018/19	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19	2017/18
Mark Carne CBE	252[4]	682	9	23	24	64	0[5]	0	285	769
Jeremy Westlake	357[7]	353	32[6]	15	31	31	48	0	468	399
Andrew Haines OBE	371[8]	-	0	-	0	-	0[9]	-	371	-

1. Benefits include car allowance, private medical cover, any annual travel subsidy, life assurance and relocation.
2. Pension includes the value of all pension benefits receivable in respect of the relevant year. This includes any supplementary cash allowance and a value from participation in the defined benefit or defined contribution pension arrangements or allowances for those who have opted out of their respective pension arrangements in the relevant year (calculated in accordance with the methodology prescribed by the Regulations). Further details of these pension benefits are set out in the pension section on 116.
3. There were no performance related payments in 2017/18 as the executive directors voluntarily decided to decline receiving any payments due to the May 2018 timetabling issues that emerged after the end of the year.
4. Mark Carne CBE's 2018/19 salary is lower than the previous year as he left Network Rail and stepped down from the Board on 13 August 2018. He declined his annual pay award in 2018.
5. Mark Carne CBE was not eligible for any performance related pay in 2019 as he had left Network Rail during the scheme year.
6. Jeremy Westlake's benefits payments were higher than for 2017/18 as he received relocation assistance.
7. Jeremy Westlake's 2018/19 salary payment is slightly higher than the previous year as he received a pay award in July 2017. This resulted in slightly lower salary payments in 2017/18 compared to 2018/19 which was paid at the higher rate for the full year.
8. Andrew Haines OBE joined Network Rail as chief executive on 14 August 2018, and the salary shown is pro-rated to reflect this.
9. Andrew Haines OBE declined the PRP he earned for 2018/19.

Pay Ratios (audited)

The government last year announced new legislation for employers to publish their pay ratios from 2020. The pay ratio highlights the gap between the chief executive and the 25th, 50th and 75th percentile of employees - using the single figure disclosed in remuneration reporting. A historical record will be published incrementally to a 10-year period moving forward.

For transparency and good governance, the nominations and remuneration committee decided to publish the ratio information a year early and to also publish the information from 2017/18, the previous year.

There are three calculation methodologies to choose from:
A. Calculate total remuneration for all employees and take the percentiles to calculate the pay ratio against the chief executive single figure total remuneration

Remuneration report continued

B. Using existing pay data i.e. gender pay gap reporting, take the 25th, 50th and 75th percentiles and then calculate the total remuneration for these and compare against the chief executive single figure total remuneration
C. Same as option B but using other recent pay data

The nomination and remuneration committee decided that option B, using existing gender pay gap reporting, would be used. This data already exists and is in the public domain, therefore more familiar and easier to obtain.

	Method	25th percentile pay ratio	Median pay ratio	75th percentile pay ratio
2017/18	**Option B**	24.4:1	19.5:1	14.2:1
2018/19[1]	**Option B**	20.5:1	14.9:1	12.3:1

1. Change of chief executive during the year. Pay ratio based on Mark Carne CBE and Andrew Haines OBE's combined single figure total for 2018/19.

When taking the employee data for the 25th, 50th and 75th percentile, the total remuneration figure has been calculated based on an office worker at these percentiles rather than other employee groups. Using a front-line or operations worker would have reduced the ratio as these types of roles are eligible for overtime, allowances and shift payments, all of which would have increased the comparator pay and decreased the ratio. The additional payments are not guaranteed and therefore are likely to vary year on year. The total remuneration figure for an office worker at these percentiles is likely to be lower and also less variable year on year. It is therefore considered to be a better comparator.

At the time of publication PRP payments for 2018/19 were yet to be confirmed, therefore estimates have been used for indicative purposes. These payments may also cause the pay ratio to fluctuate annually as the calculation for payment takes into account individual performance.

The ratios for 2018/19 have decreased from 2017/18. This is because the figure for 2018/19 is based on the pro-rated remuneration for the current and previous chief executive. The figure for 2017/18 is based solely on the remuneration for the previous chief executive, which is higher than the total remuneration for the current chief executive.

Executive director changes

Mark Carne CBE retired from Network Rail on 4 September 2018 (having stepped down from the Board on 13 August 2018) and was replaced by Andrew Haines OBE.

Incentive plan 2018/19 – annual performance related pay (audited)

During the year, three directors were eligible to participate in this scheme, Mark Carne CBE, Jeremy Westlake and Andrew Haines OBE. The maximum potential annual performance related pay award for Mark Carne CBE and Jeremy Westlake in 2018/2019 was 20 per cent of salary. Andrew Haines OBE's maximum potential annual performance related pay award is 9 per cent. Stretching performance targets were set at the start of the year in the context of the national scorecard, which can be found on pages 18 to 20. The approach for performance related pay is aligned across the businesses, including executive directors. The scorecard outturn determines the percentage payout against the maximum award. This is then modified in accordance with the performance rating. For a 'good' performance rating, the amount is reduced by applying a modifier of 0.9.

Performance against the national scorecard is summarised on pages 19 and 20. Overall scorecard performance was above target. Specifically, targets were met or exceeded in relation to safety, asset management and local customer measures. Route performance was generally above target with just one route falling below this. Despite improvement in performance against last year, further improvement is still required around financial and train performance which still fell below the targets set. Although train performance did end the year strongly, with six out of eight routes improving their overall performance.

Each year the safety, health and environment (SHE) committee considers the overall scorecard outturn from a safety perspective and decides whether to recommend any further adjustments to reflect safety performance.

Having reviewed the safety measures outturn and the overall safety performance, the committee concluded that the scorecard outturn on safety measures is a reflection of overall safety performance and no adjustments should be made.

The chief executive reviewed the scorecard outturn of 58.5 per cent. He did not believe that the adverse effects of the timetable issues, felt both in train performance and the financials adequately reflected the full impact on passengers or the reputational damage caused. In addition, there has been a sustained deterioration in industry performance over the last seven years, where Network Rail has failed to deliver on performance plans in each of those years. This has now culminated in a number of external reviews which have exposed structural shortcomings and led to the provisional order from the ORR in November 2018.

Based on both the sustained deterioration in performance and also the May 2018 timetabling issue, he recommended a 13.5 percentage point reduction in PRP from 58.5 to 45 per cent of maximum, which was approved by the nomination and remuneration committee.

Taking into account this adjusted outturn and individual performance, the PRP for the chief financial officer is 13.5 per cent of salary. The payment disclosed in the single figure table for the chief financial officer is deferred in full for three years. The current chief executive, Andrew Haines OBE, has declined payment in respect of the 2018/19 year. The previous chief executive, Mark Carne CBE, was not eligible for a payment as he left part way through the year.

Pension (audited)

1. Executive directors are eligible to participate in one of the Network Rail defined benefit pension schemes or the defined contribution pension scheme on the same basis as other employees.
2. Under the existing executive pension policy, Jeremy Westlake is entitled to an allowance in lieu of pension on the same basis as other employees of Network Rail, subject to the discretion of the group HR director. This allowance is equivalent to the employer's pension contributions otherwise payable, less an adjustment for the cost of providing continued life assurance and the employer National Insurance Contributions payable. This allowance was paid during 2018/19. Andrew Haines OBE was not eligible to an allowance in lieu of pension as part of his appointment.
3. Previously, executive directors received an additional pension allowance in the form of a cash supplement based on a percentage of their earnings above the notional earnings cap (£160,800 for 2018/2019 tax year and previously £154,200 for 2017/2018). This policy will no longer apply to new appointments, including Andrew Haines OBE.

The table below sets out details for executive directors for 2019 in respect of all Network Rail pension benefits, split between the defined benefit and defined contribution/additional allowance. The value shown in the final column of this table is included as the pension column in the single total figure of remuneration on page 114.

	Defined benefit schemes				Other pension arrangements[4]		
	Normal retirement age[2]	Accrued pension at 31 March 2018 £000	Increase in accrued pension (net of inflation) during 2017/18)	Tansfer value of accrued pension at 31 March 2018 £000[3]	Value included in single figure table (A) £000	Cash salary supplement or contribution to defined contribution scheme (B) £000	Total pension value reported in single figure table (A+B) £000
Andrew Haines OBE[1]	–	–	–	–	–	–	–
Mark Carne CBE	–	–	–	–	–	24	24
Jeremy Westlake	–	–	–	–	–	31	31

1. Andrew Haines OBE does not receive any pension contribution nor cash in lieu.
2. The normal retirement age shows the age at which the director can retire without actuarial reduction.
3. Transfer values as at 31 March 2018 have been calculated in accordance with 'The Occupational Pension Schemes (Transfer Values) (Amendment) Regulations 2008'.
4. For the defined benefit schemes, the value shown in the Single Figure table (A) has been calculated in accordance with the regulations by applying a multiplier of 20 to the increase in accrued pension (net of inflation) during the year. For the additional pension allowance (B), the value shown is the gross cash allowance/contribution in the year. The value shown in the single figure table is the sum of A and B.

Remuneration report continued

Non-executive directors' fees (audited)

Under the framework agreement the Secretary of State for Transport (SoS) sets the pay for the chair and non-executive directors of Network Rail. The fees for the non-executive directors were reviewed in 2016 and have not increased.

The table below summarises the remuneration for the non-executive directors in respect of 2018/19.

	2018/19		2017/18	
	Fees £000	Benefits £000	Fees £000	Benefits £000
Rob Brighouse	50	-	50	–
Richard Brown CBE	50	-	50	–
Sharon Flood	70	-	70	–
Chris Gibb	70	-	70	–
Sir Peter Hendy CBE[1]	375	1	411	1
Silla Maizey	40	-	40	–
David Noyes[2]	27	-	-	-
Michael O'Higgins[3]	25	-	60	–
Mike Putnam[4]	40	-	9	-
Bridget Rosewell CBE	69	-	69	–

1. In addition to fees, Sir Peter Hendy CBE also receives private medical cover which was agreed with the DfT in 2015 at the time of his appointment. Sir Peter Hendy CBE also reduced his working hours from July 2017; he was on a higher remuneration for the first three periods of 2017/18 which resulted in a higher remuneration compared to 2018/19.
2. David Noyes joined the Board on 6 July 2018.
3. Michael O'Higgins left the Board on 31 August 2018.
4. Mike Putnam's fees are higher than 2017/18 as he was appointed to the Board on 8 January 2018.

Payments to former directors (audited)

There were no payments made to former directors in 2018/19.

Payments for loss of office (audited)

There were no payments for loss of office to executive directors in 2018/19.

Outside appointments

Executive directors are normally required to seek approval from the committee to retain any fees they receive in respect of external non-executive directorships. Network Rail set out a clear expectation that the new chief executive, Andrew Haines OBE, would not take up external NED roles for the foreseeable future.

Mark Carne CBE was a director of the Rail Delivery Group Limited and also an independent governor of Falmouth University. He received no fees in respect of these appointments during the period in which we was a director of Network Rail. Andrew Haines OBE is a director of the Rail Delivery Group and does not receive fees for this appointment, although he does receive a travel pass that allows him free rail travel for personal and business purposes. Jeremy Westlake did not have any outside appointments.

Additional disclosures

The following disclosures are required by the regulations to provide additional context for considering executive remuneration.

Percentage change in remuneration

The table below shows the percentage change in the salary, benefits and annual performance related pay (APRP) of the chief executive and all Network Rail employees from 2017/18 to 2018/19.

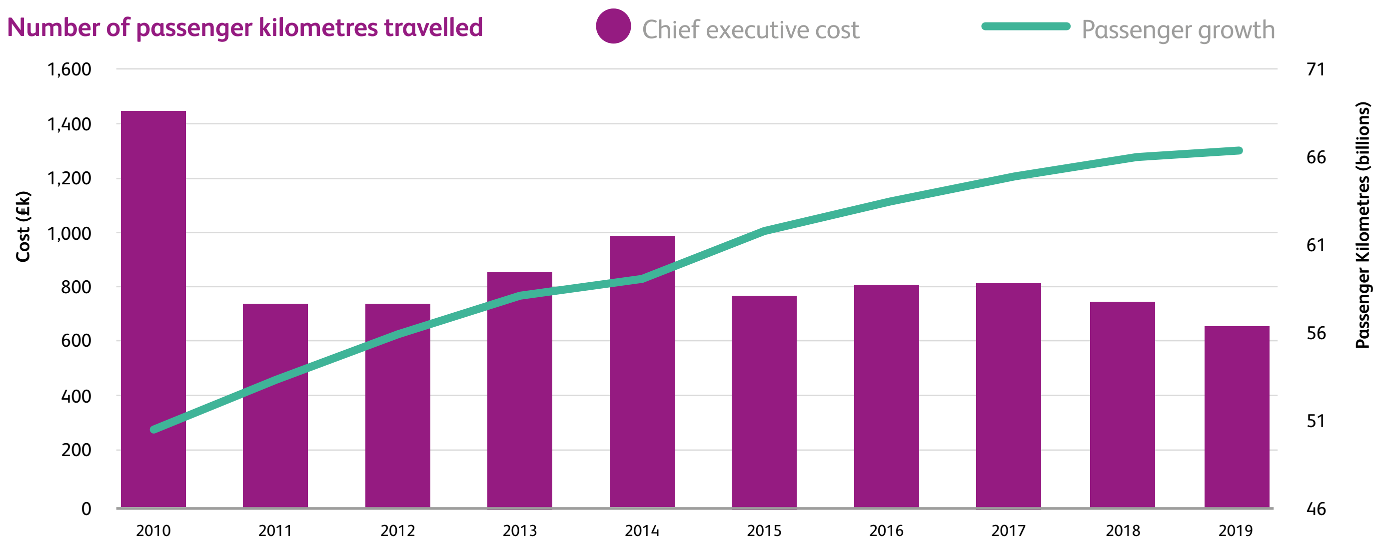
For the purposes of the table below, the annual change in the value of each of the components for the chief executive has been calculated using the data disclosed in the relevant columns of the single total figure of remuneration table on page 114.

	Chief executive[3]	All employees
Salary[1]	-8.7 %	2.8 %
Benefits	-2.0 %	0 %
Performance related pay[2]	-11 %	0 %

1. Based on salary reviews effective on either 1 January or 1 July 2019.
2. Performance related pay is based on any changes to maximum opportunity.
3. 2017/18 remuneration was based solely on Mark Carne CBE's remuneration, whereas 2018/19 was based on a combination of his and Andrew Haines OBE's remuneration.

Performance graph and table

Under the regulations, companies are required to include a chart showing historic total shareholder return (i.e. share price and re-invested dividends) over an eight-year period alongside a table that shows the remuneration paid to the chief executive over the same period. As Network Rail does not have shares, or a share price, an alternative metric of passenger kilometres travelled has been used.



Remuneration report continued

	Chief executive	Single total figure of remuneration	PRP (% of vesting)	LTIP (% of vesting)
2018/2019	Andrew Haines OBE	£371k	0 %	N/A
	Mark Carne CBE	£284k	N/A	N/A
2017/2018	Mark Carne CBE	£769k	54.6 %	N/A
2016/2017	Mark Carne CBE	£820k	37 %	N/A
2015/2016	Mark Carne CBE	£811	34.7 %	N/A
2014/2015	Mark Carne CBE	£771k	0 %	N/A
2013/2014	Mark Carne CBE	£200k	20.9 %	N/A
	Sir David Higgins	£790k	N/A	N/A
2012/2013	Sir David Higgins	£836k	28.6 %	N/A
2011/2012	Sir David Higgins	£736k	0 %	N/A
2010/2011	Sir David Higgins	£161k	N/A	N/A
	Iain Coucher	£528k	N/A	N/A
2009/2010	Iain Coucher	£1,447k	56.8 %	N/A

Iain Coucher was appointed chief executive on 1 August 2007. He resigned on 31 October 2010.
Sir David Higgins was appointed chief executive on 1 February 2011. He resigned on 28 February 2014.
Mark Carne CBE was appointed chief executive on 24 February 2014. He retired on 4 September 2018.
Mark Carne CBE also voluntarily declined any performance related pay in 2018.
Andrew Haines OBE was appointed chief executive on 14 August 2018 . He declined any performance related pay in 2019.
N/A indicates that there was no eligibility for an award vesting in respect of the relevant year.
The combined single total figure of remuneration for Andrew Haines OBE and Mark Carne CBE is £655k.

Relative importance of spend on pay

Under the regulations, companies are required to illustrate the relative importance of spend on pay by disclosing the total employee remuneration and returns to shareholders (i.e. dividends and share buybacks) in the reporting year and the prior year. Network Rail is a not-for-dividend company and therefore cannot provide data on returns to shareholders. Therefore, in line with the principle of this disclosure, the table below includes other key Network Rail metrics to illustrate employee remuneration in the context of overall business activities.

	2018/19	2017/18	Change (%)
Total employee remuneration	£2,561m	£2,419m	5.9 %
Total expenditure	£10,824m	£9,985m	8.4 %

Consideration of directors' remuneration – remuneration committee and advisers

The membership of the committee during the year comprised the following independent non-executive directors: Michael O'Higgins, Sir Peter Hendy CBE and Richard Brown CBE. David Noyes joined the committee in July 2018. Bridget Rosewell CBE replaced Michael O'Higgins as chair during the year.

The group general counsel and company secretary is secretary to the committee. The committee is also supported by the group HR director, and head of reward and benefits. The chief executive attends meetings at the invitation of the committee. No individual is present when their own remuneration is being discussed.

In carrying out its responsibilities in line with best practice, the committee seeks independent external advice as necessary. During the year, the committee retained Deloitte LLP to provide independent advice on executive remuneration. Deloitte was appointed by the committee in 2012 following a selection process undertaken by the committee. The committee is satisfied that the Deloitte engagement partner and team provide objective and independent remuneration advice to the committee and do not have any connections with Network Rail that may impair their objectivity and independence. Deloitte is a founding member of the Remuneration Consultants Group and voluntarily operates under the code of conduct in relation to executive remuneration consulting in the UK. The code of conduct can be found at **www.remunerationconsultantsgroup.com**.

Deloitte did not provide any advice to the committee during 2018/19, and as such no fees were payable in this respect.

Key remuneration committee agenda items during the year

May 2018	• Executive director remuneration report • Approval of executive annual pay review 2018 • Scorecard 2017/18 outturn for performance related pay decisions
June 2018	• Performance related pay 2017/18
November 2018	• Half year review of performance against scorecard
February 2019 (2 meetings)	• Total remuneration approach and package for new roles pursuant to the Putting Passengers First programme
March 2019 (2 meetings)	• Total remuneration approach and package for new roles pursuant to the Putting Passengers First programme • Scorecard 2018/19 outturn for performance related pay decisions • Evolution of performance related pay for 2019/20 and beyond

Committee members

Member	Formal appointment to committee	Number of meetings attended during the year
Richard Brown CBE	July 2015	4/8
Sir Peter Hendy CBE	July 2015	7/8
Michael O'Higgins[2]	November 2012	2/2
Bridget Rosewell CBE[1]	September 2018	6/6
David Noyes[3]	October 2018	5/5

1. Appointed to the committee in October 2018.

2. Chair since July 2013; stepped down from the committee on 31 August 2018 when he retired from the Board.

3. Chair of the combined nomination and remuneration committee since September 2018.

Remuneration report continued

Role of the remuneration committee

In 2018, the nomination and remuneration committees were combined to form one committee. The committee continues to cover policy, governance and decision making in relation to all senior employees with salaries above the pay threshold.

The full terms of reference of the committee can be found on the website: **www.networkrail.co.uk**.

Executive directors' remuneration policy

The remuneration policy was reviewed in 2017 and was approved by the member at the AGM.

The policy is outlined in the summary table below, with the full policy available in the 2017 annual report (**https://cdn.networkrail.co.uk/wp-content/uploads/2017/07/Network-Rail-Annual-report-and-accounts-2017.pdf**).

The policy is based on four core principles:

Simple

The policy should be clear and transparent for all customers and stakeholders to understand.

Competitive and fair

Remuneration should appropriately reflect the skills and experience of the individual, and the scope and complexity of the role. At the same time, it should provide value for money for customers, taxpayers and passengers.

Focused on safety and performance

The framework covering performance related pay should reward exceptional performance in the areas which are most important for Network Rail, our customers and stakeholders – such as safety, train performance and financial management. A key component of financial management is the focus on driving efficiency and managing costs effectively. There should be no reward for failure.

Aligned with employees

All Network Rail employees continue to be eligible for performance related pay using a consistent performance framework across the company.

