





2 24/08/2022 COMPANIES HOUSE **Network Rail Limited**

Annual report and accounts 2022



Network Rail Limited's Annual Report and Accounts 2022

Presented to Parliament
by The Secretary of State for Transport
by Command of Her Majesty
July 2022



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ISBN 978-1-5286-3508-0

E02762378 07/22

Printed on paper containing 40% recycled fibre content minimum.

Printed in the UK by HH Associates Ltd. on behalf of the Controller of Her Majesty's Stationery Office.

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https://www.networkrail.co.uk/who-we-are/publicationsand-resources/regulatory-and-licensing/annual-return/



Revenue in the year

2021/2022

2020/2021

£9,553m

£9,618m

Operating Costs (before depreciation and amortisation)

2021/2022

2020/2021

£4,645m

£4,479m

Profit before to x

2021/2022

2020/2021

£324m

£1.66m

Newdebs

2021/2022

2020/2021

£56.1bm

£54,7/bm

Capital expenditure

2021/2022

2020/2021

£6,139m

£5,928m

Environmental sustainability

2021/2022

2020/2021

181%

Percentage reduction in greenhouse gas emissions against our 2018/19 baseline. Numbers do not include traction carbon reduction, which is not part of Network Rail's direct emissions.

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The numbers below are important to show our financial and non-financial performance. We report numbers for both 2020/21) and 2021/22, Both 2020/21 and 2021/22 were affected by the coronavirus pandemic.

Rossengerkm(travelled(bn))

2021/2022

2020/2021

39.1km

12.5km

Passenger trains on time On Time Measure

2021/2022

2020/2021

731,00%

79,7%

Freight moved Net tonne kilometres

2021/2022

2020/2021

Freight Groins on time Freight Delivery Metric

2021/2022

2020/2021

93,5%

95,2%

Lost time injury frequency rate

2021/2022

2020/2021

Timelost to injuries and fatalities among Network Rail staff and contractors. Allower figure represents a better performance.

Network Rail's employee engagement index

September 2021 full survey June 2021 pulse survey

57%

58%

July 2020 pulse survey

66%





WE MEAN GREEN

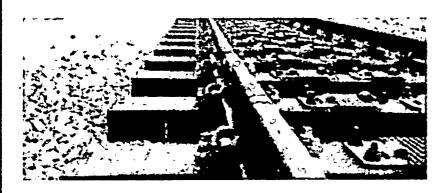


A LOW-EMISSION RAILWAY

BIODIVERSITY

CLIMATE CHANGE

REDUCING WASTE



This year we have trialled recycled plastic composite sleepers including the use of over 750 sleepers in the King's Cross Remodelling project and 150 at Sherrington Viaduct. The sleepers use recycled plastic waste and are manufactured in Yorkshire. At the end of their life the sleepers can be recycled into more plastic composite sleepers or re-used for lower track categories, providing a possible life of over 100 years. The sleeper contains 60 per cent less carbon dioxide than a standard concrete sleeper.



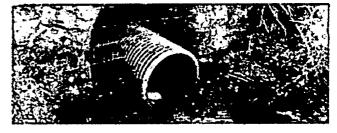
As part of our commitment to make our network more resilient to climate change, we have raised Black Bridge in Wales by one metre. With 30 closures due to flooding in the last decade, 10 of which were in 2020, this will improve the reliability and performance of our service for passengers.



In partnership with the Rail Safety and Standards Board (RSSB), we are carrying out monitoring across 105 train stations to measure air quality. Over a 12-month period this will provide insight into air quality levels at a range of locations within the stations, helping us to protect employees and passengers.







This year, Scotland built the region's first beaver tunnel under the railway to allow the safe passage of beavers. This can also prevent disruption to passenger and freight trains caused by beavers constructing dams in areas where the water is meant to flow freely across our estate.

This year, we have begun to use the Rail Social Value Tool (RSVT). This is an online tool, created in partnership with RSSB, for the rail industry. We have started to use the RSVT to forecast the social value of station redevelopments, monitor impacts of capital programmes and evaluate activities including our rough sleeping on rail outreach services in Birmingham and Manchester.



NETWORK RAIL'S STORY

VISION, VALUES, STRATEGY, PERFORMANCE

Network Rail exists to get people and goods where they need to be and to support our country's economic prosperity. We do this by running a safe, reliable and efficient railway that serves our customers and communities. To be successful, we need to be a company that is on the side of passengers and freight users. This is why we developed our vision of Putting Passengers First.



PUTTING PASSENGERS FIRST

Our regions make sure that their services and decisions meet the needs of the passengers, customers and communities they serve.





OUR VALUES

Our values – how we behave – allow us to deliver our vision. We empower our people to always be safe, care about the railway, its users and each other, and put teamwork at the heart of all that we do. This means that we Put Passengers First.