The policy is summarised below:

Fixed	Salary	Salaries are set at a level that reflects the capability, skills and experience of the individual as well as the scope and responsibilities of the role allowing the company to recruit the calibre of individual needed to lead the business. In line with other employee groups, salaries are reviewed annually and increases will normally be in line with the typical salary increase for the overall population over the same period.
	Benefits	Includes discounted rail travel and life insurance in line with all Network Rail employees as well as car and healthcare benefits in line with other management positions.
	Pensions	Eligible to participate in Network Rail pension schemes on the same basis as all employees. To provide a market competitive pension benefit, executive directors and senior managers may also receive a supplementary cash allowance of up to 10 per cent of salary above the Network Rail pension cap.
Variable	Performance related pay	One performance related pay plan based on stretching annual performance targets which our stakeholders care about most. Cascading the performance framework across the organisation creates aligned objectives and shared successes. For executive directors, a maximum opportunity of 20 per cent of salary, subject to performance, and any amount is deferred for three years.

Remuneration report continued

Pay for performance structure for executive directors – aligned to what is important for customers

The PRP arrangements for executive directors and other employees are aligned to business performance. The targets directly relate to the business scorecards.

The approach for PRP in 2019/20 is being reviewed so it is aligned to the operating model. The new scheme will be fully disclosed in the 2020 report.

Directors' report

The directors present their annual report and the audited accounts for the year ending 31 March 2019.

Disclosures regarding business performance and activities, future business developments and risk management are contained in the strategic report (pages 1 to 79) and corporate governance report (pages 81 to 125).

The company is limited by guarantee, having no share capital, so there are no share disclosures in the present report.

Directors

The directors who served during the year and held office at the date of signing the annual report and accounts are detailed on pages 81 to 84.

Directors' conflicts of interest

In accordance with company law and the company's articles of association, the directors have the power to authorise any matter which would or might otherwise constitute or give rise to a direct or indirect conflict of interest. However, such authority can only be exercised if the director has declared their actual or potential conflict of interest to the Board. The directors have a continuing obligation to update any changes to their conflicts. Further details about directors' conflicts of interest can be found on page 93.

Branches

The company's subsidiary, Network Rail Consulting Limited, has established branches in Saudi Arabia, Australia, United States of America (USA), Canada, and New Zealand.

Contracts of significance

There were no contracts of significance subsisting during 2018/2019 to which any Network Rail undertaking was a party and in which a director of the company is or was materially interested (as defined by Listing Rule LR 9.8.4R).

Political donations

It is Network Rail's policy not to make political donations or to incur political expenditure in the UK and the EU. No political donations were made, and no political expenditure was incurred during the year (2017/18: £nil).

Investment in research and development

Technology and innovation is fundamental to Network Rail's success in Control Periods 5 and 6 and beyond.

During the year the group charged nothing to the income statement (2017/18: nil) on research development.

Further information on the cost of research and development can be found in Note 2 on page 145.

Engagement with our people, passengers and stakeholders

Details of the actions the company has taken during the financial year to develop arrangements aimed at:

- providing its people with information on matters of concern to them
- consulting its people's representatives on a regular basis to ensure that their views are taken into account when making decisions that are likely to affect their interests
- encouraging its people's involvement in the company's performance
- achieving a common awareness on the part of all its people of the financial and economic factors affecting the company's performance as well as how the directors have had regard to the need to foster the business relationships with its suppliers and stakeholders can be found in the Building Public Trust section on page 86.

Financial disclosures

Disclosures relating to the group's use of financial instruments, financial risk management objectives and policies of the company, including its policy for hedging each major type of forecasted transaction for which hedge accounting is used; its exposure to price risk, credit risk, liquidity risk and cash flow risk can be found under Note 25 on page 172.

Particulars of important events affecting the group since the financial year end and an indication of likely future developments can be found in the CFO's statement on pages 12 to 17.

Directors' statement of responsibilities

The directors are responsible for preparing the annual report, the directors' remuneration report and the financial statements in accordance with applicable law and regulations.

Company law requires the directors to prepare financial statements for each financial year. Under that law the directors have prepared the group and company financial statements in accordance with International Financial Reporting Standards (IFRSs) as adopted by the EU. Under company law the directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the group and the company, and of the profit or loss of the group for that period. In preparing these financial statements, the directors are required to:

- Select suitable accounting policies and then apply them consistently;
- Make judgements and accounting estimates that are reasonable and prudent;
- State whether applicable IFRSs as adopted by the EU have been followed, subject to any material departures disclosed and explained in the financial statements.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the company's transactions and disclose with reasonable accuracy at any time the financial position of the company and the group, to enable them to ensure that the financial statements and the directors' remuneration report comply with the Companies Act 2006 and, as regards the group financial statements, Article 4 of the IAS Regulation. They are also responsible for safeguarding the assets of the

Directors' report continued

company and the group, and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Legislation in the UK governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

The directors are responsible for the maintenance and integrity of the company's website.

The directors consider that the annual report and accounts, taken as a whole, is fair, balanced and understandable and provides the information necessary for its member to assess the company's performance, business model and strategy.

Each of the directors in office at the date of this report, whose names and functions are listed on pages 81 to 84 confirm that to the best of their knowledge:

- The financial statements, prepared in accordance with the applicable set of accounting standards, give a true and fair view of the assets, liabilities, financial position and loss of the group and the undertakings included in the consolidation taken as a whole.
- The management report, which for the purposes of the Disclosure and Transparency Rules (DTR 4.1.8R) is incorporated into the strategic report and directors' report, includes a fair review of the development and performance of the business and the position of the group and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that the group faces.

Independent auditor

Resolutions for the re-appointment of the current independent auditor, the National Audit Office, who also acts for the Comptroller and Auditor General, and to authorise the audit and risk committee (ARC) to determine the independent auditor's remuneration, will be proposed at the forthcoming annual general meeting. The notice of meeting is enclosed, together with explanatory notes, in a pack with this report.

Disclosure of information to the independent auditor

Each of the directors at the date of approval of this report confirms that:

- So far as the director is aware, there is no relevant audit information of which the company's independent auditor is unaware;
- The director has taken all steps that they ought to have taken as a director in order to make them aware of any relevant audit information and to establish that the company's independent auditor is aware of that information.

Going concern statement

The group's business activities, together with the factors likely to affect its future development, performance and position and the group's principal risks and uncertainties are set out in the 'strategic report' section on pages 1 to 79 The financial position of the group, its cash flows, liquidity position and borrowing facilities are described in the CFO's review on pages 12 to 17. Note 25 on page 172 to the accounts includes the group's objectives, policies and processes for managing its capital; its financial risk management objectives; details of its financial instruments and hedging activities; and its exposures to credit, liquidity and foreign exchange risk. The viability statement on page 78 sets out a longer-term assessment than this going concern statement.

The group has considerable financial resources together with long-term contracts with a number of customers and suppliers.

Business plans and financial models are used to project cash flows and monitor financial risks and liquidity positions, forecast funding requirements and other key financial ratios, including those relevant to our network licence. Analysis is undertaken to understand the resilience of the group and its business model to the potential impact of the group's principal risks, or a combination of those risks. This analysis takes account of the mitigating actions realistically to be taken to avoid or reduce the impact or occurrence of the underlying risks. In considering the likely effectiveness of such actions, the conclusions of the board's regular monitoring and review of risk management and internal control systems, as described on pages 68 to 77, are disclosed in detail.

Consequently, the directors believe that the group is well placed to manage its business risks.

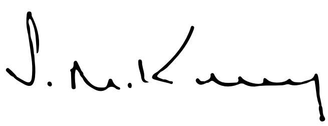
After making enquiries, the directors have a reasonable expectation that the company and the group have adequate resources to continue in operational existence for the foreseeable future.

For this reason and on the basis of the above, the directors consider it appropriate for the group to adopt the going concern basis in preparing its annual report and accounts.

Post Balance sheet events

Except as disclosed above, there have not been any significant post balance sheet events, whether adjusting or non-adjusting.

Stuart Kelly,
Group general counsel and company secretary



15 July 2019

Financial statements

Financial statements

- 127 Independent auditor's report to the member of Network Rail Limited
- 136 Income statement
- 137 Statement of comprehensive income
- 138 Statement of changes in equity
- 139 Balance sheets
- 140 Statement of cash flows
- 141 Notes to the financial statements

Independent auditor's report to the members of Network Rail Limited

Opinion on financial statements

I have audited the financial statements of Network Rail Limited ('the company') for the year ended 31 March 2019 which comprise:
- the group income statement and statement of comprehensive income;
- the group and parent company statement of changes in equity;
- the group and parent company balance sheets;
- the group and parent company statement of cash flows;
- and the related notes, including the significant accounting policies.

The financial reporting framework that has been applied in their preparation is applicable law and International Financial Reporting Standards as adopted by the European Union. I have also audited the information in the Directors' Remuneration Report that is described as having been audited.

In my opinion the financial statements:
- give a true and fair view of the state of Group's and the parent company's affairs as at 31 March 2019 and of the group's loss for the year then ended;
- have been properly prepared in accordance with International Financial Reporting Standards as adopted by the European Union; and
- have been prepared in accordance with the Companies Act 2006.

Opinion on regularity

In my opinion, in all material respects the expenditure and income recorded in the financial statements have been applied to the purposes intended by Parliament and the financial transactions recorded in the financial statements conform to the authorities which govern them.

Conclusions relating to principal risks, going concern and viability statement

I have nothing to report in respect of the following information in the annual report, in relation to which the ISAs (UK) require me to report to you whether I have anything material to add or draw attention to:
- the disclosures in the annual report that describe the principal risks and explain how they are being managed or mitigated;
- the directors' confirmation in the annual report that they have carried out a robust assessment of the principal risks facing the group, including those that would threaten its business model, future performance, solvency or liquidity;
- the directors' statement in the financial statements about whether the directors considered it appropriate to adopt the going concern basis of accounting in preparing the financial statements and the directors' identification of any material uncertainties to the group and company's ability to continue to do so over a period of at least twelve months from the date of approval of the financial statements;
- whether the directors' statement relating to going concern required under the Listing Rules in accordance with Listing Rule 9.8.6R(3) is materially inconsistent with my knowledge obtained in the audit; or
- the directors' explanation in the annual report as to how they have assessed the prospects of the group, over what period they have done so and why they consider that period to be appropriate, and their statement as to whether they have a reasonable expectation that the group and company will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

Basis of opinions

I conducted my audit in accordance with International Standards on Auditing (ISAs) (UK) and Practice Note 10 'Audit of Financial Statements of Public Sector Entities in the United Kingdom'. My responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of my report. Those standards require me and my staff to comply with the Financial Reporting Council's Revised Ethical Standard 2016. I am independent of Network Rail Limited in accordance with the ethical requirements that are relevant to my audit and the financial statements in the UK. My staff and I have fulfilled our other ethical responsibilities in accordance with these requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

The regularity framework described in the table below has been applied:

Regularity Framework	
Governing legislation	Network Licence
HM Treasury and related authorities	Managing Public Money

Overview of my audit approach

Key audit matters

Key audit matters are those matters that, in my professional judgment, were of most significance in my audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that I identified.

I consider the following areas of particular audit focus to be those areas that had the greatest effect on my overall audit strategy, the allocation of resources in my audit and directing the efforts of the audit team in the current year. These matters were addressed in the context of my audit of the financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on these matters.

This is not a complete list of all risks identified by my audit but only those areas that had the greatest effect on my overall audit strategy, allocation of resources and direction of effort. I have not, for example, included information relating to the work I have performed on the significant risks of management override of controls and fraud in revenue recognition; or the two newly identified risks around the transition to IFRS 9 and 15, and the company's migration of its balances to an upgraded Oracle platform in-year. While these areas were included in my risk assessment notified to the Audit and Risk Committee as significant audit risks, and the audit involved focused work in these areas, my work has not identified any matters to report.

The areas of focus were discussed with the Audit and Risk Committee; their report on matters that they considered to be significant to the financial statements is set out on page 100 to 101.

In this year's report the following changes to the risks identified have been made compared to my prior year report.

- The valuation of the railway network remains a key audit matter, but my focus has shifted this year away from the estimation uncertainty in respect of the performance adjustment relevant for the last years of Control Period 5 ('CP5'), towards Network Rail's overall confidence in Control Period 6 ('CP6') delivery at this early stage, and the continuing relevance of the Regulatory Asset Base ('RAB') as a basis for valuation in the context of the CP6 regulatory approach.
- The valuation of Network Rail's pension deficit appears for the first time as a key audit matter reflecting renewed audit focus in the extensive measurement work underlying the asset portfolio, and the estimation uncertainty inherent in the assumptions and roll-forward methodology supporting the liability.
- My testing of the valuation of capital accruals is also featured for the first time as a key audit matter, following enhanced focus arising after my initial sample testing results revealed a tendency towards optimism bias in the assessment of the value of work completed on capital projects at the year end. This effect was slight in terms of the overall projects but significant enough in terms of the year-end accruals testing for me to perform further work, which is described on the following pages.

Property, plant and equipment – valuation of the rail network

Description of risk

The group accounts for the rail network as a single asset carried in the Balance Sheet at its fair value. In the absence of an active market, fair value is estimated using the discounted cash flows associated with the asset.

As explained in Note 12 to the financial statements, the group continues to use the Regulated Asset Base ('RAB') as the starting point for its discounted cash flow valuation of the railway network. This is on the basis that a private owner of the railway network asset would have its revenue requirement determined using the building block model of regulation.

The value of the RAB at 31 March 2019 (after the effects of inflation, qualifying capital expenditure, and amortisation) is £72.0 billion. Management continues to acknowledge that, in pricing the asset, an investor would make an assessment of the deliverability of the current regulatory determination, and a discount of £281 million has been applied to the RAB value in determining the fair value of the rail network asset at the reporting date (31 March 2018: discount of £1,326 million). This is termed the Performance Adjustment and, as in previous years, has been calculated based on management's own performance forecasts for the remainder of the current Control Period. This year's adjustment represents a modest discount in respect of the overall assessment of financial risks in the delivery of CP6 (2019-2024) as a whole, whereas the prior year adjustment reflected the group's specific expectations for the final year of CP5 (2018-19) since the group had a reasonable expectation of required operational expenditure exceeding the determination amount.

A further discount of £232 million (31 March 2018: discount of £1,348 million) has been applied to reduce the reported fair value of the rail network asset to £71.5 billion (31 March 2018: £64.1 billion). This adjustment is equal to the value of assets separately recognised as Investment Property and Assets Held for Sale, and is applied on the basis that the under the traditional regulatory model, the revenue requirement of the regulated entity is calculated net of the income the entity expects to generate from the property assets. The reduced effect of this adjustment follows the disposal of the majority of the group's commercial estate during 2018/19, following which the group assesses that a private buyer would no longer be exposed to the risk of a RAB reduction connected with the sale (as was prudently assessed as being the case at 31 March 2018). Further information is included in note 12.

I identified the method of measurement of the railway network asset, and the inherent assumptions, as an area of significant risk for my audit of the company's 2018/19 financial statements. Due to the sale of a significant proportion of the investment property portfolio in 2018/19, I did not assess the adjustment made to the fair value of the railway network asset for these assets to carry significant levels of audit risk.

How the scope of my audit responded to the risk

Evaluating underlying valuation assumptions
Having read the regulator's determination for CP6, I agree that a market participant could reasonably expect their revenue requirement to be determined using the traditional regulatory funding model. I have therefore assessed as reasonable management's judgement that a market participant would value the railway network asset by reference to the RAB.

I confirmed with the regulator that, in their view, the sale of all (or part) of the railway network could take place without a regulatory re-opener (i.e. a new regulatory determination with revised outputs and a revised assessment of efficient costs). Accordingly, I have assessed as reasonable management's judgement that in valuing the railway network asset a market participant would make an adjustment to deliverability of the current regulatory determination. I was also content with the reasonableness of the other underpinning assumptions noted in Note 12.

Addressing measurement uncertainty – the performance adjustment
The company has measured the performance adjustment has the difference between its CP6 Delivery Plan and the CP6 funding settlement. I confirmed with the regulator that Network Rail's CP6 Delivery Plan has been formally adopted as the regulatory baseline for CP6.

Inherent in the described method of measurement of the Performance Adjustment is the assumption that a market participant would reasonably consider the Network Rail Delivery Plan to be a reliable best estimate of the risk-exclusive efficient costs of operating, maintaining and renewing the railway network. I therefore assessed the reliability of the company's CP6 Delivery Plan by evaluating the planning process, and assurance work performed thereon. I also evaluated, at a high-level, the company's performance forecasts for CP6 against historic performance and my wider understanding of the business. Based on this work I have assessed management's measurement of the performance adjustment relevant to a third party as reasonable.

Management has not made any adjustment to the valuation to reflect the uncertainty inherent in the underlying cashflows; this is on the basis that a market participant would reasonably expect to receive a rate of return on the RAB which includes a risk buffer that appropriately reflects the risks inherent in the regulatory determination. I assessed the confidence that a theoretical investor might have in the regulator's pricing of risks and opportunities within the regulatory determination for CP6 by reviewing the CP6 planning process and, assurance work performed thereon, and have assessed management's assumption as reasonable.

Defined Benefit Pensions Scheme – valuation of deficit

The group is party to several pension schemes. Based on risk and value, I have restricted my significant risk (and key audit matter) in respect of pensions to the Network Rail section of the Railway Pensions Scheme ('RPS'). The balances related to this section reflect, respectively, 95 % and 96 % of the group's total assets and liabilities in respect of defined benefit pension schemes, with the Career Average Retained Earnings ('CARE') scheme making up the remainder. Both schemes are on a 60:40 shared cost basis between the group and scheme members.

There is significant complexity, and inherently a significant amount of estimation uncertainty, in the valuation of the net position of the RPS scheme arising from the need for:

- accurate and timely valuation of the various asset classes held in the pension fund administered by RPMI on Network Rail's behalf (£6,662m as at 31 March 2019, or £3,997m excluding members' share); and
- an appropriate actuarial estimate of the liability reflecting amounts to be paid out to scheme members in the future (£10,593m as at 31 March 2019, or £6,356m excluding members' share).
- Further detail is available in Note 26 to the financial statements, where scheme movements are presented on an aggregated basis for the RPS and CARE schemes, inclusive of members' share.

How the scope of my audit responded to the risk

Scheme liabilities
I contacted Network Rail's actuaries to obtain an up to date understanding of the methodology used to calculate the main financial assumptions, and to understand the methodology and level of uncertainty involved in the roll-forward calculation.

I performed my initial assessment of the independence and expertise of these actuaries, and engaged my own actuaries to examine the and assumptions, methodology and source data used to value the obligations. As a result of the October 2018 High Court ruling in Lloyds Banking Group Pensions Trustees Limited v Lloyds Bank PLC and others, this included an assessment of the reasonableness of estimates made in respect of Guaranteed Minimum Pension ('GMP') equalisation.

I have concluded that the assumptions and methodology applied by the group on advice from their actuaries are in line with best practice. In particular I note that financial assumptions are within reasonable ranges, with a 10 basis point increase in discount rate and inflation assumptions the principal drivers behind the increase in the liability's valuation since 31 March 2018; and that membership data has been appropriately adjusted to reflect the year-end position.

In respect of GMP equalisation, Network Rail have applied a past service cost equivalent to 0.1 % of liabilities. I am content that this judgement, which is at the lower end of industry experience, is reasonable since the Railways Pension Schemes were contracted out for only a short period post 1980, limiting the impact of equalisation to a small number of members.

I concluded management's valuation of scheme liabilities to be reasonable and in line with IAS 19 principles.

Scheme assets
My work on scheme assets relies to some extent on the statutory audit of the results RPS financial statements, which are independently performed by another firm,, but also includes a number of independent procedures which are weighted

towards the December – March period since the RPS accounts are prepared to a December year end.

I assessed the design and implementation of RPMI's controls over the scheme assets and found them to be adequately designed and implemented. Key controls include regular analysis at an individual fund/investment level, which includes a check on any apparent valuation 'outliers' or unexplained movements; as well as monthly agreements to fund manager valuations which cover all funds at least quarterly. I additionally performed sample testing over the 31 March 2019 valuation of non-exchange-traded assets which include private equity, property and infrastructure investments, which confirmed the timely use of independently performed valuations.

I also completed analytical procedure over the performance of the pension assets in the period from 31 December 2018 to 31 March 2019 and found the performance to be in line with my independently benchmarked expectations. Network Rail's assets in RPMI's pooled funds (principally quoted equity, but also some unquoted equity and property investments) grew 5 % during this three-month period, in line with appropriately hedged FTSE and MSCI World indices which reflected market recovery from poor performance in the previous quarter.

I concluded management's valuation of scheme assets to be reasonable based on the evidence received.

Accruals for capital work – valuation

Description of risk

The group's accounting for its capital investment in the railway network, for example in terms of renewals, involve a level of estimation at the year end about the precise amount of work that has been delivered at 31 March, which may differ from plan, for example as a result of unexpected under- or over-delivery by Network Rail's contractors. Both controllable factors (e.g. contractor project management) and uncontrollable factors (e.g. ground conditions and weather) provide a level of estimation uncertainty which can be addressed through post Balance Sheet review in the group's routes and other delivery areas.

These factors are part of the estimation uncertainty outlined by the group under the comments concerning cost of work done in the 'Critical accounting judgements and key sources of uncertainty' section of Note 2.

Network Rail's capital accruals comprise the vast majority of the £1,434 million 'other accruals' in Note 18 of the financial statements as at 31 March 2019 (31 March 2018: £1,180 million). The estimate is built from the aggregation of estimates made by individual project teams, overseen by financial controllers and directors within the routes and delivery areas. The valuation follows the group's treatment of estimation uncertainty, in particular a tendency in project teams towards optimism bias both in an assessment of the quantity of work done (which would tend to overstate both accruals and PPE) and in their estimate of how disputes with contractors will conclude (which would tend to understate both accruals and PPE). The risk to the financial statements is associated with the need to reasonably reflect both tendencies.

While in many respects capital accruals valuation follows straightforwardly from management information, my experience of these specific factors caused me to recognise a significant risk in my reporting to the Audit and Risk Committee and to provide additional focus to my work, as described below.

How the scope of my audit responded to the risk

As a result of audit experience evidencing the tendency for project managers to over-estimate the extent of work done, I ensured my sample selection was sufficient to include further testing to provide a more firmly grounded statistical extrapolation of the potential effect on the accounts. I particularly focused, through a stratified approach on testing the highest value accruals separately from the remainder, on the higher risk in the population of smaller accruals which receive a lower level of management focus. We also widened our coverage and statistical confidence by testing the majority of accruals at project, rather than task line, level.

Alongside my work, management performed additional work to more thoroughly evaluate the estimation uncertainty factors using post year end information (for delivery optimism) and historical trends (for disputes optimism). I assessed both exercises to be appropriately scoped and implemented – analysis in respect of disputes was conducted centrally based on historical trend analysis, while assessments of work stage again drew on an aggregation of project team's inputs.

Key observations
Having assessed the results of both exercises, my sample testing and associated statistical confidence bandings, I agreed with management an immaterial net adjustment of £56.8m to reduce both PPE and accruals, following which I was able to conclude that accruals were valued reasonably.

I found no evidence of manipulation by management at either a central or local level, and note that in many cases issues arose out of a failure by local teams to revisit previous assumptions, and therefore to leave their natural optimism bias untreated.

I have discussed with both management and the Audit and Risk Committee the need, pro-actively acknowledged by management, for an additional focus in future years on both drivers of uncertainty; most particularly, in addressing the root causes of the tendency for delivery optimism. A key root cause is that for some projects – including many which are financially well-managed during their overall lifecycle – insufficient focus is placed on revising accruals estimates based on information emerging after the Balance Sheet date. Management have outlined practical steps for resolution in future years, including an enhanced process to ensure project teams take advantage of this information, which if properly implemented are well placed to further mitigate estimation uncertainty in future years.

Application of materiality

I applied the concept of materiality in both planning and performing my audit, and in evaluating the effect of misstatements on my audit and on the financial statements. This approach recognises that financial statements are rarely absolutely correct, and that an audit is designed to provide reasonable, rather than absolute, assurance that the financial statements are free from material misstatement or irregularity. A matter is material if its omission or misstatement would, in the judgement of the auditor, reasonably influence the decisions of users of the financial statements.

Audited Area	Basis	Materiality
Overall Financial Statement Materiality (applying to all audited areas with the exception of those listed above)	Approximately 1 % of the rail network asset valuation	£500m
Account balances and transaction streams not connected with the valuation of the rail network asset and to support my opinion on regularity	Approximately 1 % of the group's total gross annual expenditure (operating and capital)	£100m

I consider the above benchmarks to reflect the principal considerations for the users of the accounts in assessing the financial performance and position of the group.

As well as quantitative materiality there are certain matters that, by their very nature, would if not corrected influence the decisions of users, for example, any errors reported in Directors' Remuneration Report. Assessment of such matters would need to have regard to the nature of the misstatement and the applicable legal and reporting framework, as well as the size of the misstatement.

I applied the same concept of materiality to my audit of regularity. In planning and performing audit work in support of my opinion on regularity and evaluating the impact of any irregular transactions, I took into account both quantitative and qualitative aspects that I consider would reasonably influence the decisions of users of the financial statements.

I agreed with the Audit and Risk Committee that I would report to it all uncorrected misstatements identified through my audit in excess of £1m, as well as differences below this threshold that in my view warranted reporting on qualitative grounds.

Total unadjusted audit differences, including the effect of extrapolating sample-based errors to a most likely position, reported to the Audit and Risk Committee would increase net assets by £33m.

Responsibilities of the Directors for the financial statements

As explained more fully in the Directors' statement of responsibilities within the Directors' report, the directors are responsible for:
- the preparation of the group financial statements and for being satisfied that they give a true and fair view;
- such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Independent auditor’s report continued

- assessing the group’s and the parent’s company’s ability to continue as a going concern, disclosing, if applicable, matters relating to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the group or the parent company or to cease operations, or have no realistic alternative but to do so.

Auditor’s responsibilities for the audit of the financial statements

My responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and International Standards on Auditing (ISAs) (UK).

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs (UK), I exercise professional judgment and maintain professional scepticism throughout the audit. I also:

- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion – the risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the group and company’s internal control;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management;
- evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation; and
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. I am responsible for the direction, supervision and performance of the group audit. I remain solely responsible for my audit opinion.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide those charged with governance with a statement that I have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on my independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, I determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. I describe these matters in my auditor’s report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, I determine that a matter should not be communicated in my report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

In addition, I am required to obtain evidence sufficient to give reasonable assurance that the income and expenditure reported in the financial statements have been applied to the purposes intended by Parliament and the financial transactions conform to the authorities which govern them.

Audit scope

The scope of my group audit was determined by obtaining an understanding of the group and its environment, including group-wide controls, and assessing the risks of material misstatement at the group level.

The Network Rail group has total assets of £74.6bn. The majority of operations are within Network Rail Infrastructure Limited, whilst the obligations attaching to the legacy Debt Issuance Programme (used to finance the group until October 2014) reside in a separate legal entity, Network Rail Infrastructure Finance plc (‘NRIF’). There are further small legal entities including a consultancy business and a company that manages the maintenance of non-owned stations. The Network Rail group is a consolidation of these legal entities.

I have audited the full financial information of Network Rail Infrastructure Limited, as well as the consolidation. The audit of NRIF is conducted by a component auditor. I exercised oversight of the conduct and results of this component audit through a direct review under group audit procedures, with the availability of the full NRIF audit file for my direct review enabling this oversight. This work covered substantially all of the group's assets and pre-tax results, and together with the procedures performed at group level in respect of non-significant components, gave me the evidence I needed for my opinion on the group financial statements as a whole.

During the course of my audit, in addition to the key audit matters highlighted above, I:
- reviewed the accounting for proceeds from Network Rail's sale of railway arches;
- considered the impact of the evolving changes Network Rail is making under the banner of 'putting passengers first';
- evaluated the group's judgements about the implementation of IFRS 9 Financial Instruments and IFRS 15 Revenue from contracts with customers, and worked with management to further develop disclosures.

Furthermore, I reviewed the work of the component audit team working on NRIF who have:
- compared management's valuation of bonds used by NRIF under the legacy Debt Issuance with the results of an independently developed audit model; and
- performed detailed testing on a sample of derivative financial instruments, which are entered into by the group to mitigate interest rate and currency fluctuations on borrowings, and tested the application of hedge accounting to these instruments.

Other Information

Directors are responsible for the other information. The other information comprises information included in the Strategic Report and Corporate Governance Report, with the exception of the parts of the Directors' remuneration report described in that report as having been audited, the financial statements and my auditor's report thereon. My opinion on the financial statements does not cover the other information and I do not express any form of assurance conclusion thereon. In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work I have performed, I conclude that there is a material misstatement of this other information, I am required to report that fact. I have nothing to report in this regard.

I am specifically required to address the following items and to report uncorrected material misstatements in the other information, where I conclude that those items meet the following conditions:
- Fair, balanced and understandable: the statement given by the directors that the annual report and accounts taken as a whole are fair, balanced and understandable and provide the necessary information to enable users to assess the entity's performance, business model and strategy, is materially inconsistent with my knowledge obtained in the audit.
- Audit & Risk Committee reporting: the section describing the work of the Audit & Risk Committee does not appropriately addresses matters communicated by me to that committee.

I also have nothing to report in this regard.

Opinion on other matters prescribed by the Companies Act

Directors' remuneration

In my opinion the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006.

I also report to you if, in my opinion, certain disclosures of directors' remuneration required have not been made. I have nothing to report arising from this duty.

The strategic and directors' reports

In my opinion, based on the work undertaken in the course of the audit, the information given in the Strategic and Directors' Reports for the financial year for which the financial statements are prepared is consistent with the financial statements and those reports have been prepared in accordance with applicable legal requirements.

In light of the knowledge and understanding of the group and the company and its environment obtained in the course of the audit, I have not identified any material misstatements in the Strategic Report or the Directors' Report.

The corporate governance statement

In my opinion, based on the work undertaken in the course of the audit:
- the information given in the Corporate governance report, in compliance with rules 7.2.5 and 7.2.6 in the Disclosure Rules and Transparency Rules sourcebook made by Financial Conduct Authority (the FCA Rules), in respect of internal control and risk management systems in relation to financial reporting processes, and about share capital structures, is consistent with the accounts and has been prepared in accordance with applicable legal requirements.
- rules 7.2.2, 7.2.3 and 7.2.7 of the FCA Rules about the group and company's corporate governance code and practices and about its administrative, management and supervisory bodies and their committees have been complied with.

Notes to the financial statements continued

Based on my knowledge and understanding of the group and company and their environments obtained during the course of the audit, I have identified no material misstatements in this information.

Matters on which I report by exception

Adequacy of accounting records information and explanations received

I report to you if, in my opinion:

- adequate accounting records have not been kept, or returns adequate for my audit have not been received from branches not visited by my staff;
- the financial statements and the part of the Remuneration report to be audited are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made;
- I have not received all of the information and explanations I require for my audit; or
- a corporate governance statement has not been prepared by the parent company.

I have nothing to report arising from this duty.

Matthew Kay,
Senior Statutory Auditor

For and on behalf of the Comptroller and Auditor General (Statutory Auditor)
National Audit Office
157-197 Buckingham Palace Road
London, SW1W 9SP

17 July 2019

Income statement

for the year ended 31 March 2019

	Note	2019 Group £m	2018 Group £m
Revenue	3	**6,676**	**6,580**
Net operating costs	4	**(5,243)**	**(4,731)**
Operating profit	5	**1,433**	**1,849**
Property revaluation movements and profits on disposal		**363**	**190**
Profit from operations		**1,796**	**2,039**
Finance income	7	**11**	**8**
Other gains and losses	8	**220**	**234**
Finance costs	9	**(2,200)**	**(2,233)**
(Loss) /Profit before tax		**(173)**	**48**
Tax	10	**(52)**	**27**
(Loss) / Profit after tax for the year		**(225)**	**75**

Under section 408 of the Companies Act 2006 the group has elected to take the exemption with regard to disclosing the company income statement. The company's result for the year was £nil (2018: £nil).

Statement of comprehensive income

for the year ended 31 March 2019

	Note	2019 Group £m	2018 Group £m
(Loss)/ Profit for the year		**(225)**	**75**
Other comprehensive (expense)/income:			
Items that will not be reclassified to profit or loss			
Gain on revaluation of the rail network	12	**2,632**	**675**
Actuarial (loss)/gain on defined benefit pension schemes	26	**(31)**	**221**
Deferred tax relating to components of other comprehensive income*	22	**(443)**	**(152)**
Total items that will not be reclassified to profit or loss		**2,158**	**744**
Items that may be reclassified to profit or loss			
(Loss) / Gain on movement in fair value of cash flow hedge derivatives		**(5)**	**29**
Reclassification of balances in the hedging reserve to the income statement		**206**	**170**
Total items that may be reclassified to profit or loss		**201**	**199**
Other comprehensive income for the year		**2,359**	**943**
Total comprehensive income for the year		**2,134**	**1,018**

*Net of derivatives per note 22.

Statement of changes in equity

for the year ended 31 March 2019

Group	Revaluation reserve £m	Other reserve* £m	Hedging reserve £m	Retained earnings £m	Total equity £m
Balance at 31 March 2018	**751**	**249**	**(844)**	**6,618**	**6,774**
Loss for the year	-	-	-	(225)	(225)
Other comprehensive income					
Revaluation of the rail network	2,632	-	-	-	2,632
Transfer of deemed cost depreciation from revaluation reserve	(37)	-	-	37	-
Increase in deferred tax liability on the rail network	(447)	-	-	-	(447)
Actuarial loss on defined benefit pension schemes	-	-	-	(31)	(31)
Deferred tax on actuarial loss	-	-	-	4	4
Transfer of deferred tax	13	-	-	(13)	-
Decrease in fair value of hedging derivatives	-	-	(5)	-	(5)
Reclassification of balances in hedging reserve to the income statement	-	-	206	-	206
Total comprehensive income	**2,161**	**-**	**201**	**(228)**	**2,134**
Balance at 31 March 2019	**2,912**	**249**	**(643)**	**6,390**	**8,908**

Balance at 31 March 2017	**189**	**249**	**(1,043)**	**6,361**	**5,756**
Profit for the year	-	-	-	75	75
Other comprehensive income					
Revaluation of the rail network	675	-	-	-	675
Transfer of deemed cost depreciation from revaluation reserve	3	-	-	(3)	-
Increase in deferred tax liability on the rail network	(116)	-	-	1	(115)
Actuarial gain on defined benefit pension schemes	-	-	-	221	221
Deferred tax on actuarial gain	-	-	-	(37)	(37)
Increase in fair value of hedging derivatives	-	-	29	-	29
Reclassification of balances in hedging reserve to the income statement	-	-	170	-	170
Total comprehensive income	**562**	**-**	**199**	**257**	**1,018**
Balance at 31 March 2018	**751**	**249**	**(844)**	**6,618**	**6,774**

* Other reserves of £249m (2018 £249m) include the vesting reserve on privatisation.

There has been no movement in the current or prior year affecting the statement of changes in equity for the company.

Balance sheets

at 31 March 2019

	Note	2019 Group £m	2018 Group £m	2019 Company £m	2018 Company £m
Assets					
Non-current assets					
Intangible assets	11	63	64	–	–
Property, plant and equipment - the rail network	12	71,467	64,142	–	–
Investment property	13	232	206	–	–
Derivative financial instruments	20	340	269	–	–
Interest in joint venture	14	44	35		
		72,146	64,716		
Current assets					
Assets held for sale	15	10	1,134	–	–
Inventories	16	226	215	–	–
Trade and other receivables	17	1,739	1,595	–	–
Current tax assets		2	–	–	–
Derivative financial instruments	20	10	227	–	–
Cash and cash equivalents		450	973	–	–
		2,437	4,144	–	–
Total assets		74,583	68,860		
Liabilities					
Current liabilities					
Trade and other payables	18	(3,406)	(2,840)	–	–
Current tax		–	–	–	–
Bank loans and overdrafts	19	(11,557)	(4,820)	–	–
Derivative financial instruments	20	(52)	(20)	–	–
Short-term provisions	21	(64)	(81)	–	–
		(15,079)	(7,761)		
Net current liabilities		(12,642)	(3,617)	–	–
Non-current liabilities					
Bank loans	19	(43,719)	(48,113)	–	–
Derivative financial instruments	20	(981)	(1,147)	–	–
Other payables	18	(326)	(246)	–	–
Retirement benefit obligation	26	(2,566)	(2,311)	–	–
Deferred tax liabilities	22	(3,004)	(2,508)	–	–
		(50,596)	(54,325)	–	–
Total liabilities		(65,675)	(62,086)	–	–
Net assets		8,908	6,774	–	–
Equity					
Revaluation reserve		2,912	751	–	–
Other reserve		249	249	–	–
Hedging reserve		(643)	(844)	–	–
Retained earnings		6,390	6,618	–	–
Total shareholder's funds and equity attributable to equity holders of the parent company		8,908	6,774	–	–

The financial statements and accompanying disclosure notes on pages 136 to 183 were approved by the board of directors and authorised for issue on 15 July 2019.

They were signed on its behalf by:

Andrew Haines
Chief executive

Jeremy Westlake
Chief financial officer

Company registration number: 4402220

Statement of cash flows

for the year ended 31 March 2019

	Note	2019 Group £m	2018 Group £m	2019 Company £m	2018 Company £m
Cash flows from operating activities					
Cash generated from operations	23	3,622	3,549	–	–
Interest paid*		(1,634)	(1,455)	–	–
Income tax paid		–	(1)	–	–
Net cash generated from operating activities		1,988	2,093	–	–
Investing activities					
Interest received		11	8	–	–
Purchases of property, plant and equipment		(6,726)	(6,547)	–	–
Proceeds on disposal of property		1,469	81	–	–
Capital grants received		679	791	–	–
Net cash outflows from joint ventures		(9)	(2)	–	–
Other capital expenditure**		–	(1,268)	–	–
Net cash used in investing activities		(4,576)	(6,937)	–	–
Financing activities					
Repayments of borrowings	19	(4,597)	(1,541)	–	–
New loans raised	19	6,688	6,713	–	–
Decrease / (increase) in collateral posted	19	23	(125)	–	–
Decrease in collateral held	19	(49)	(172)	–	–
Net cash generated from financing activities		2,065	4,875	–	–
Net (decrease)/increase in cash and cash equivalents		(523)	31	–	–
Cash and cash equivalents at beginning of the year		973	942	–	–
Cash and cash equivalents at end of the year		450	973	–	–

* Balance includes the net interest on derivative financial instruments

** Cash flow on repayment of Crossrail project funding made available during the course of construction

Notes to the financial statements

for the year ended 31 March 2019

1. General information

Network Rail Limited ('the company') is a company limited by guarantee which is incorporated and domiciled in Great Britain and registered in England and Wales under the Companies Act 2006. Network Rail Limited is an arm's length body of the Department for Transport.

The company registration number is 4402220.

The company's registered office is situated at 1 Eversholt Street, London NW1 2DN, United Kingdom.

The company's and its subsidiaries' (together 'the group' or 'Network Rail') principal activities are detailed in the 'About us' section on pages 5 to 11.

Network Rail is organised as a single operating segment for financial reporting purposes.

The Secretary of State is the sole member of the Company.

2. Significant accounting policies

Basis of accounting

The financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) adopted for use in the European Union, and therefore comply with Article 4 of the European Union International Accounting Standard regulation, and in accordance with interpretations of the IFRS Interpretation Committee.

The financial statements have been prepared on the historical cost basis, except for the revaluation of the rail network to a value determined using an income approach, the revaluation of investment properties, the measurement of certain financial assets and liabilities at fair value through profit and loss (FVTPL) and the measurement of derivative financial instruments at fair value.

The principal accounting policies adopted by the directors are set out below.

Adoption of new and revised standards

The accounting policies adopted in this set of financial statements are consistent with those set out in the annual financial statements for the year to 31 March 2018; except for the changes in accounting standards noted below.

The following accounting standards have become effective in the current year and were adopted and applied by the group:

i) IFRS 15 'Revenue from Contracts with Customers'. In the current year, the group has applied IFRS 15 Revenue from Contracts with Customers (as amended in April 2016), effective for periods commencing 1 January 2018. IFRS 15 establishes a comprehensive framework for determining when revenue should be recognised and how it should be measured. In adopting IFRS 15, the group has elected to adopt in line with the modified retrospective method which does not require comparative reporting figures to be restated.

The Group's accounting policies for its revenue streams are disclosed in detail under the heading 'Revenue recognition'. Apart from providing more extensive disclosures on the Group's revenue transactions (refer to note 3), trade and other receivables (note 17) and trade and other payables (note 18), the application of IFRS 15 has not had any impact on the financial position and/or financial performance of the Group. All relevant revenue streams have historically, under IAS 18, been recognised on satisfaction of contractual obligations, that meet the definition of 'performance obligations' under IFRS 15. For this reason, no retrospective adjustments to retained earnings were made under the modified retrospective method of transitioning to IFRS 15.

The grant income that Network Rail receives does not fall under IFRS 15; as such we have continued to recognise grant income in line with IAS 20 Accounting for Government Grants.

2. Significant accounting policies continued

ii) IFRS 9 'Financial Instruments'. This is a new standard that addresses the classification, measurement and recognition of financial assets and liabilities. It is effective for accounting periods starting after 1 January 2018 and therefore adopted in Network Rail's current annual accounts.

Financial assets

The group has assessed the impact on financial assets and with the exception of derivatives held at fair value through profit or loss, they will continue to be held at amortised cost as they are held-to-collect rather than traded assets and meet the 'solely payments of principal and interest' test.

As financial assets, the receivables disclosed in the group accounts are subject to the new "Expected Credit Loss model." The group's exposure to credit risk is limited largely to the property rental income, and no significant increase in credit risk has materialised. See 'Impairment of financial assets' accounting policy and Note 17: Trade and other receivables for more details.

The impact on the classification of financial assets, as a result of transitioning from IAS 39 to IFRS 9 is as follows:

- Cash and cash equivalents - reclassified from 'loans and receivables' to 'at amortised cost' under IFRS 9
- Trade and other receivables - reclassified from 'loans and receivables' to 'at amortised cost' under IFRS 9
- Derivative financial instruments – unchanged from 'fair value through profit or loss' under IFRS 9

Financial liabilities

The group has assessed the impact on financial liabilities and with the exception of derivatives held at fair value through profit or loss and loan instruments previously designated at fair value through profit or loss, they will continue to be held at amortised cost.

The impact on classification of financial liabilities, as a result of transitioning from IAS 39 to IFRS 9 is:

- Loans and debt (except for those designated at fair value through profit or loss) - unchanged from 'at amortised cost' under IFRS 9 (refer to 'Debt' accounting policy for further detail)
- Trade and other payables - unchanged from 'at amortised cost' under IFRS 9
- Derivative financial instruments – unchanged from 'fair value through profit or loss' under IFRS 9

Hedge accounting

With regards to hedge accounting, almost all the hedged events have now occurred and there will be no new hedging programme. The group have opted to continue to apply the hedge accounting requirements of IAS 39 until the hedging programme is finalised.

IFRS 16 'Leases'

IFRS 16 'Leases' establishes principles for the recognition, measurement, presentation and disclosure of leases, with the objective of ensuring that lessees and lessors provide relevant information that faithfully represents those transactions. The standard is effective for accounting periods starting after 1 January 2019 and will therefore be effective from 1 April 2019 in Network Rail's accounts.

Network Rail intends to apply the modified retrospective transition approach and will not restate comparative amounts for the year prior to first adoption. This transition method allows for the lease liability to be based on the remaining payments, and then sets the right-of-use asset as an amount equal to lease liability (adjusted for any accrued or prepaid amounts recognised under IAS 17). Therefore, there is no impact on equity at the date of initial application.

The following other exemptions will be elected with the adoption of IFRS16:

- Elect not to measure leases that terminate within 12 months of the date of transition to IFRS16.
- Elect not to measure leases where the underlying asset is of low-value (<£5,000).
- Exclude initial direct costs from the measurement of right-of-use assets.
- Elect to use hindsight to determine lease term (e.g. in determining the lease term if options exist).
- Elect to take forward the previous identification of a lease applying IAS 17 and IFRIC 4 at the start of the relevant accounting period, also known as 'grandfathering'

The standard will require lessees to account for all leases on their balance sheets, including those which had previously been treated as operating leases and accounted for in the Income Statement as an "in-year" expense. Had this standard been adopted in 2018-19 Network Rail's assets and liabilities would have been grossed up by approximately £390m and the loss for the year would have been increased by approximately £10m.

2. Significant accounting policies continued

The following key judgements have been made by management regarding both the recognition as well as calculation of leases under IFRS 16:

- The marginal rate of borrowing will be used to calculate the right of use asset and lease liability unless the implicit rate can reliably be determined in the contract.
- Where practically possible lease components will be separated from the larger contracts to calculate the right of use asset. This is especially notable in contracts which contain embedded leases.

IFRS 17 Insurance Contracts

IFRS 17 has been adopted by the IASB for periods beginning on or after 1 January 2021 and has not currently been endorsed by the EU. Management have not yet considered the impact of the standard on Network Rail.

Going concern

The group's business activities, together with the factors likely to affect its future development, performance and position are set out in the 'About us' section on pages 5 to 11, and 'Business unit summaries' on pages 23 to 61. The financial position of the group, its cash flows, liquidity position and borrowing facilities are described in the Chief Financial Officer's review on pages 12 to 17.

The group has considerable financial resources together with long-term contracts with a number of customers and suppliers. Network Rail does not expect to undertake any new borrowing in the next 12 months. Instead it's activities will be largely funded by grants from the Department for Transport and revenue from customers. Network Rail has secured a £32.3bn loan facility with the Department for Transport (DfT), which it intends to draw upon to specifically refinance its' existing debt with DfT legacy commercial borrowing. This facility remains within its parameters.

Network Rail has eight separate grant agreements in place with DfT and Transport Scotland (TS) to fund activities in the next 12 months. These grants are: - with DfT - Network Grant; Enhancements Grant; British Transport Police Grant; Financing Costs Grant for DfT interest; Financing Costs Grant for external interest (bonds and swaps); and Corporation Tax Grant - with TS - Network Grant and Enhancements Grant.

Business plans and financial models are used to project cash flows and monitor financial risks and liquidity positions, forecast future funding requirements and other key financial ratios, including those relevant to our network licence. Analysis is undertaken to understand the resilience of the group and its business model to the potential impact of the group's principal risks, or a combination of those risks. This analysis takes account of the availability and effectiveness of the mitigating actions that could realistically be taken to avoid or reduce the impact or occurrence of the underlying risks. The board considers the likely effectiveness of such actions through regular monitoring and review of risk management and internal control systems. Further details are set out in the Viability Statement on pages 78 and 79. In addition, Note 25 to the accounts includes the group's objectives, policies and processes for managing its capital; its financial risk management objectives; details of its financial instruments and hedging activities; and its exposures to credit, liquidity and foreign exchange risk.

After making enquiries, including those detailed above, the directors have a reasonable expectation that the company and the group have adequate resources to continue in operational existence for the foreseeable future. Accordingly, they continue to adopt the going concern basis in preparing the annual report and accounts.

Basis of consolidation

Subsidiaries are all entities (including structured entities) over which the group has control. The group controls an entity when the group is exposed to, or has rights to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Transactions with non-controlling interests that do not result in a loss of control are accounted for as equity transactions. In terms of subsidiaries the group:

- Consolidates subsidiaries from the date on which control passes to the group and deconsolidates from the date control ceases;
- Changes the accounting policies of subsidiaries, where necessary, to ensure consistency with the policies adopted by the group;
- Eliminates intercompany transactions and balances in the group results.

Revenue recognition

The group recognises revenue from the following major sources:

- Grant income – recognised in accordance with IAS 20;
- Franchised network access – recognised in accordance with IFRS 15;
- Freight revenue - recognised in accordance with IFRS 15;
- Property rental income – recognised in accordance with IAS 17/IFRS15; and
- Other income – recognised in accordance with IFRS 15.

Network Rail's grant income is recognised in line with IAS 20 'Accounting for Government Grants' – refer to 'Grants' accounting policy.

Network Rail's recognition approach is to recognise franchised network access and freight revenue each period in the financial year.

2. Significant accounting policies continued

Performance obligations are based upon fixed and variable volume access to the railway during the relevant year. Performance obligations are satisfied by providing track access over time as per agreement with the train operating companies. There are no significant judgments applied to determine whether performance obligations have been satisfied. The input method is applied based on time lapsed.

Network Rail recognises property rental income over time as the tenant receives and consumes the benefits throughout the contract (and financial year). Performance obligations are based upon making the lease available to the customer over a set period of time. Performance obligations are satisfied by providing access to leased property along with fulfilment of lease terms relevant to the lessor. There are no significant judgments applied to determine whether performance obligations have been satisfied. The input method is applied to recognise revenue over time, based on time lapsed.

Other income consists of Non Franchised fixed and variable network access which will be recognised using the same policy as for Franchised Network access.

Revenue is measured based on consideration specified in a contract with a customer and excludes amounts collected on behalf of third parties. Revenue represents amounts derived from the management and provision of assets for use in the operation of the railway and property rental income net of value added tax. Amounts recognised take account of any performance penalties or bonuses in respect of the year. The performance penalties and bonuses are estimated in each 4 week period based on that period's performance and reflect management's best estimate of the amounts due.

Revenue measurement has remained unchanged upon transitioning to IFRS 15, and includes supplements to the access charges and bonuses receivable from, less penalties and rebates payable to, customers and stakeholders. Operating expenditure includes additional contract amounts and bonuses payable to, less penalties receivable from, suppliers and the Office of Rail and Road.

Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable. This is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount.

Separate accounting policies have not been adopted for revenue related contract assets / liabilities (deferred income), as the impact of IFRS 15 classification, recognition and measurement is insignificant.

Grants

Grants and other contributions received towards the cost of property, plant and equipment are deducted from the fair value of assets which the grant funding relates to, and released to the income statement over the estimated useful economic life of the rail network.

Revenue grants earned for the management and provision of rail network assets are credited to the income statement in the period to which they relate.

Leasing

Leases are classified as finance leases when the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

The group as lessor

Amounts due from lessees under finance leases are recorded as receivables at the amount of the group's net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the group's net investment outstanding in respect of the leases.

Rental income from operating leases and initial direct costs are recognised on a straight-line basis over the term of the relevant lease.

The group as lessee

Assets held under finance leases are recognised at their fair value as assets of the group or, if lower, at the present value of the minimum lease payments. Each is determined at the inception of the lease. The corresponding liability to the lessor is included in the balance sheet as a finance lease obligation. Lease payments are apportioned between finance charges and reduction of the lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are charged to the income statement, unless they are directly attributable to qualifying assets, in which case they are capitalised in accordance with the group's general policy on borrowing costs.

Rentals payable under operating leases are charged to the income statement on a straight-line basis over the term of the relevant lease.

Foreign currencies

Monetary assets and liabilities expressed in foreign currencies are translated into sterling at the exchange rates prevailing at the balance sheet date. Foreign currency amounts are initially recorded at the exchange rates prevailing on the dates of the transactions. Gains and losses arising on retranslation are included in the income statement for the period and are classified as either operating or financing depending on the nature of the monetary item giving rise to them.

Notes to the financial statements continued

2. Significant accounting policies continued

Borrowing costs

Borrowing costs directly attributable to the construction of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use.

All other borrowing costs are recognised in the income statement in the period in which they are incurred.

Operating profit

Operating profit is stated before finance income, finance costs, other gains and losses, and revaluation movements and profits on disposal of properties.

Retirement benefit costs

Payments to the defined contribution retirement benefit scheme are charged as an expense as they fall due.

For the defined benefit schemes, the cost of providing benefits is determined using the projected unit credit method, with full actuarial valuations being carried out at least every three years and updates to these valuations carried out in intervening years. The current service cost and plan administration expenses are recognised as an operating expense in the consolidated income statement.
The group's share of the actuarial gains and losses are recognised in full in the period in which they occur. They are recognised outside the income statement and presented in the statement of comprehensive income.

The net interest cost is the charge in the year on the net defined benefit liability. The charge reflects the passage of time and is recognised as a finance cost in the income statement.

Past service cost and credits are recognised immediately in the consolidated income statement.

The retirement benefit obligation recognised in the balance sheet represents the present value of the defined benefit obligation, as adjusted for unrecognised past service cost, and as reduced by the fair value of scheme assets. Any asset resulting from this calculation is limited to past service cost, plus the present value of available refunds and reductions in future contributions to the plan.

The group reflects its share of the obligation in the financial statements. The IAS 19 deficit, service cost and interest cost therefore represent 60 per cent of the total for each of the schemes. Further details on the retirement benefit schemes are provided in note 26.

Research and development

Research and general development expenditure is charged to the income statement as incurred. Expenditure on the development of specific projects is capitalised only if all of the following conditions are met:

- An asset is created that can be identified
- It is probable that the asset created will generate future economic benefits
- The development cost of the asset can be measured reliably.

Tax

The tax expense represents the sum of the current tax and deferred tax. The group's current tax liability is calculated using the tax rates that have been enacted or substantively enacted by the balance sheet date.

Current tax is based on the taxable results of the group and calculated in accordance with tax rules in the United Kingdom.

Deferred tax is the tax expected to be payable or recoverable on the temporary differences that arise when tax authorities recognise and measure assets and liabilities with rules that differ from those of the consolidated accounts. Deferred tax is calculated under the balance sheet liability method at the rate of tax expected to prevail, subject to the rate being enacted or substantively enacted by that date, when the temporary differences reverse. Deferred tax is not discounted.

Deferred tax liabilities are recognised for all taxable temporary differences. Deferred tax assets are recognised on all deductible temporary differences to the extent that it is probable that there will be taxable profits available against which the temporary timing differences can be utilised.

Deferred tax is charged or credited in the income statement except when it relates to items charged or credited directly to equity. In this case the deferred tax is also accounted for within equity.

Property, plant and equipment – the rail network

The group has one class of property, plant and equipment, being the rail network. This is the integrated network that the group uses to deliver the operation, maintenance and renewal of Great Britain's national rail infrastructure.

Valuation methodology

The rail network is carried in the balance sheet at its fair value. As there is no active market in railway infrastructure assets, the company has derived the fair value of the rail network using an income approach. The income approach assesses the discounted future cash flows that are expected to be generated by the rail network, including an assessment of under and outperformance against the current 5-year regulatory determination.

2. Significant accounting policies continued

This valuation is carried out twice a year and revaluation gains and losses are reflected in other comprehensive income.

Depreciation
The rail network is depreciated on a straight-line basis over its estimated weighted average remaining useful economic life. The estimated weighted average remaining useful economic life of the network is currently 40 years (2018: 40 years). The remaining useful economic lives of network assets are estimated annually, with external verification of the valuation and asset lives carried out where required.

Capitalisation of operating costs
In line with IAS 16 Property, plant and equipment all directly attributable costs necessary to deliver the investment programme are capitalised. Employee and other associated costs are capitalised if they arise directly as a result of delivering the investment programme.

Presentation of capital grants
Grants and other contributions received towards the cost of property, plant and equipment are deducted from the fair value of assets which the grant funding relates to. See Note 12. Property, plant and equipment – the rail network for detail of the gross and net values of capital grants included in the property, plant and equipment balance.

Investment property
Investment property, which is property held to earn rentals and/or for capital appreciation, is stated at its fair value at the balance sheet date. Gains and losses from changes in the fair value of investment property are included in the income statement for the period in which they arise.

Intangible assets
An intangible asset is only recognised if it is probable that future economic benefits will flow to the group and its costs can be measured reliably. Intangible assets are measured initially at purchase cost and are amortised on a straight-line basis. Cost includes the original purchase price of the asset and the costs attributable to bringing the asset to its working condition for its intended use. Licences and concessions are amortised over the length of their contractual agreement. Intangible assets are tested for impairment at each balance sheet date by comparing their carrying value and the expected discounted cash flows expected to arise from them over their contractual agreements. If the carrying value exceeds the discounted cash flows expected to arise from the assets, the carrying value would be impaired accordingly.

Assets held for sale
Non-current assets are classified as held for sale if it is highly probable that they will be recovered primarily through sale or distribution rather than through continuing use.

Immediately before classification as held for sale, the assets are re-measured in accordance with the accounting policies for the asset category. Subsequently, the assets are held at the lower of carrying value and fair value less costs to sell. Any impairment loss on a disposal group is recognised immediately in the income statement. For the assets held for sale in these financial statements, Network Rail has opted to use the valuation as at 30 September 2017 as a proxy for the value of the assets immediately before classification date.

Inventories
Inventories are stated at the lower of cost and net realisable value. Cost comprises direct materials, direct labour costs and those overheads that have been incurred in bringing the inventories to their present location and condition. Cost is calculated using the weighted average method.

Financial instruments
Financial assets and financial liabilities are recognised on the group's balance sheet when the group becomes party to the contractual provisions of the instrument.

Financial assets

Financial assets at amortised cost
Financial assets are classified as at amortised cost where the business model is to hold assets in order to collect contractual cash flows, and the cash flows consist solely of payments of principal and interest (SPPI) on the principal amount outstanding.

Trade receivables do not carry any interest and are stated at their nominal value as reduced by appropriate allowances for estimated irrecoverable amounts, recognised in the income statement.

Financial assets at FVTPL
Financial assets are classified as at FVTPL where the asset does not meet the amortised cost criteria, and, if doing so, eliminates or significantly reduces or eliminates a measurement or recognition inconsistency. Gains and losses arising from changes in fair value of these assets are recognised in profit or loss for the period.

Notes to the financial statements continued

2. Significant accounting policies continued

Impairment of financial assets
Financial assets, other than those at FVTPL, are assessed for indicators of impairment at each balance sheet date. Financial assets at FVTPL are stated at fair value with any resultant gain or loss recognised in the income statement. Financial assets are impaired where there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the investment have been reduced.

The carrying amount of the financial asset is reduced by the impairment loss for all financial assets with the exception of trade receivables, which are reduced by allowances for irrecoverable amounts. As financial assets, trade receivables are subject to the "Expected Credit Loss model" under IFRS 9. The group's exposure to credit risk is limited largely to property rental income, and no significant increase in credit risk has materialised. Therefore, the group has continued to recognise 12 month expected losses that are updated at each reporting date, in the form of allowances for irrecoverable amounts, which approximate the expected losses for the next 12 month period.

If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised, the previously recognised impairment loss is reversed through the income statement. The reversal is only made to the extent that the carrying amount of the investment at the date the impairment is reversed does not exceed what the amortised cost would have been had the impairment not been recognised.

Cash and cash equivalents
Cash and cash equivalents comprise bank balances held by the group, commercial paper and money market deposit investments at varying rates. The carrying amount of these assets approximates their fair value.

Joint ventures
The results and net assets of joint ventures are incorporated in these financial statements using the equity method of accounting. Investments in joint ventures are carried in the balance sheet at cost and adjusted by post-acquisition changes in the group's share of net assets of joint ventures, less any impairment in the value of individual investments. Losses of a joint venture in excess of the group's interest in a joint venture are not recognised.

Financial liabilities
Financial liabilities are classified according to the substance of the contractual arrangements entered into.

Financial liabilities at FVTPL
Financial liabilities are classified as at FVTPL where the financial liability is a derivative financial liability or designated at FVTPL at initial recognition.

A financial liability is designated as FVTPL upon initial recognition if such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise exist.

The group derecognises financial liabilities when, and only when, the group's obligations are discharged, cancelled or expire.

Debt
Debt instruments not designated at FVTPL are initially measured at fair value, net of discount and direct issue costs, and subsequently recognised at amortised cost using straight line amortisation as a proxy for the IFRS 9 effective interest rate method. Finance charges, including premiums payable on settlement or redemption and direct issue costs, are accounted for on an accrual basis to the income statement using the effective interest rate method, and are added to the carrying value of the debt instrument to the extent that they are not settled in the period in which they arise.

Certain bonds, as set out in Note 19, are designated at FVTPL. These bonds are hedged by derivative financial instruments as part of a documented risk management strategy. By recognising these bonds and derivatives at FVTPL the recognition inconsistencies that would otherwise exist with regard to these risk management strategies are significantly reduced.

Trade payables
Trade payables are ordinarily not interest bearing and are stated at amortised cost.

Derivative financial instruments and hedge accounting
The group's activities expose it primarily to the financial risks of changes in interest rates and foreign currency exchange rates. The group uses interest rate swaps, cross-currency swaps and foreign exchange forward contracts to hedge these exposures. The use of financial derivatives is governed by the group's policies approved by the treasury committee of the board, which provide written principles on the use of financial derivatives.

Almost all the hedged events have now occurred and there will be no new hedging programme. Under IFRS 9, the group have opted to continue to apply the hedge accounting requirements of IAS 39 until the hedging programme is finalised.

Derivatives are initially recognised at fair value at the date a derivative contract is entered into and are subsequently remeasured to their fair value at each balance sheet date. Derivatives are presented on the balance sheet in line with their maturity date.

2. Significant accounting policies continued

The group designates certain hedging instruments as either cash flow hedges or fair value hedges. At the inception of the hedge relationship, the entity documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the group documents whether the hedging instrument that is used in a hedging relationship is highly effective in offsetting changes in fair value or cash flows of the hedged item.

Some derivatives, while complying with the group's financial risk management policies, do not qualify for hedge accounting and are therefore classifed as financial instruments at FVTPL. Changes in the fair value of derivative financial instruments that do not qualify for cash flow hedge accounting are recognised in the income statement as they arise.

Cashflow hedge accounting is discontinued when the hedging instrument expires, is sold, terminated, exercised or no longer meets the criteria for hedge accounting. Where the hedging instrument no longer meets the criteria for hedge accounting, the cumulative gain or loss on the hedging instrument that remains recognised directly in equity from the period when the hedge was effective remains in equity until the forecast transaction occurs.

In the instance where cashflow hedge accounting is discontinued since the forecast transaction is no longer expected to occur, the cumulative gain or loss on the hedging instrument that remains recognised directly in equity from the period where the hedge was effective is recognised in the income statement.

Embedded derivatives within a financial asset host contract are not separated from the host contract, instead, the whole contract in its entirety is accounted for as a single financial instrument.

Embedded derivatives within a host contract that is a financial liability are separated from the host contract and accounted for as a derivative financial instrument when economic characteristics of the embedded derivative and host are not closely related, an identical instrument (with the same terms) would meet the definition of a derivative, and the entire contract is not measured at fair value through profit or loss. Gains or losses from the movement in fair value of the financial instrument are reported in the income statement. There are no separated embedded derivatives included in the financial statements.

Note 20 sets out details of the fair values of the derivative instruments used for hedging purposes. Movements in the hedging reserve in equity are detailed in the statement of changes in equity and in the statement of comprehensive income.

Fair value hedges

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recorded in the income statement, together with any changes in the fair value of the hedged item that is attributed to the hedged risk. The change in the fair value of the hedging instrument and the change in the hedged item attributable to the hedged risk are recognised within 'other gains and losses' in the income statement.

Cash flow hedges

Changes in the fair value of derivative financial instruments that are designated and effective as hedges of future cash flows are recognised in other comprehensive income, and the ineffective portion is recognised immediately within 'other gains and losses' in the income statement.

Provisions

Provisions are recognised when the group has a present obligation as a result of a past event, and it is probable that the group will be required to settle that obligation. Provisions are measured at the directors' best estimate of the expenditure required to settle the obligation at the balance sheet date, and are discounted to present value where the effect is material.

Notes to the financial statements continued

2. Significant accounting policies continued

Critical accounting judgements and key sources of uncertainty

(i) Property, plant and equipment – the rail network: the estimate of the fair value of the rail network is based on an income approach using the regulatory asset base, which equates to the discounted future cash flows associated with the network, adjusted for the net present value of any variances from the Office of Rail and Road's determination using the building block model of regulation.

The most significant judgement underpinning the valuation is that the regulatory framework and associated cash flows remain sufficiently stable and robust to form the basis of a third party valuation. Management assess that based on the current regulatory environment, an investor could reasonably expect to recover the RAB value through the revenue deriving from future amortisation allowances and the regulatory return thereon. In its assessment management has considered the amendments to the regulatory framework that are set out in the regulator's determination for Control Period 6 (2019-2024), and noted that although the regulated asset base will cease to be a building block in the determination of the company's revenue requirement, the link between income and the regulated asset base would be reinstated in the event that the rail network asset were transferred to a private owner.

Management have also considered whether the portfolio of assets held for sale should continue to be deducted against the RAB in arriving at the fair value of the rail network, and based on an assessment of likely regulatory action in the event of a sale, have concluded that this remains appropriate. Further detail on this and other key judgements applied in the valuation are set out in Note 12.

The key source of estimation uncertainty within the valuation is the assessment of future performance against the regulatory determination which is discussed in more detail in Note 12.

Whilst not affecting the fair value of the asset recognised at the balance sheet date, management's assessment of the remaining life of the asset affects the depreciation that is charged on the asset, is also an area of estimation uncertainty. IAS 16 requires that management regularly review asset lives on at least an annual basis and that that depreciation is charged on a systematic basis that reflects the way the asset is consumed. In March 2019 Network Rail produced a detailed and rigorous depreciated replacement cost (DRC) valuation of the rail network for inclusion in DfT's group accounts. In preparing these financial statements management reviewed the weighted average remaining asset lives as produced in the DRC valuation and concluded that it is still appropriate to use 40 years as the weighted average remaining life.

Cost of Work Done (COWD): The additions to Property, plant and equipment are valued using an estimate of the cost of work done in the year to 31 March. To the extent that the COWD is greater than the invoiced amount, a PPE addition and 'other payable' (Note 19) are recognised on the basis of expected amounts required to settle contractual obligations. COWD assessments are predominantly based on information readily available to project managers on the status of works, but some estimation uncertainty is involved in the year-end measurement, in respect of the evaluation of how contractual dispute positions are likely to resolve, and in measuring the value of works performed at the precise year end date.

(ii) Investment property – an element of the investment property portfolio valuation is determined using the Beacon method. Jones Lang LaSalle provided their assessment of yields for 18 classes of property and areas in the portfolio. These are then used to produce income multipliers and applied to the rental streams from each of the individual properties in the portfolio to form an overall valuation. For investment property transferred to assets held for sale this is also the inherited method of valuation. The transfer occurred on 24 November 2017; the valuation as at this date is regarded as the carrying value of these assets and the frozen ceiling valuation for assets held for sale. Further details are set out in Note 13.

(iii) Retirement benefit obligations – the group recognises and discloses its retirement benefit obligation in accordance with the measurement and presentational requirement of IAS 19 (Revised) '*Employee Benefits*'. The calculations include a number of judgements and estimations in respect of the expected rate of return on assets, the discount rate, inflation assumptions, the rate of increase in salaries and life expectancy among others. Changes in these assumptions can have a significant effect on the value of the retirement benefit obligation. The key assumptions made are set out in Note 26. The total contribution rate payable under the Railway Pension Scheme (RPS) and the Career Average Revalued Earnings (CARE) scheme is normally split in the proportion 60:40 between the group and the members, respectively. The group reflects its share of the contribution in the financial statements.

(iv) Taxation – the group recognises and discloses its deferred tax assets in accordance with IAS 12. Where it is considered to be probable that deferred tax assets can be matched to future taxable profits then deferred tax assets are recognised, or offset against the overall deferred tax provision as appropriate. This evaluation requires significant judgements to be made, including the uncertainty of the availability of future taxable profits. Further details are set out in Note 10.

Notes to the financial statements continued

3. Revenue

	2019 Group £m	2018 Group £m
Grant income	4,125	4,480
Franchised network access	2,143	1,707
Freight revenue	58	53
Property rental income	317	306
Other income	33	34
Revenue	**6,676**	**6,580**

The effect of the performance regimes was a net loss of £439m (2018: net loss of £232m) which led to a reduction in revenue of the respective amount.

The group has assessed its revenue recognition in accordance with IFRS15 and has deemed that it derives the vast majority of its revenue over-time. Revenue recognised at a point in time is not material in the financial year and therefore is not disclosed separately.

Grant income, franchised network access, freight revenue and property rental income, recognised in line with the accounting policies, were recognised upon fulfilment of the contractual performance obligations, by providing track access or access to rental property, in line with the terms of the existing customer contracts. Recognition is over time, and the input method, specifically time lapsed, is used as the basis for revenue recognition. There are no alternative performance obligations identified for individual contracts within the disaggregated revenue streams.

There are no recognised contract assets, as defined by IFRS 15, that relate to recognised revenue disaggregated in the above table.

4. Net operating costs

	2019 Group £m	2018 Group £m
Employee costs (see Note 6)	2,561	2,419
Own costs capitalised	(1,055)	(998)
Other external charges (including infrastructure maintenance costs)	2,435	2,094
Other operating income and recoveries	(364)	(323)
Net operating costs before depreciation and amortisation	**3,577**	**3,192**
Depreciation (see Note 12)	1,810	1,638
Amortisation of grants	(144)	(99)
Net operating costs	**5,243**	**4,731**

Notes to the financial statements continued

5. Profit from operations

Total profit from operations is stated after charging/(crediting):

	2019 Group £m	2018 Group £m
Amortisation of intangible assets	**1**	**1**
Profit on sale of properties	**(328)**	**(75)**
Increase in the fair value of investment properties	**(35)**	**(117)**
Cost of inventories recognised as an expense	**220**	**192**
Write downs of inventories recognised as an expense	**3**	**1**

Amounts payable to auditors		
Fees payable to the company's auditors for the audit of the company and consolidated financial statements	0.43	0.38
Fees payable to the company's auditors for audit related services		
– The audit of the company's subsidiaries	0.09	0.05
– Regulatory accounts audit and interim review	0.07	0.08
Total amounts payable to auditors	0.59	0.51

For financial years ended 31 March 2019 and 2018 no fees were payable to the company's auditors in respect of non-audit related services. In addition to the audit fee information given in the table the group pays £0.11m for the audit of subsidiaries that are not performed by the group auditor.

6. Employee costs

The monthly average number of employees (including executive directors) was:

	2019 Group Number	2018 Group Number
Management and operation of the railway	**40,268**	**39,370**

	2019 Group £m	2018 Group £m
Their aggregate remuneration comprised:		
Wages and salaries	**2,050**	**1,929**
Social security costs	**227**	**215**
Defined contribution pension costs (see Note 26)	**20**	**19**
Defined benefit pension costs – current service costs (see Note 26)	**257**	**256**
Defined benefit pension costs – past service costs (see Note 26)	**7**	**-**
Total employee costs	**2,561**	**2,419**

On 26 October 2018 the High Court ruled on the Lloyds case that Guaranteed Minimum Payment ("GMP") equalisation is required. We have carried out calculations following the ruling to determine the appropriate accounting reserve to reflect the impact of GMP equalisation and estimate that the impact would be an increase in the Section's liabilities of 0.1 % . This impact has been recognised as a past service cost in the 2018/19 Income Statement.

In the years ended 31 March 2019 and 31 March 2018 key management personnel were all the executive directors and the chair of the board of directors. Full details of their remuneration are included within the annual remuneration report on pages 111 to 123.

7. Finance income

	2019 Group £m	2018 Group £m
Interest receivable on investments and deposits	**11**	**8**
	11	**8**

Finance income earned on financial assets analysed by category of asset, is as follows:

	2019 Group £m	2018 Group £m
Financial assets at amortsied cost (including cash and bank balances)	**11**	**8**
	11	**8**

8. Other gains and losses

	2019 Group £m	2018 Group £m
Net ineffectiveness arising from cash flow hedge accounting	(7)	7
Fair value loss on fair value hedges	(220)	(445)
Fair value gain on carrying value of fair value hedged debt	226	449
Gain arising from fair value hedge accounting	6	4
Net (decrease)/increase in fair value of non-hedge accounted debt	(3)	21
Gain on derivatives not hedge accounted	224	202
Gain arising from non-hedge accounting	221	223
Total other gains	**220**	**234**

No other gains and losses have been recognised in respect of financial assets or liabilities other than those disclosed in this note. No gains or losses have been recognised on financial liabilities measured at amortised cost other than those disclosed in Note 9.

The movements in the hedged risk adjustment on fair value hedged debt, the movement in fair value of debt designated as fair value through profit and loss and exchange differences on retranslation of foreign currency debt that form part of the above total other gains and losses are in relation to debt issuances disclosed in Note 19.

9. Finance costs

	2019 Group £m	2018 Group £m
Interest on bank loans and overdrafts	8	22
Interest on loan issued by Department of Transport	674	551
Interest on bonds issued under the Debt Issuance Programme	1,148	1,331
Interest on derivative instruments	232	164
Defined benefit pension interest cost	55	57
Debt Issuance Programme financial indemnity fee	266	281
Other interest	-	1
Total borrowing costs	**2,383**	**2,407**
Less: capitalised interest	(183)	(174)
Total finance costs	**2,200**	**2,233**

Borrowing costs are included in the costs of qualifying assets to the extent that the asset is financed by the group. The average rate used during the year was 3.7 per cent (2018: 4.5 per cent).

Notes to the financial statements continued

10. Tax

	2019 Group £m	2018 Group £m
Current tax:		
Corporation tax charge	-	-
Adjustment in respect of prior years	(1)	2
Total current tax (credit) / charge	(1)	2
Deferred tax:		
Current year charge / (credit)	53	(7)
Effect of rate change	-	-
Adjustments in respect of prior years	-	(22)
Total deferred tax charge/(credit)	53	(29)
Total tax charge/(credit)	52	(27)

The tax (charge)/credit for the year can be reconciled to the (loss) / profit per the income statement as follows:

	2019 Group £m	2018 Group £m
(Loss)/ Profit before tax	(173)	48
Tax at the UK corporation tax rate of 19 per cent (2018: 19 per cent)	33	(9)
Adjustments in respect of prior years	(1)	21
Income not subject to tax	(43)	(10)
De-recognition of deferred tax assets recognised in the year	(40)	-
Utilisation of tax losses previously derecognised	(1)	25
Tax (charge)/credit for the year	(52)	27

Under IAS12 deferred tax assets can only be recognised where it is probable that taxable profits will be available against which the deferred tax asset can be utilised. As in 2018, it remains improbable that Network Rail will produce a level of taxable profits that will allow for recognition of a deferred tax asset relating to the trading losses carried forward. Additionally, whilst taxable income does not exceed allowable deductions in the year, Network Rail claims only the capital allowances sufficient to claim for group relief and available tax credits.

Deferred tax at 31 March 2019 is calculated at a rate of 17 per cent (2018: 17 per cent) based on tax rate expected to prevail based on legislative enactments at the point temporary differences resolve.

UK corporation tax is calculated at 19 per cent (2018: 19 per cent). Further reductions to the UK tax rate have been enacted which reduced the rate to 19 % with effect from 1 April 2017 and to 17 per cent by 1 April 2020.

The Group has £36.9m (2018: £36.9m) of surplus advanced corporation tax carried forward. No deferred tax asset has been provided.

11. Intangible assets

Group	Concession £m
Cost	
At 1 April 2017, 31 March 2018 and 31 March 2019	78
Accumulated amortisation	
At 31 March 2017	**(13)**
Charge for the year	(1)
At 31 March 2018	**(14)**
Charge for the year	(1)
At 31 March 2019	**(15)**
Carrying amount	
At 31 March 2019	**63**
At 31 March 2018	**64**

The intangible assets above relate to seperable economic rights associated with the concession to run the operations, maintenance and renewal business of the Channel Tunnel Rail Link, and are held by the wholly owned company Network Rail (High Speed) Limited.

Intangible assets are being amortised over the life of the licence of 83 years to 2086. Amortisation is charged to net operating costs in the income statement.

Notes to the financial statements continued

12. Property, plant and equipment – the rail network

	Group assets £m	Group capital grants deferred £m	Group carrying value £m
Valuation			
At 31 March 2017	**62,730**	**(3,525)**	**59,205**
Additions	6,634	(822)	5,812
Transfer to investment properties	(3)	-	(3)
(Depreciation charge)/grant amortisation for the year	(1,638)	91	(1,547)
Revaluation in the year	675	-	675
At 31 March 2018	**68,398**	**(4,256)**	**64,142**
Additions	7,043	-	7,043
Capital grant additions	-	(637)	(637)
(Depreciation charge)/grant amortisation for the year	(1,810)	97	(1,713)
Revaluation in the year	2,632	-	2,632
At 31 March 2019	**76,263**	**(4,796)**	**71,467**

Given the economic and physical interdependency of the assets comprising the rail network, the company has concluded that the rail network is considered as a single class of asset. The rail network is carried at its fair value.

As there is no active market in railway infrastructure assets, the company has derived the fair value of the rail network using an income approach. Under this approach the cash flows that a network licence holder expects to generate from the rail network are assessed using a market rate of return. This valuation is carried out twice a year and revaluation gains and losses are reflected in other comprehensive income.

The independent rail regulator, the Office of Rail and Road (ORR), has stated (in the 2018 periodic review final determination: Supplementary document – financial framework) that a private network licence holder of the railway network would have its revenue requirement determined using the building block model of regulation. Under this model the network licence holder's annual income (received in the form of the network grant and track access charges) would comprise:

a) The regulator's assessment of the efficient costs of operating and maintaining the network

b) An allowance for Regulatory Asset Base (RAB) amortisation – qualifying capital expenditure is added to the RAB as incurred and recovered by the company through future amortisation allowances (in order to spread the cost to customers and stakeholders of investment in the rail network over many years).

c) An allowed return on the RAB – calculated by applying the rate of return permitted by the ORR (based on its assessment of the market's cost of capital) to the RAB balance.

In the determination for Control Period 6 (2019-2024), published on 12 June 2018, ORR explains that from 1 April 2019 the RAB will no longer be a building block in the determination of the company's revenue requirement, but that the previous method of revenue determination would be restored if the rail network asset were to be transferred to a private owner. IFRS 13 Fair Value Measurement requires management to assess fair value from the perspective of a theoretical market participant, rather than on the basis of the value-in-use. Accordingly, the amendments made to the regulatory framework for Control Period 6, which reflect the proximity of Network Rail to the public sector and which would not apply to a market participant, are not relevant to the valuation.

Future cash flows under (a) are assumed to be equivalent over time to the network licence holder's actual costs of operation and maintenance, on the basis that the Regulator aims to set targets which are ambitious but achievable. These therefore have no net impact on forecast future cash flows, or the valuations. The allowed return (c) is based on a cost of capital which would be offset in a discounted future cash flows model (see Discount rate below). The economic rights inherent in ownership of the regulated rail network asset are therefore vested primarily in the value of the RAB, which will be recovered through future regulated income as the RAB is amortised (b).

This means that it is possible for the RAB itself to be used as the starting point for a discounted cash flow valuation. The RAB fluctuates in valuation; increasing in value principally as a result of allowances for capital expenditure and inflation indexation, whilst reducing for amortisation. The adjustments may give rise to upwards or downwards revaluations. Further changes are subject to:

a) Adjustment for any difference between regulatory rate of return and the market cost of capital that a third party investor would use to assess the value of the network (the rate of return and market cost of capital are currently assessed as fully aligned); and

b) Adjustment for forecast future under or out performance against the regulatory determination over the remainder of the current control period. No adjustment is made in respect of future control periods on the expectation of the Regulator setting, over the long term, ambitious but achievable determination. See forecast performance variation below.

12. Property, plant and equipment – the rail network continued

When valuing the network, management is required to consider the value a knowledgeable willing party would place on the network in an arm's length transaction. On the grounds that third party investors are known to value the assets of regulated companies by reference to the RAB, and that the cash flows associated with the regulatory framework are considered sufficiently stable and robust to form the basis of a third party valuation, management has used the RAB as the starting point for its valuation.

Third party funding

Additions to the railway network funded by capital grant, rather than via the RAB funding mechanism, are included in the valuation at cost. The carrying value of property, plant and equipment is calculated after netting off associated grant funding received or receivable.

Depreciation

The depreciation charge for any year is calculated using the average carrying value for the year and the estimated remaining weighted average useful economic life of the rail network. The remaining weighted average useful economic life of the rail network was calculated using the engineering assessment of serviceable economic lives of the major categories that comprise the rail network. The estimated remaining weighted average useful economic life of the network is currently 40 years (2018: 40 years).

Discount rate

The discount rate used in the income approach is the pre-tax rate of return set by the ORR. The ORR performs a periodic review every five years, which leads to the setting of the appropriate rate for the five-year period. The ORR's method encompasses advice from consultants, comparisons to similar infrastructure assets and discussions with Network Rail. Management believes this cost of capital reflects the assumptions that a market participant would make in arriving at a discount rate.

Should the ORR amend the permitted rate of return in future quinquennial reviews, the regulator would raise or lower the permitted charges to customers so as to achieve the new rate of return. In other words, the cash flows would change but the RAB would not.

The ORR confirmed that a conventionally funded market participant would receive an allowed return equal to the full market cost of capital. This has been reiterated in their final determination for CP6. Management expects that if the rail network asset were to be transferred to a private owner during CP6, ORR would determine the private owner's revenue requirement for CP6 using the pre-tax (CPI) WACC of 4.15 % set out in their final determination for this Control Period. Management expects that the rate of return set by the regulator in subsequent quinquennial reviews will be consistent with the market discount rates for infrastructure assets at the quinquennial review date.

Accordingly, the valuation includes a reassessment of this rate to determine whether it continues to reflect market conditions. This assessment is by reference to movements in observable market data, including the risk-free cost of borrowing, and changes in the weighted average cost of capital of listed utilities with similar gearing ratios. The following table shows the effect of changes in the market discount rate on the carrying value of the rail network and on the depreciation charge. The analysis only considers the effects of movements in the market discount rate until the end of Control Period 6 (2024), and not in perpetuity. The effect of changes in the market discount rate apply equally to increases and to decreases in discount rates.

	Change in cost of capital (basis points)	31 March 2019	31 March 2018
Change in fair value	25	**£835m**	**£173m**
	50	**£1,675m**	**£346m**
Percentage change in fair value	25	**1.2%**	**0.3%**
	50	**2.3%**	**0.5%**
Change in annual depreciation charge	25	**£21m**	**£6m**
	50	**£42m**	**£12m**

Forecast performance variations

In assessing the value of the rail network, management considers that a knowledgeable willing third party would take into account the perceived fairness and deliverability of the current regulatory determination. Accordingly management makes an addition (or deduction) to the valuation for its assessment of the likely ORR determination in respect of the financial consequences of anticipated future out (or under) performance against the regulatory determination.

Cost outturns on capital work (renewals and enhancements) have an impact on future cash flows under the regulatory framework, since only efficient overspending in excess of regulated cost targets can be added to the RAB.

At 31 March 2019 the valuation included £281m (2018: £1,326m) of projected financial underperformance, which is expected to crystallise in the income statement or result in the ineligibility of additions to the RAB over the next 5 years. Substantially all the balance from last year crystallised in 2018-19.

12. Property, plant and equipment – the rail network continued

At this point in the regulatory cycle out or under-performance is measured against the Delivery Plan 2019 which sets out how Network Rail will deliver its outputs in the period 2019-24. It was estimated that the cost of delivering planned outputs is most likely to be £281m more than the regulatory settlement across 5 years. The main reason for this is that train performance at the start of CP6 is at lower levels than assumed in the recent regulatory determination, which is forecast to result in financial underperformance stemming from compensation payments to passenger train operators under the performance regime. The Delivery Plan 2019 will be used to benchmark performance throughout CP6.

Critical judgements

The valuation includes the following critical judgements:

a) The regulatory framework, and associated cash flows remain sufficiently stable and robust to form the basis of a third party valuation. As noted above, the ORR has made it clear in its final determination for Control Period 6 that the amendments made to the regulatory framework for CP6 reflect the proximity of Network Rail to the public sector and the amendments would not apply to a market participant.

b) The ORR has committed to providing a market cost of capital return to a conventionally funded owner and operator of the network and the fair value calculation has been prepared on that basis. Accordingly, no adjustment has been made to the valuation in respect of the difference between the regulatory rate of return and a market participant cost of capital.

c) Management's assessment of the deliverability of the current regulatory determination is a good indication of how other management groups would perform against the determination.

d) The deliverability of the current 5-year regulatory determination does not have any implication for the deliverability of future determinations (i.e. the ambition of the regulator at the start of each Control Period is to set the regulatory determination at a level which is challenging but achievable).

e) The RAB includes historic expenditure on the company's investment properties. In accordance with IAS 40 Investment Property and IFRS 5 Non-current Assets Held for Sale and Discontinued Operations the fair value of investment property and assets held for sale is separately recognised in Notes 13 and 15 to the accounts. The fair value of the railway network excludes the fair value of RAB-funded investment properties (and assets held for sale) on the grounds that a private owner of the railway network would not expect to derive any future economic benefit from the sale of investment property (i.e. the regulator would make a downwards adjustment to the RAB for the value of any investment properties sold). The valuation performed at 31 March 2019 includes a downwards adjustment of £232m to exclude the fair value of investment property and assets held for sale (31 March 2018: £1,348m). The regulator has not reduced the RAB for the value of the non-core railway assets sold by the company in 2018-19 and this has led to a consequential increase in the fair value of the railway network.

At 31 March 2019 the group had entered into contractual commitments in respect of capital expenditure amounting to £2,113m (2018: £2,810m).

We have classified the valuation of the rail network as Level 3 under IFRS 13. The network's fair value is the estimated future cash flows that will be generated in perpetuity, discounted at the regulatory cost of capital, as set by the ORR in its Periodic Review. The cost of capital at which cash flows are discounted is the key unobservable input in the valuation. The full market cost of capital determined by the ORR is 3.71 % (2018:4.31 %) for the current control period, arrived at through advice from consultants, comparisons to similar infrastructure assets and discussions with Network Rail.

An increase in the market cost of capital would lead to a decrease in the valuation of the rail network and vice versa. However, the impact would be limited to the current control period as the regulator would re-evaluate the allowed return and reset it to the market rate at the next quinquennial review.

13. Investment property

	Group £m
Fair value	
At 31 March 2017	**1,231**
Additions	4
Disposals	(6)
Transfer (to)/from property, plant and equipment	3
Transfer (to)/from assets held for sale	(1,142)
Increase in fair value in the year	116
At 31 March 2018	**206**
Additions	-
Disposals	(14)
Transfer (to)/from property, plant and equipment	-
Transfer (to)/from assets held for sale (Note 15)	5
Increase in fair value in the year	35
At 31 March 2019	**232**

The market values of the group's investment properties at 31 March 2019 have been arrived at on the basis of a valuation carried out at that date in conjunction with Jones Lang LaSalle, external valuers not connected with the group. Network Rail Property undertake a detailed review of the investment property portfolio to allocate the portfolio to beacons which represent particular groups of property sharing the same characteristics. Network Rail Property apply yields provided by Jones Lang LaSalle to these beacon categories. Jones Lang LaSalle will also value specific properties, as instructed by Network Rail Property.

Management are satisfied that Jones Lang LaSalle hold a recognised and relevant professional qualification, and have had recent experience in the location and category of the investment property being valued. The fair value of the group's investment property portfolio is deemed to be the market value.

The valuation, which conforms to International Valuation Standards, was arrived at by splitting the portfolio between one-off individual properties to be valued separately and the remainder of the portfolio to be valued under the Beacon method.

Jones Lang LaSalle provided independent valuations of 8 one-off individual properties (2018: 6), amounting to 36 per cent (2018: 35 per cent) of the total valuation. The balance of the estate was valued under the Beacon method by splitting the portfolio into 18 homogeneous classes (2018: 13) of property and areas, assuming that the current passing rent received from these properties are in line with market rent. Jones Lang LaSalle independently assessed the appropriate yield to be adopted within each of these classes and areas. This enabled the directors to estimate market values by applying the provided yields to the net rental income from these properties, in accordance with a standard UK investment property valuation.

The property rental income earned by the group from assets categorised at the year end as investment property, all of which is leased out under operating leases, amounted to £18m (2018: £17m). Direct operating expenses arising on the investment properties in the year amounted to £4.4m (2018: £4.1m).

The group's investment properties are let on a tenant repairing basis. The group's maintenance obligations are limited to common areas and vacant property units.

Property valuations are by their nature subjective, as they are made on the basis of assumptions made by the valuer. They have been classified as Level 3 and the key inputs to the valuations, defined as 'unobservable' by IFRS 13, are analysed in the table below.

		Estimated rental value per sq. ft			Equivalent yield		
	Fair value at 31 March 2019 £m	Minimum £	Maximum £	Weighted average £	Minimum %	Maximum %	Weighted average %
Valuation Technique:							
One-off valuation	**84**	**0.66**	**248**	**5.38**	3.7	13.5	7.1
Beacon method*	**148**	**n/a**	**n/a**	**n/a**	5	15	7.7

* The Beacon methodology splits all the properties within the portfolio into 18 homogenous groups. The properties in each group are valued by applying a yield to the annual rent (passing or void) for the property. Yields applied are on the basis that the property is rack rented i.e. the current passing rent received from these properties are in line with market rent. As such, an estimated rental value per square feet for these properties is not available.

All other factors being equal, a higher yield would lead to a decrease in the valuation of a property and an increase in the current or estimated future rental stream would have the effect of increasing the capital value, and vice versa. However, there are interrelationships between the unobservable inputs which are influenced by market conditions, which would impact the changes in fair value.

Notes to the financial statements continued

14. Investments in subsidiaries and joint ventures

Principal subsidiaries affecting the amounts shown in the financial statements are included in the list below.

Principal subsidiaries	Country of incorporation	Proportion of all classes of issued share capital owned	Principal activities
Network Rail Infrastructure Limited	Great Britain	100 %	Operation, maintenance and renewal of the national railway infrastructure
Network Rail Insurance Limited	Guernsey	100 %	Insurance
Network Rail Holdco Limited*	Great Britain	100 %	Holding company of Network Rail Infrastructure Limited
Network Rail (High Speed) Limited	Great Britain	100 %	Holds St Pancras concession and High Speed Railway Services Agreement
Network Rail Development Limited	Great Britain	100 %	Holds 49.95 % of each of the property joint ventures Solum Regeneration Limited Partnership and Solum Regeneration Epsom Limited Partnership
Network Rail Pension Trustee Limited	Great Britain	Company limited by guarantee	Administration of defined contribution and CARE defined benefit pension schemes
Network Rail Consulting Limited	Great Britain	100 %	International rail consultancy
Network Rail Certification Body Limited	Great Britain	100 %	Conformity assessment services to the rail industry
Network Rail (VY1) Limited	Great Britain	100 %	Holds land required for works access
Network Rail (VY2) Limited	Great Britain	100 %	Holds land required for works access
Shares held by a trustee			
Network Rail Infrastructure Finance PLC	Great Britain	Intertrust Corporate Services Limited	Issuer of the Debt Issuance Programme

* Directly owned by Network Rail Limited company.

The shares in Network Rail Infrastructure Finance PLC are held by HSBC Trustee (C.I.) Limited, for charitable purposes. The sole purpose of this company is to act as a special purpose funding vehicle. The company is treated as a subsidiary for accounting purposes as proceeds from debt issuances are lent on to Network Rail Infrastructure Limited and are used to finance the activities and to refinance the existing debt of the group.

Joint ventures	Country of incorporation	Proportion of all classes of issued share capital owned	Principal activities
Solum Regeneration Epsom (GP) Limited	Great Britain	50 %	Hold 0.1 % in Solum Regeneration (Epsom) Limited Partnership
Solum Regeneration (Epsom) Limited Partnership	Great Britain	49.95 %	Property development
Innova Investment Partnership GP Limited	Great Britain	50 %	Hold 0.1 % in Innova Investment Limited Partnership
Innova Investment Limited Partnership	Great Britain	49.95 %	Property development
West Hampstead Square LLP	Great Britain	50 %	Property development
Blockwork LLP	Great Britain	50 %	Property development
The Station Office Network LLP	Great Britain	50 %	Provides flexible office space, meeting rooms and virtual offices

	2019 Group £m	2018 Group £m
At 1 April	35	33
Investment in joint ventures	9	2
Share of profit/(loss)	–	–
At 31 March	44	35

14. Investments in subsidiaries and joint ventures continued

Network Rail Development Limited is a 50% joint venture partner in:

Solum Regeneration (Haywards) LLP, Solum Regeneration (Guildford) LLP, Solum Regeneration (Twickenham) LLP, Solum Regeneration (Bishops) LLP, Solum Regeneration (Surbiton) LLP, Solum Regeneration Holding 2 LLP, Solum Regeneration (Maidstone) LLP, Solum Regeneration (Walthamstow) LLP, Solum Regeneration (Redhill) LLP, Solum Regeneration (Kingswood) LLP, Solum Regeneration Holding 1 LLP.

The objective of these joint ventures is to prepare sites for development and secure the necessary planning and railway consent.

15. Assets held for sale

In November 2017 Network Rail received clearance from Her Majesty's Government to begin marketing the sale of a substantial part of its investment property portfolio. On 24 November 2017, the assets were transferred from investment property to assets held for sale at their carrying value, as the criteria for reclassification had been met. The value at which the assets were transferred represents the valuation at this date on the measurement basis described in Note 13. Network Rail completed the sale in February 2019.

Under IFRS 13, the assets are classified as Level 3.

	2019 Group £m	2018 Group £m
At 1 April	1,134	–
Transfer (to)/from investment property	(5)	1,142
Transfer from trade and other payables	(7)	(11)
Additions	22	3
Disposals	(1,134)	-
At 31 March	10	1,134

During the financial year Network Rail disposed of a proportion of the commercial property portfolio from assets held for sale. This achieved a sales value of over £1.4bn and generated net returns above the carrying value of c£0.2bn . As at 31 March 2019, £10m relates to the remaining commercial property disposal.

16. Inventories

	2019 Group £m	2018 Group £m
Raw materials and consumables	226	215

As at 31 March 2019 a provision of £26m was held in respect of inventories (2018: £24m).

Notes to the financial statements continued

17. Trade and other receivables

Current assets: trade and other receivables	2019 Group £m	2018 Group £m	2019 Company £m	2018 Company £m
Trade receivables				
- receivable from contracts with other customers	201	126	-	-
- receivable from agreements with government	34	114	-	-
- receivable from property portfolio customers	112	100	-	-
Capital grants receivable	270	163	-	-
Other taxation and social security	134	102	-	-
Collateral receivable	727	750	-	-
Other receivables	-	55	-	-
Prepayments	55	43	-	-
Accrued income				
- receivable from contracts with other customers	130	107	-	-
- receivable from property portfolio customers	76	35	-	-
	1,739	1,595	-	-

Trade receivables from contracts with customers, agreements with government and from the property portfolio are all based on unconditional rights to consideration, and are not contingent on conditional or dependent on satisfying other performance obligations. Trade receivables from agreements with government reflects capital grants due.

Trade receivables include an allowance for estimated irrecoverable amounts from the supply of services of £22.5m (2018: £19m). This allowance has been made by reference to past default experience. Past default experience is adjusted for forward looking information where relevant. The group provides fully for receivables overdue by over six months. Average debtor days were 47 days (2018: 55 days).

The directors consider that the carrying value of trade and other receivables approximates to their fair value. All balances are non-interest bearing and denominated in sterling.

The group's credit risk is primarily attributable to its trade receivables. Around 94 per cent of the company's income is received from train operating companies and in the form of revenue grants from Government. Franchises are issued to train operating companies by the Department for Transport in England and Wales and Transport Scotland in Scotland. The group believes that amounts receivable from Government and the train operating companies represent a high level of credit quality. This is because in the extraordinary circumstance that a train operating company were to be unable to meet its obligations then provisions in the franchise agreements allow the Department for Transport to take over services at any time. Before accepting any other new customer, the group uses an external credit scoring system to assess the potential customer's credit quality.

Included in the group's trade receivable balance are amounts totalling £40m (2018: £92m) which are past due at the reporting date for which the group has not provided as there has not been a significant change in the credit quality and the amounts are still considered recoverable. The group does not hold collateral over these balances. The average age of these receivables is 21 days (2018: 13 days).

The following table shows the age of financial assets for the group which are past due and for which no specific provision has been raised:

	2019 Group £m	2018 Group £m	2019 Company £m	2018 Company £m
Past due by 1 – 28 days	32	79	–	–
Past due by 29 – 56 days	2	7	–	–
Past due by 57 – 84 days	3	2	–	–
Past due by 85 – 180 days	12	4	–	–
	49	92	–	–

Trade receivables of £15m (2018: £10m) are overdue by six months or more, and have been fully provided for.

Notes to the financial statements continued

18. Trade and other payables

Current liabilities: trade and other payables	2019 Group £m	2018 Group £m	2019 Company £m	2018 Company £m
Trade payables	**782**	556	**–**	–
Collateral held from banking counterparties	**38**	87	**–**	–
Payments received on account	**15**	21	**–**	–
Other payables	**359**	306	**–**	–
Other interest accruals	**287**	279	**–**	–
Other accruals	**1,434**	1,180		
Deferred income				
- from contracts with other customers	**414**	349	**–**	–
- from property portfolio customers	**77**	62	**–**	–
	3,406	2,840	**–**	–

IFRS 15 uses the term 'contract liability' to describe what might more commonly be known as 'deferred income', however the Standard does not prohibit an entity from using alternative descriptions in the statement of financial position. The Group has not adopted the terminology used in IFRS 15 to describe such balances.

£62m of the property deferred income balance at the beginning of the year and £39m of other government grant was recognised as revenue in the current year.

The average credit period taken for trade purchases is 29 days (2018: 28 days).

Before accepting new suppliers, and upon letting significant contracts, the group evaluates suppliers' creditworthiness using external credit scoring systems and other relevant data.

The directors consider that the carrying value of trade and other payables approximates to their fair value. All balances are ordinarily non-interest bearing and denominated in sterling.

Non-current liabilities: other payables	2019 Group £m	2018 Group £m	2019 Company £m	2018 Company £m
Other accruals and deferred income	**150**	109	**–**	–
Other payables	**176**	137	**–**	–
	326	246	**–**	–

Notes to the financial statements continued

19. Borrowings

	2019 Group £m	2018 Group £m	2019 Company £m	2018 Company £m
Net borrowings by instrument:				
Cash and cash equivalents	450	973	–	–
Collateral placed with counterparties	727	750	–	–
Collateral received from counterparties	(38)	(87)	–	–
Bank loans	(500)	(481)	–	–
Bonds issued under the Debt Issuance Programme (less unamortised premium, discount and fees)	(24,196)	(25,702)	–	–
Borrowings issued by the Department for Transport*	(30,580)	(26,750)	–	–
	(54,137)	(51,297)	–	–
Movement in net borrowings:				
At the beginning of the year	(51,297)	(46,254)	–	–
(Decrease)/increase in cash and cash equivalents	(523)	31	–	–
Proceeds from borrowings	(6,688)	(6,713)	–	–
Repayments of borrowings	4,597	1,541	–	–
Capital accretion	(496)	(715)	–	–
Exchange differences	(8)	15	–	–
Movement in collateral placed with counterparties	(23)	125	–	–
Movement in collateral received from counterparties	49	172	–	–
Fair value and other movements	252	501	–	–
At the end of the year	(54,137)	(51,297)	–	–
Net borrowings are reconciled to the balance sheet as set out below:				
Cash and cash equivalents	450	973	–	–
Collateral placed with counterparties (included in trade and other receivables)	727	750	–	–
Collateral received from counterparties (included in trade and other payables)	(38)	(87)	–	–
Borrowings included in current liabilities	(11,557)	(4,820)	–	–
Borrowings included in non-current liabilities	(43,719)	(48,113)	–	–
	(54,137)	(51,297)	–	–

* Included within this balance is a collateral facility of £685m at 31 March 2019.

19. Borrowings continued

	2019 Group £m	2018 Group £m	2019 Company £m	2018 Company £m
1.085% sterling index linked bond due 2052	137	134	–	–
0% sterling index linked bond due 2052	149	144	–	–
1.003% sterling index linked bond due 2051	26	25	–	–
0.53% sterling index linked bond due 2051	133	129	–	–
0.517% sterling index linked bond due 2051	133	130	–	–
0% sterling index linked bond due 2051	149	144	–	–
0.678% sterling index linked bond due 2048	131	127	–	–
1.125% sterling index linked bond due 2047	5,685	5,559	–	–
0% sterling index linked bond due 2047	95	91	–	–
1.1335% sterling index linked bond due 2045	53	52	–	–
1.5646% sterling index linked bond due 2044	299	290	–	–
1.1565% sterling index linked bond due 2043	60	58	–	–
1.1795% sterling index linked bond due 2041	73	71	–	–
1.2219% sterling index linked bond due 2040	294	285	–	–
1.2025% sterling index linked bond due 2039	80	78	–	–
4.6535% sterling bond due 2038	100	100	–	–
1.375% sterling index linked bond due 2037	5,578	5,447	–	–
4.75% sterling bond due 2035	1,232	1,231	–	–
1.6492% sterling index linked bond due 2035	447	433	–	–
4.375% sterling bond due 2030	872	872	–	–
1.75% sterling index linked bond due 2027	5,435	5,328	–	–
4.615% Norwegian krone bond due 2026*	53	53	–	–
4.57% Norwegian krone bond due 2026*	15	15	–	–
1.9618% sterling index linked bond due 2025	378	366	–	–
4.75% sterling bond due 2024	742	740	–	–
3 % sterling bond due 2023	398	398		
2.76% Swiss franc bond due 2021	231	224	–	–
2.315% Japanese yen bond due 2021*	73	71	–	–
2.28% Japanese yen bond due 2021*	73	71	–	–
2.15% Japanese yen bond due 2021*	73	72	–	–
4.625% sterling bond due 2020	1,000	999	–	–
1.75 % US dollar bond due 2019**	-	717	–	–
0.875 % US dollar bond due 2018**	-	1,248	–	–
	24,197	25,702	–	–

* Bonds treated as fair value through profit and loss.
** Bonds in a fair value hedge arrangement.
All other bonds are shown net of unamortised discount and fees.

Notes to the financial statements continued

19. Borrowings continued

Bank loans are analysed as follows:

	2019 Group £m	2018 Group £m	2018 Company £m	2017 Company £m
Index-linked European Investment Bank due 2036 (£251m) and 2037 (£249m)	**500**	**484**	–	–
Barclays Bank due 2017 repayable by instalments	-	(3)	–	–
	500	**481**	–	–

At 31 March 2019 and 2018 the group had the following undrawn committed borrowing facilities at nominal value:

	2019 Drawn £m	2019 Undrawn £m	2019 Total £m	2018 Drawn £m	2018 Undrawn £m	2018 Total £m
Department for Transport loan facility	29,909	-	29,909	28,400	2,475	30,875
Department for Transport collateral facility	685	315	1,000	-	1,000	1,000
	30,594	315	30,909	28,400	3,475	31,875

Undrawn committed facilities expire as follows:

	2019 Group £m	2018 Group £m
Within one year	-	**2,475**
Within two to five years	-	–
After five years	-	–
	-	**2,475**

On 4 July 2014, the Secretary of State for Transport provided the group with a loan facility of £30,875m expiring on 31 March 2019. Following the asset divestment programme, the loan facility was reduced to £29,909m which had been fully drawn as at 31 March 2019. On 28 March 2019, a new facility was signed which became available for drawing on 1 April 2019 (the '2019 facility'). The 2019 facility has a drawdown limit of £32,329m. In addition, the Secretary of State for Transport has provided unlimited financial indemnity in respect of borrowings under the Debt Issuance Programme which expires in 2052.

20. Derivative financial instruments

	2019 Group	
	Fair value £m	Notional amounts £m
Derivative financial instrument assets		
Cash flow hedges		
Cross-currency swaps to hedge debt issued under the Debt Issuance Programme	**126**	**128**
Fair value hedges		
Cross-currency swaps to hedge debt issued under the Debt Issuance Programme	**-**	**-**
Non-hedge accounted derivatives		
Cross-currency swaps to hedge debt issued under the Debt Issuance Programme	**95**	**199**
Interest rate swaps	**129**	**10,711**
Forward foreign exchange contracts	**-**	**3**
	350	**11,041**
Included in non-current assets	**340**	**9,552**
Included in current assets	**10**	**1,489**
	350	**11,041**
Derivative financial instrument liabilities		
Cash flow hedges		
Interest rate swaps	**15**	**130**
Forward starting interest rate swaps	**-**	**-**
Non-hedge accounted derivatives		
Interest rate swaps to hedge debt issued under the Debt Issuance Programme	**1,016**	**19,852**
Forward foreign exchange contracts	**2**	**48**
	1,033	**20,030**
Included in current liabilities	**52**	**4,975**
Included in non-current liabilities	**981**	**15,055**
	1,033	**20,030**

See Note 25: Funding and financial risk management for further details on the risk management strategy. Notional amounts above reflect the contractual value relating to the principal instrument (e.g. bond) to which the derivative relates.

Notes to the financial statements continued

20. Derivative financial instruments continued

	2018 Group	
	Fair value £m	Notional amounts £m
Derivative financial instrument assets		
Cash flow hedges		
Cross-currency swaps to hedge debt issued under the Debt Issuance Programme	125	128
Fair value hedges		
Cross-currency swaps to hedge debt issued under the Debt Issuance Programme	217	1,738
Non-hedge accounted derivatives		
Cross-currency swaps to hedge debt issued under the Debt Issuance Programme	97	198
Interest rate swaps	57	4,531
Forward foreign exchange contracts	-	11
	496	6,606
Included in non-current assets	269	3,497
Included in current assets	227	3,109
	496	6,606
Derivative financial instrument liabilities		
Cash flow hedges		
Interest rate swaps	19	130
Forward starting interest rate swaps	242	2,695
Non-hedge accounted derivatives		
Interest rate swaps to hedge debt issued under the Debt Issuance Programme	905	22,590
Forward foreign exchange contracts	1	66
	1,167	25,481
Included in current liabilities	20	2,401
Included in non-current liabilities	1,147	23,080
	1,167	25,481

21. Provisions

	Legal £m	Commercial and other claims £m	Total £m
At 31 March 2018	**9**	**72**	**81**
Charge for the year	5	10	15
Utilised in the year	(4)	(14)	(18)
Release for the year	(9)	(5)	(14)
At 31 March 2019	**1**	**63**	**64**

The group has also provided against a number of claims arising from interpretations of legal contracts or past events for which settlement is expected to be achieved in the next year, but could be deferred to future years depending on the legal interpretation of rights and responsibilities under the contracts as well as commercial negotiation.

Provisions are measured at the directors' best estimate of the expenditure required to settle the obligation at the balance sheet date. The nature of these claims means that there is some uncertainty with regard to the value that they will be settled at. If the outcomes of the claims are different to the assumptions underpinning the directors' best estimates then a further liability may arise.

Contingent liability

The group's lawyers have advised that detailed disclosure regarding the nature and amount of contingent liabilities, beyond that disclosed here, could be expected to prejudice the position of the group. The general nature of contingent liabilities are development indemnities and warranties.

Notes to the financial statements continued

22. Deferred tax

The following are the deferred tax liabilities and assets recognised by the group and movement thereon during the current and prior year.

Group	Accelerated tax depreciation £m	Unrealised Gain on Investment Property £m	Revaluation of railway network £m	Short-term timing differences including retirement benefit obligations £m	Derivatives £m	Tax losses £m	Total £m
At 31 March 2017	**2,411**	**-**	**46**	**(51)**	**(21)**	**-**	**2,385**
Charge/(credit) to income	10	-	-	(38)	(1)	25	(4)
Charge/(credit) to other comprehensive income	-	-	115	37	31	-	183
Transfer between reserves	-	-	1	(1)	-	-	-
Utilisation of losses previously derecognised	-	-	-	-	-	(2)	(2)
Derecognition of deferred tax asset (income)	-	-	-	-	-	(23)	(23)
Derecognition of deferred tax asset (equity)	-	-	-	-	(31)	-	(31)
At 31 March 2018	**2,421**	**-**	**162**	**(53)**	**(22)**	**-**	**2,508**
Charge/(credit) to income	165	(98)	-	(48)	(6)	(1)	12
Charge/(credit) to other comprehensive income	-	-	447	(4)	29	-	472
Transfer between reserves	-	-	(13)	13	-	-	-
Reclassification	(58)	58	-	-	-	-	-
Utilisation of losses previously derecognised	-	-	-	-	-	1	1
Derecognition of deferred tax asset (income)	-	40	-	-	-	-	40
Derecognition of deferred tax asset (equity)	-	-	-	-	(29)	-	(29)
At 31 March 2019	**2,528**	**-**	**596**	**(92)**	**(28)**	**-**	**3,004**

Certain deferred tax assets and liabilities have been offset. The following is the analysis of the gross deferred tax balances:

	2019 (£m	2018 (£m
Deferred tax liabilities	**3,124**	**2,583**
Deferred tax assets	**(120)**	**(75)**
	3,004	**2,508**

Under IAS 12 deferred tax assets can only be recognised where it is probable that taxable profits will be available against which the deferred tax asset can be utilised. Additionally, whilst taxable income does not exceed allowable deductions in the year, Network Rail claims only the capital allowances sufficient to make the necessary claims for group relief and available tax credits.

During the year, a deferred tax asset in respect of current year losses on derivatives of £29m has been derecognised as well as £40m of unrecognised deferred tax asset on investment property.

23. Notes to the statement of cash flows

	2019 Group £m	2018 Group £m	2019 Group £m	2018 Company £m
(Loss)/ Profit before tax	(173)	48	–	–
Adjustments for:				
Property revaluation movements and profits on disposal	(363)	(190)	–	–
Fair value gain on derivatives and debt	(220)	(234)	–	–
Net interest expense	2,189	2,225	–	–
Depreciation of the rail network	1,810	1,638	–	–
Amortisation of grants	(144)	(99)	–	–
Amortisation of intangible assets	1	1	–	–
Movement in retirement benefit obligations	169	164	–	–
(Decrease) / increase in provisions	(17)	17	–	–
Operating cash flows before movements in working capital	3,252	3,570	–	–
Increase in inventories	(11)	(24)	–	–
(Increase)/Decrease in receivables	(167)	28	–	–
Increase / (decrease) in payables	548	(25)	–	–
Cash generated from operations	3,622	3,549	–	–

Cash and cash equivalents

Cash and cash equivalents (which are represented as a single class of assets on the face of the balance sheet) comprise cash at bank, collateral and commercial paper, all of which are on call with the exception of short-term deposits. There were £502m (excluding offsetting clearing accounts) of short term deposits of which £14m is with BlackRock, and the remainder with the government banking scheme (“GBS”) held as at 31 March 2019.

Notes to the financial statements continued

24. Operating lease arrangements

The group as lessee	2019 Group £m	2018 Group £m
Minimum lease payments under operating leases recognised in the income statement in the year	44	40

At the balance sheet date, the group had outstanding commitments for future minimum lease payments under non-cancellable operating leases, which fall due as follows:

	2019 Group £m	2018 Group £m
Within one year	58	33
In the second to fifth years inclusive	157	98
After five years	104	121
	319	252

Operating lease payments largely represent rentals payable by the group for certain of its office properties. Leases are negotiated for an average term of seven years and rentals fixed for an average of three years. In addition rentals are paid for land adjacent to the railway required for maintenance and renewal activities.

The group as lessor

Operating lease rentals earned in the year by the group were £732m (2018: £674m). This amount includes property rental income of £317m (2018: £306m), as disclosed in Note 3.

At the balance sheet date, the group had contracted with customers for the following future minimum lease payments:

	2019 Group £m	2018 Group £m
Within one year	470	444
In the second to fifth years inclusive	1,316	1,213
After five years	2,142	2,335
	3,928	3,992

25. Funding and financial risk management

Introduction

The group is almost entirely debt financed. Debt has been issued through the special purpose financing company Network Rail Infrastructure Finance PLC, which is not a member of the Network Rail Limited group, but is treated as a subsidiary for accounting purposes. The majority of the group's existing debt has been issued by Network Rail Infrastructure Finance PLC under the Debt Issuance Programme which is rated AA by Standard and Poor's, Aa2 (outlook stable) by Moody's and AA (outlook negative) by Fitch. The Debt Issuance Programme is supported by a financial indemnity from the Secretary of State for Transport which expires in 2052.

Debt has been issued in a number of currencies and a range of maturities which gives rise to interest rate, foreign currency and inflation risk. Financial risk management aims to mitigate these risks.

Reclassification of Network Rail

In December 2013, the Office for National Statistics announced the reclassification of Network Rail as a Central Government Body in the UK National Accounts and Public Sector Finances with effect from 1 September 2014. This is a statistical change driven by guidance in the European System of National Accounts 2010 (ESA10).

As part of Network Rail's formal reclassification to the public sector, an arrangement was agreed whereby funding would be provided by the DfT in the form of a loan made directly to Network Rail Infrastructure Limited, to fund the continuing programme of long-term investment in the national rail network. Network Rail Infrastructure Finance PLC does not anticipate issuing further bonds in the foreseeable future and its debt service obligations would be met through repayments of the intercompany loan by Network Rail Infrastructure Limited.

All of the outstanding bonds under the Debt Issuance Programme, including nominal and index-linked benchmarks and private placements in all currencies, will continue to benefit from the direct and explicit guarantee from the UK Government under the Financial Indemnity Mechanism. In the unlikely event that the DfT withdraws or breaches its obligations on the loan facility to Network Rail the group may issue further bonds or commercial paper to meet funding requirements.

Externally imposed capital requirements

The Network Rail group is almost entirely debt financed and therefore manages its debt as the key part of its capital. Network Rail manages its debt in relation to the Regulatory Asset Base (RAB). This is an important business ratio because the value of the RAB and the amount of debt that the business can sustain are, generally speaking, closely related. Network Rail's debt cannot exceed the value of the RAB; a debt to RAB ratio of significantly less than 100 per cent indicates that the business is more robust to future cost shocks without endangering its sustainability as an arms length body of central government.

The RAB and regulatory debt are reconciled to property, plant and equipment (in Note 12) and net debt (in Note 19) as follows:

	2019 £m	2018 £m
Net debt per Note 19	(54,137)	(51,297)
Revaluations and remeasurements	693	939
Regulatory net debt	(53,444)	(50,358)

The RAB used to calculate the debt to RAB ratio is:

	2019 £m	2018 £m
Rail network per Note 12	71,467	64,142
Investment properties per Note 13	232	206
Other fair value adjustments	319	2,444
RAB	72,018	66,792

The debt to RAB ratio at 31 March 2019 and 2018 was as follows:

	2019	2018
Debt: RAB ratio	74.2%	75.4%

The debt to RAB ratio is based on regulatory net debt, which recognises debt at hedged rates.

The group's subsidiary, Network Rail Infrastructure Limited, owns and operates Britain's rail network under licence from the ORR. The licence imposes conditions on the company with regard to its net debt. Should the value of the company's qualifying net debt exceed 75 per cent of the ORR's RAB then the ORR will be formally notified. In the prior year Network Rail received consent from the ORR to exceed the financial indebtedness Debt:RAB ratio.

Notes to the financial statements continued

25. Funding and financial risk management continued

Summary table of financial assets and liabilities

The following table presents the carrying amounts and the fair values of the group's financial assets and liabilities at 31 March 2019 and 31 March 2018.

The fair values of the financial assets and liabilities are recorded at the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale. The following methods and assumptions were used to estimate the fair values where balances were not already held at fair value:

- Bank loans – based on market data at the balance sheet date and the net present value of discounted cash flows
- Certain bonds issued under the Debt Issuance Programme – based on market data at the balance sheet date. Where market data is not available valuations have been obtained from dealing banks.

For cash and cash equivalents, finance lease receivables, trade and other payables and trade and other receivables, fair value equates to carrying value.

Group	2019 Carrying value £m	2019 Fair value £m	2018 Carrying value £m	2018 Fair value £m
Financial assets				
Cash and cash equivalents	**450**	**450**	**973**	**973**
Other non-derivative financial assets				
Trade and other receivables (less prepayments, accrued income and other taxation and social security)	**617**	**617**	**546**	**546**
Collateral receivable	**727**	**727**	**750**	**750**
Derivatives				
Derivatives designated as cash flow hedging instruments	**126**	**126**	**125**	**125**
Derivatives designated as fair value hedging instruments	**-**	**-**	**217**	**217**
Other derivatives as fair value through profit and loss	**224**	**224**	**154**	**154**
Total financial assets	**2,144**	**2,144**	**2,765**	**2,765**
Financial liabilities				
Financial liabilities held at amortised cost				
Bank loans	**(500)**	**(853)**	**(481)**	**(811)**
Bonds issued under the Debt Issuance Programme	**(23,909)**	**(29,518)**	**(25,419)**	**(30,617)**
Borrowings issued by Department for Transport	**(30,580)**	**(30,523)**	**(26,750)**	**(26,245)**
Collateral payable	**(38)**	**(38)**	**(87)**	**(87)**
Trade and other payables at amortised cost (less deferred income)	**(3,091)**	**(3,091)**	**(2,754)**	**(2,754)**
Financial liabilities designated as fair value through profit and loss				
Bonds issued under the Debt Issuance Programme	**(287)**	**(287)**	**(283)**	**(283)**
Derivatives				
Derivatives designated as cash flow hedging instruments	**(15)**	**(15)**	**(261)**	**(261)**
Other derivatives as fair value through profit and loss	**(1,018)**	**(1,018)**	**(906)**	**(906)**
Total financial liabilities	**(59,438)**	**(65,343)**	**(56,941)**	**(61,964)**

As shown in the above table, the bonds issued under the Debt Issuance Programme have fair values significantly in excess of their carrying values. These differences are not reflected in the Balance Sheet since the majority of these instruments (See Note 19) were not designated at FVPL on initial recognition and hence are accounted for at amortised cost under IFRS 9. The size of the difference is driven by the overall decrease in market debt yield rates since the inception of these instruments; debt terms in a higher yield environment resulting in a settlement at par would now attract a premium, assuming no other changes to the instrument or wider environment.

25. Funding and financial risk management continued

Derivatives

The group (including the group's special purpose financing company, Network Rail Infrastructure Finance PLC) uses derivative financial instruments to reduce exposure to foreign exchange risk and interest rate movements. The group does not use derivative financial instruments for speculative purposes. Certain derivatives are designated as hedges, and those derivatives that are not hedge accounted are fair valued immediately through the income statement. The group has a comprehensive risk management process.

The board, through a treasury sub-committee (the treasury committee), has approved and monitors the risk management processes, including documented treasury policies, counterparty limits, controlling and reporting structures.

The use of derivative instruments can give rise to credit and market risk. Market risk is the possibility that future changes in foreign exchange rates and interest rates may make a derivative more or less valuable. Since the group uses derivatives for risk management, market risk relating to derivative instruments will principally be offset by changes in the valuation of the underlying assets, liabilities or transactions being hedged.

Credit risk

Network Rail manages its funds with banks that have high credit ratings; assigned by international credit-rating agencies. The treasury committee authorises the policy for setting counterparty limits based on credit ratings. The group spreads its exposure over a number of counterparties and has strict policies on how much exposure can be assigned to each of the counterparties. Surplus liquidity is invested in the Government Banking Scheme which has low credit risk.

For debt designated as fair value through profit and loss (FVTPL) there has been no change in carrying value as a result of changes in the group's credit risk. The gain in the income statement arising from the remeasurement of FVTPL debt items of £3m (2018: £21m loss) are all attributable to changes in market risk.

The credit risk with regard to all classes of derivative financial instruments entered into before 1 January 2013 is limited because Network Rail has arrangements in place which limit each bank to a threshold (based on credit ratings), which if breached requires the bank to post collateral in cash or eligible securities. The members of the banking group are required to post collateral on positive mark to market swaps above the threshold. In December 2012 the group entered into new collateral agreements in respect of derivative trades entered into after 1 January 2013. Under the terms of the new agreements Network Rail posts collateral on adverse net derivative positions with its counterparties. The new agreements do not contain a provision for thresholds; as such Network Rail or its counterparties are required to post collateral for the full fair value of net out of the money positions. At 31 March 2019 the fair value of collateral held was £38m (2018: £87m). The group is the beneficial owner of this collateral. The group is free to invest or otherwise utilise the collateral at its discretion, subject to acting within the authority sanctioned by the treasury committee. The balance of collateral posted by the group at 31 March 2019 was £727m (2018: £750m).

The group does not have any significant credit risk exposure to any single counterparty and has considered the creditworthiness of debtors. For further detail on the credit-worthiness of customers and suppliers, see Notes 17 (Trade and other receivables) and 18 (Trade and other payables).

The group considers its maximum exposure to credit risk to be the sum of its financial assets, as set out on page 173.

Foreign exchange risk

Network Rail is exposed to currency risks from its investing, financing and operating activities. Foreign exchange risk for all currencies is managed by the use of forward exchange contracts and currency swaps to limit the effects of movements in exchange rates on foreign currency denominated liabilities.

It is estimated that a general increase of ten percentage points in the value of any currency against sterling would have no material effect on the group's profit before tax or equity due to all currency positions being 100 per cent hedged and therefore no sensitivity analysis is produced.

Notes to the financial statements continued

25. Funding and financial risk management continued

Interest rate and inflation risk

The group is exposed to changes in interest rates as funds are borrowed at both fixed and floating interest rates. The hedging strategy approved by the treasury committee defines the appropriate mix between fixed and floating borrowings. Cross-currency and interest rate swap contracts are used to manage the fixed/floating ratio.

Debt with a carrying value of £30,592m (2018: £18,885m) is arranged at or swapped into fixed interest rates and exposes the group to fair value interest rate risk. Other borrowings were arranged at or swapped into floating rates, thus exposing the group to cash flow interest rate risk. They have arranged or swapped other borrowings into floating rates (£198m), thus exposing the group to cash flow interest rate risk.

Network Rail has no more forward starting interest rate swaps. These were used to hedge the interest rate on borrowings for CP5. The fair value movement on these swaps during the year before they were utilised were £39m (2018: £41m).

The group has certain debt issuances which are index-linked and so are exposed to movements in inflation rates. The group does not enter into any derivative arrangements to hedge its exposure to inflation in relation to its index-linked debt, but rather to mitigate the effects of inflation on the group's retail price index-linked revenue streams.

Sensitivity analysis

This sensitivity analysis has been determined based on the exposure to interest rates and inflation for both derivative and non-derivative financial instruments at the balance sheet date. A one per cent increase or decrease represents management's assessment of the reasonably possible changes in average interest rates and inflation.

	Group 31 March 2019		Group 31 March 2018	
	Impact on the income statement £m	Impact on equity £m	Impact on the income statement £m	Impact on equity £m
1 % increase in the interest rate	**504**	**-**	**341**	**(20)**
1 % increase in the GBP RPI on index linked bonds	**(182)**	-	**(179)**	**–**

A one per cent decrease in the above rates would have an equal and opposite effect.

Interest rate sensitivities have been calculated by comparing the average rates of the derivative financial instruments to the market rate for similar instruments.

The impact of a change in GBP RPI has been calculated by applying a change of one per cent to the RPI at the balance sheet date to the carrying value of the index linked bonds.

The group believes that the above analysis is unrepresentative of the risks inherent in issuing index-linked debt. Franchised track access and grant income constitute £6,268m (2018: £6,187m) of revenue which is far in excess of an index-linked interest expense of £257m (2018: £243m). Currently, these sources of income are contractually index-linked and, whilst there is no absolute contractual guarantee for future regulatory control periods that this will continue, the group is highly confident that this will continue to be the case. Therefore, the natural hedge that exists between finance costs and revenue mitigates the risk of RPI movements.

25. Funding and financial risk management continued

Liquidity risk management

The ultimate responsibility for liquidity risk management rests with the board of directors. The policy manual ratified by the treasury committee includes an appropriate liquidity risk management framework covering the group's short, medium and long-term funding and liquidity management requirements. The Treasury funding is subject to regular internal audits. Treasury provides sufficient liquidity to meet the group's needs, while reducing financial risks and prudently maximising interest receivable and minimising credit risk on surplus cash.

The group manages liquidity risk by maintaining sufficient cash and facilities to cover at least one year's working capital requirement by continuously monitoring forecast and actual cash flows. Included in Note 19 is a description of additional undrawn facilities that the group has at its disposal to further reduce liquidity risk.

The following table details the group's remaining contractual maturity for its financial liabilities. The table has been drawn up on the undiscounted cash flows of financial liabilities based on the earliest date on which the group can be required to pay and, therefore, differs from both the carrying value and the fair value. The table includes both interest and principal cash flows.

Group	Within 1 year £m	1-2 years £m	2-5 years £m	5+ years £m	Total £m
31 March 2019					
Non-derivative financial liabilities					
Bank loans and overdrafts	(6)	(6)	(18)	(582)	(612)
Bonds issued under the Debt Issuance Programme					
– Sterling denominated bonds	(196)	(1,196)	(1,600)	(3,273)	(6,265)
– Sterling denominated index-linked bonds	(268)	(276)	(852)	(40,993)	(42,389)
– Foreign currency denominated bonds	(14)	(14)	(459)	(65)	(552)
Loan from the Department for Transport	(9,592)	(8,163)	(10,741)	(3,218)	(31,714)
Trade and other payables	(1,466)	(175)	-	-	(1,641)
Derivative financial liabilities					
Net settled derivative contracts	(231)	(137)	(247)	(44)	(659)
Gross settled derivative contracts – receipts	14	14	459	65	552
Gross settled derivative contracts – payments	(3)	(6)	(278)	(60)	(347)
	(11,762)	(9,959)	(13,736)	(48,170)	(83,627)

Group	Within 1 year £m	1-2 years £m	2-5 years £m	5+ years £m	Total £m
31 March 2018					
Non-derivative financial liabilities					
Bank loans and overdrafts	(5)	(5)	(14)	(483)	(507)
Bonds issued under the Debt Issuance Programme					
– Sterling denominated bonds	(196)	(196)	(1,496)	(4,573)	(6,461)
– Sterling denominated index-linked bonds	(256)	(264)	(839)	(38,849)	(40,208)
– Foreign currency denominated bonds	(1,993)	(13)	(454)	(69)	(2,529)
Loan from the Department for Transport	(3,007)	(10,605)	(11,024)	(4,041)	(28,677)
Trade and other payables	(1,228)	(137)	-	-	(1,365)
Derivative financial liabilities					
Net settled derivative contracts	(191)	(177)	(372)	(104)	(844)
Gross settled derivative contracts – receipts	1,993	13	454	69	2,529
Gross settled derivative contracts – payments	(1,757)	(5)	(282)	(61)	(2,105)
	(6,640)	(11,389)	(14,027)	(48,111)	(80,167)

Notes to the financial statements continued

25. Funding and financial risk management continued

Offsetting financial assets and liabilities

Financial assets

The following financial assets are subject to offsetting, enforceable master netting arrangements and similar agreements. The balances have not been presented on a net basis in the financial statements.

Group	Gross amounts of recognised financial assets £m	Gross amounts of recognised financial liabilities set off in the balance sheet £m	Net amount of financial assets presented in the balance sheet £m	Related amounts not set off in the balance sheet: Financial instruments £m	Related amounts not set off in the balance sheet: Cash collateral received £m	**Net amount £m**
31 March 2019						
Derivative financial assets	350	-	350	(307)	413	**456**

Group	Gross amounts of recognised financial assets £m	Gross amounts of recognised financial liabilities set off in the balance sheet £m	Net amount of financial assets presented in the balance sheet £m	Related amounts not set off in the balance sheet: Financial instruments £m	Related amounts not set off in the balance sheet: Cash collateral received £m	**Net amount £m**
31 March 2018						
Derivative financial assets	496	-	496	(406)	123	**213**

Financial liabilities

The following financial liabilities are subject to offsetting, enforceable master netting arrangements and similar agreements. The balances have not been presented on a net basis in the financial statements.

Group	Gross amounts of recognised financial liabilities £m	Gross amounts of recognised financial assets set off in the balance sheet £m	Net amount of financial liabilities presented in the balance sheet £m	Related amounts not set off in the balance sheet: Financial instruments £m	Related amounts not set off in the balance sheet: Cash collateral paid £m	**Net amount £m**
31 March 2019						
Derivative financial liabilities	(1,033)	-	(1,033)	307	276	**(450)**

Group	Gross amounts of recognised financial liabilities £m	Gross amounts of recognised financial assets set off in the balance sheet £m	Net amount of financial liabilities presented in the balance sheet £m	Related amounts not set off in the balance sheet: Financial instruments £m	Related amounts not set off in the balance sheet: Cash collateral paid £m	**Net amount £m**
31 March 2018						
Derivative financial liabilities	(1,167)	-	(1,167)	406	540	**(221)**

Cash flow hedges

Contractual payments on derivatives designated as cash flow hedges impact the income statement and will all have matured by 2027.

Borrowings

Details of the group's undrawn committed facilities and types of debt instrument used can be found in Note 19.

25. Funding and financial risk management continued

Fair value measurements recognised in the balance sheets

The following table provides an analysis of financial instruments that are measured subsequent to initial recognition at fair value, grouped into Levels 1 to 3 based on the degree to which the fair value is observable:

- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities
- Level 2 fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

	2019			
	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Derivative financial assets	-	350	-	350
Assets	-	350	-	350
Derivative financial liabilities	-	(1,033)	-	(1,033)
Financial liabilities designated at fair value through profit and loss	(287)	-	-	(287)
Liabilities	(287)	(1,033)	-	(1,320)
Total	(287)	(683)	-	(970)

	2018			
	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Derivative financial assets	-	496	-	496
Assets	-	496		496
Derivative financial liabilities	-	(1,167)	-	(1,167)
Financial liabilities designated at fair value through profit and loss	(283)	-	-	(283)
Liabilities	(283)	(1,167)	-	(1,450)
Total	(283)	(671)	-	(954)

The fair value of level 2 derivatives is estimated by discounting the future contractual cash flows using appropriate yield curves based on quoted market rates as at the current financial year end.

A review of the categorisation of the assets and liabilities into the three levels is made at each reporting date. There were no transfers between Level 1 and Level 2 fair value measurements and no transfers into or out of Level 3 fair value measurements in the current or prior years.

Notes to the financial statements continued

26. Retirement benefit schemes

Defined contribution schemes

On 1 April 2004 the group introduced a defined contribution pension scheme, the Network Rail Defined Contribution Pension Scheme (NRDCPS). This is an auto-enrolment scheme for all new employees of Network Rail, except those who have the legal right to join the Railway Pension Scheme (RPS), in compliance with regulations made under the Pensions Act 2008. Any employee who wishes to transfer from the Network Rail Section of the RPS to the NRDCPS is entitled to do so.

At 31 March 2019, the NRDCPS had 13,135 members (2018: 12,170) and the average employer contribution rate in the year was 4.2 per cent (2018: 4.3 per cent).

Defined benefit schemes

The principal pension scheme in which the group participates is the Railway Pension Scheme (RPS), which was established by statutory instrument, commenced on 1 October 1994 and is a funded defined benefit arrangement. The assets and liabilities under the predecessor scheme, the British Rail Pension Scheme (BRPS), were transferred to the RPS on that date. The RPS is an industry-wide scheme for all eligible employees within the railway industry. There are different sections within it for different employers. The assets and liabilities of each section are identified separately from those of the other sections. The group has its own section, the Network Rail Shared Cost Section (the Network Rail Section). This scheme, the assets of which are held separately from the group, is contributory and provides pensions related to pay at retirement.

The assets transferred to the RPS from the BRPS on 1 October 1994 were apportioned among the various sections of the RPS in accordance with the methods and assumptions specified in The Railways Pensions (Transfer and Miscellaneous Provisions) Order 1994 (the 'Transfer Order') which effected the transfer. The amount credited to the Network Rail Section included a share of the surplus at that time.

Since 1 April 2004, new members can only join the Network Rail Section of the RPS after completing five years of service. Benefits for existing members and employees joining up to and including 31 March 2004 were not affected by the revised eligibility rules of the Network Rail Section. In addition, the group announced its decision to cap its contribution to British Railways Additional Superannuation Scheme (BRASS) matching at current levels for existing employees and to dispense with matching for new employees. The group will continue to match regular contributions but will not increase them in cash terms in the future. On 1 November 2008 Network Rail launched a third pension scheme – the Career Average Revalued Earnings (CARE) scheme, which is available to all employees.

Qualified actuaries Willis Towers Watson have valued the schemes on an IAS 19 (revised) basis at 31 March 2019 and 31 March 2018.

The contributions required to fund the RPS and the CARE scheme are reassessed every three years, following completion of actuarial valuations (by the Scheme Actuaries). The last full actuarial valuation of both schemes was undertaken by the scheme actuary, Willis Towers Watson, as at 31st December 2016.

Under the terms of the Pensions Act 2004, the Trustee and each employer must agree the methods and assumptions used to calculate the 'Technical Provisions', i.e. assets required to meet the Section's liabilities. The assumptions agreed are typically weaker than those used for IAS 19 purposes in current market conditions, so the minimum funding requirement in itself requires no further adjustment to the IAS 19 obligations below. However, the regulatory regime may, depending on legal advice received at the appropriate time, mean that a future employer's accounting surplus would need to be restricted.

The RPS and CARE schemes are both shared cost in nature, so the cost of benefits being earned and the cost of funding any shortfall in the schemes are normally split in the proportion 60:40 between the group and the members. In practice the contributions are adjusted at each triennial valuation to reflect the funding position of the schemes at that time.

The estimated amounts of contributions expected to be paid by the group and members to the schemes during the year ending 31 March 2020 are £120m and £78m respectively. If a surplus or deficit arises, the provisions in the rules mean that the group and members benefit from or pay for this respectively in the proportion 60:40.

26. Retirement benefit schemes continued

	2019 %	2018 %
Key assumptions used:		
Discount rate	2.3	2.4
Expected rate of price inflation and CARE benefit increases (RPI measure)	3.2	3.1
Future earnings increases*		
- after changes to benefits from 1 April 2016	3.2	3.1
Pension increases (CPI measure)	2.2	2.1

* Excluding promotional salary scale. Promotional salary scale increases apply only in respect of service after the date of promotion.
** 2.9% p.a. for non-Protected members, 3.4% p.a. for Protected members

	2019		2018	
	Males	Females	Males	Females
Average life expectancy for mortality tables used to determine defined benefit obligations:				
– Member aged 65	22.2	23.8	22.1	23.7
– Member aged 45	23.9	25.7	23.8	25.6

For the Network Rail Section of the RPS the discounted mean term of the Defined Benefit obligation is 22 years, for the CARE scheme it is 33 years.

Amounts recognised in income in respect of the group's pension arrangements are as follows:

	2019 £m	2018 £m
Current service cost – defined benefit	277	271
Past service cost - defined benefit (see Note 6)	7	-
Interest cost	55	57
	339	328

The current service cost has been included in employee costs, the net interest scheme deficit has been included in finance costs.

Amounts recognised in the statements of comprehensive income in respect of the group's pension arrangement are as follows:

	2019 £m	2018 £m
Gain on defined benefit obligation due to experience	(46)	(31)
Loss/ (gain) on defined benefit obligation due to assumption changes	285	(132)
Return on plan assets greater than discount rate	(208)	(58)
Actuarial loss / (gain) on defined benefit pension scheme	**31**	**(221)**

The cumulative amount of actuarial losses recognised in other comprehensive income was £1,519m (2018: £1,488m).

The amount included in the balance sheet arising from the group's obligations in respect of its defined benefit schemes is as follows:

	2019 £m	2018 £m
The defined benefit obligation is made up as follows:		
Active members	(6,253)	(5,827)
Deferred pensioner member	(1,455)	(1,281)
Retired members	(3,480)	(3,200)
Present value of defined benefit obligation	(11,188)	(10,308)
Fair value of scheme assets	6,912	6,457
Deficit in the scheme	**(4,276)**	**(3,851)**
Group's share (60%) of the scheme deficit recognised in the balance sheet	**(2,566)**	**(2,311)**

This amount is presented as a non-current liability in the balance sheet. Cumulative gains or losses are recognised in equity.

Notes to the financial statements continued

26. Retirement benefit schemes continued

Movements in defined benefit plan assets and liabilities (including members' share):

	Asset* £m	Liabilities** £m	Deficit £m
At 31 March 2017	6,231	(10,083)	(3,852)
Current service cost including members' share	-	(440)	(440)
Interest on pension deficit	156	(249)	(93)
Administration expenses	(11)	-	(11)
Return on plan assets greater than the discount rate	97	-	97
Actuarial gain arising from experience adjustments	-	52	52
Actuarial loss arising from demographic assumptions	-	219	219
Regular contributions by employer	107	-	107
Contributions by employees	70	-	70
Benefits paid	(193)	193	-
At 31 March 2018	6,457	(10,308)	(3,851)
Current service cost including members' share	-	(445)	(445)
Interest on pension deficit	154	(245)	(91)
Section amendment (Past Service Costs)	-	(11)	(11)
Administration expenses	(13)	-	(13)
Return on plan assets greater than the discount rate	346	-	346
Actuarial gain arising from experience adjustments	-	81	81
Actuarial loss arising from demographic assumptions	-	-	-
Loss on DBO - financial assumption		(476)	(476)
Regular contributions by employer	112	-	112
Contributions by employees	72	-	72
Benefits paid	(216)	216	-
At 31 March 2019	6,912	(11,188)	(4,276)

*Including CARE scheme assets at 31 March 2019 of £250m (2018: £214m)
**Including CARE scheme liabilities at 31 March 2019 of £595m (2018: £476m)

The actual return on scheme assets was £500m (2018: £253m).

Expected future benefit payments from the Network Rail Section, based on data from the 2013 formal valuation and the 31 March 2019 IAS19 assumptions are as follows:

	£m
Benefits expected to be paid within 12 months	199
Benefits expected to be paid between 2 to 3 years	440
Benefits expected to be paid between 4 to 6 years	766
Benefits expected to be paid between 7 to 10 years	1,228
Benefits expected to be paid between 11 to 15 years	1,832
Benefits expected to be paid in over 15 years	12,023

26. Retirement benefit schemes continued

The analysis of the scheme assets and the expected rate of return at the balance sheet date was as follows:

	Fair value of assets		Percentage of assets	
	2019 £m	2018 £m	2019 %	2018 %
Equity instruments	6,116	5,714	88.48	88.49
Debt instruments – Government	531	472	7.68	7.31
Debt instruments – non-Government	233	265	3.37	4.10
Property	8	6	0.12	0.10
Other	24	-	0.35	-
	6,912	6,457		

The group is exposed to a number of risks relating to the scheme including assumptions not being borne out in practice. The most significant risks are as follows:

Asset volatility

There is a risk that a fall in asset values is not matched by a corresponding reduction in the value placed on the defined benefit obligation scheme (DBO). The scheme holds a proportion of growth assets, which are expected to outperform corporate or government bond yields in the long term, but gives exposure to volatility and risk in the short-term.

Change in bond yields

A decrease in corporate bond yields will increase the value placed on the scheme defined benefit obligation, although this will be partially offset by an increase in the value of the scheme's corporate bond holdings.

Inflation risk

The majority of the scheme's DBO is linked to inflation where higher inflation will lead to higher value being placed on the DBO. Some of the scheme assets are either unaffected by inflation or loosely correlated with inflation (e.g. growth assets), meaning that an increase in inflation will generally increase the deficit.

Life expectancy

An increase in life expectancy will lead to an increased value being placed on the scheme's DBO. Future mortality rates cannot be predicted with certainty.

Actuarial assumption sensitivity

The discount rate is set by reference to market conditions at the reporting date, and can vary significantly between periods.

The earnings increases are linked to inflation and so set by reference to market conditions at the reporting date.

The mortality assumptions used are set by considering the experience of the scheme's members, and by making an allowance for possible future improvements in longevity. Mortality assumptions are difficult to set accurately, and forecasting rates of future mortality improvement is inevitably speculative.

The following table shows the effect of changes in these assumptions upon the defined benefit obligation:

	2019 £m	2018 £m
Discount rate		
Change in defined benefit obligation at year end from a 25 basis points increase	651	(529)
Change in defined benefit obligation at year end from a 25 basis points decrease	(603)	571
Mortality		
Change in defined benefit obligation from a one year increase in longevity	332	287
Change in defined benefit obligation from a one year decrease in longevity	(329)	(278)
Earnings increase		
Change in defined benefit obligation at year end from a 25 basis points increase	172	164
Change in defined benefit obligation at year end from a 25 basis points decrease	(166)	(159)
Price inflation (CPI measure)*		
Change in defined benefit obligation at year end from a 25 basis points increase	619	541
Change in defined benefit obligation at year end from a 25 basis points decrease	(576)	(505)

* Including consistent increases to Retail Price Index, salary growth and Retail Price Index/ Consumer Price Index related pensions assumptions.

27. Related parties

The Department for Transport (DfT) and Transport Scotland (TS) are considered related parties of Network Rail. Network Rail received grant income of £3,786m from the DfT in the year ended 31 March 2019 (2018: £4,055m). Network Rail received grant income of £339m from TS for the year ended 31 March 2019 (2018: £425m). The total of this income is “Grant income” in Note 3. The group also paid the DfT £265m (2018: £281m) in respect of the Financial Indemnity Mechanism fee (see note 25 for more details). At 31 March 2019 the company held £30,580m of loans issued by DfT (2018: £26,750m).

The British Transport Police (BTP), with whom Network Rail has a Police Service Agreement is also a related party. Network Rail incurred £91m (2018: £93m) of costs relating to services provided by the BTP in the year ending 31 March 2019 and received £1m (2018: £1m) in property income from the BTP in the same period.

Network Rail is also a related party of High Speed 2 (HS2). At the end of the financial year Network Rail held £38m (2018: £73m) of capital work in progress relating to works on HS2 and had also received £63m (2018: £50m) of capital grants that was recorded against property, plant and equipment.

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