STRATEGIC PRIORITIES

The key elements of Putting Passengers First are grouped under our six strategic priorities:

- Safety
- Train Service Delivery
- Efficiencies
- Sustainable Growth
- Customers and Communities
- People



Our balanced scorecard allows us to measure how well we're doing against our strategic priorities.

The linkages between our vision, values, strategic priorities and performance are explained more in About Network Rail on page 15.

OPERATING MODEL

In 2021/2022 we faced unprecedented times and tackled some significant challenges. Our focus was on keeping Britain moving during the pandemic, delivering a safe and reliable service for our passengers including key workers and freight users. Our operating model enabled us to serve and meet the changing needs of passengers and freight users and guickly respond to external changes like Covid-19.

We continue our journey to being more customer-focussed and service driven. Putting passengers first is our priority, with our efforts concentrated on delivering a more sustainable, efficient, joined-up railway that is on the side of passengers and freight users. Our operating model reflects that we all work directly for the benefit of passengers and freight users, or we work to support those that do.

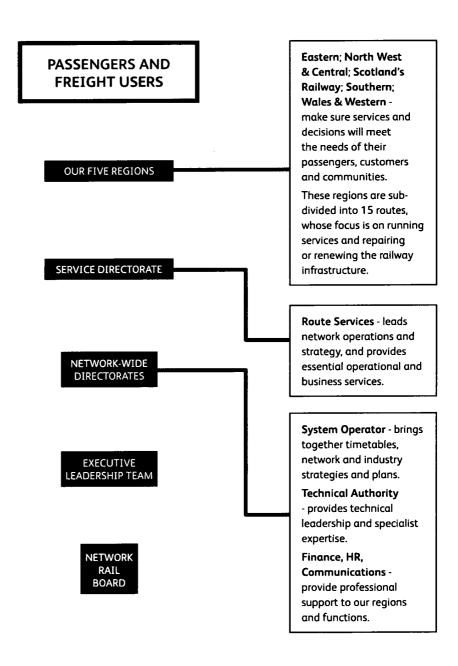
Our funding comes from:

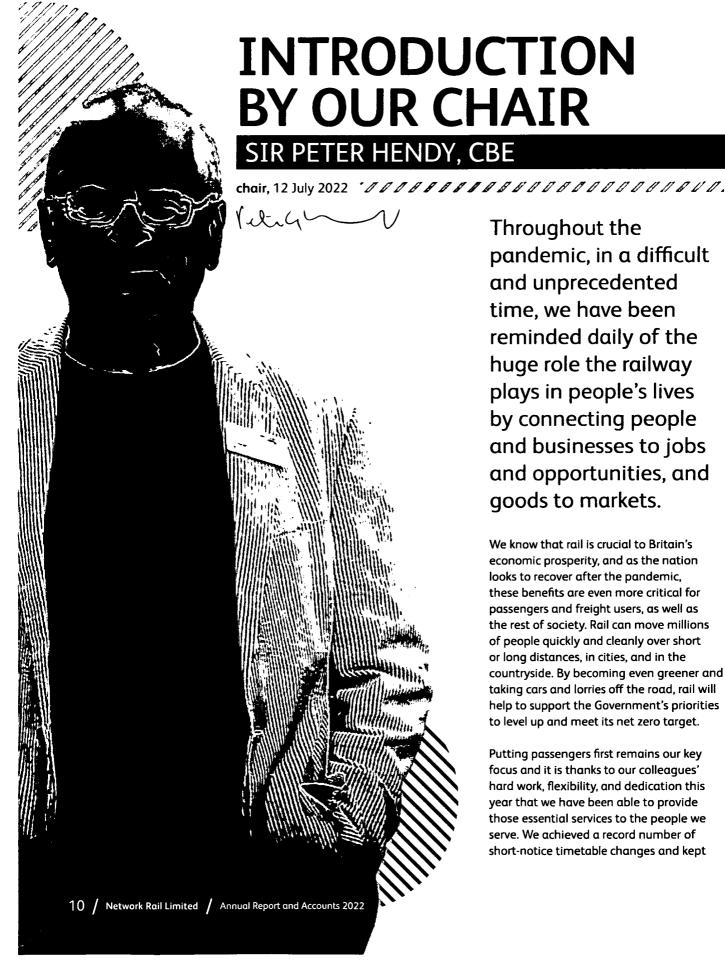
- UK Government
- Transport Scotland
- · Charging train operators to use our track
- Income from our property assets

We are held to account by:

- The Office of Rail and Road - our economic and safety regulator
- UK Government: Department for Transport, HM Treasury
- Transport Scotland

Our key stakeholders include (in no particular order): lineside neighbours, national and local government, our supply chain, train and freight operating companies, trades unions, Transport Focus, Rail Accident Investigation Branch. British Transport Police, industry partners.

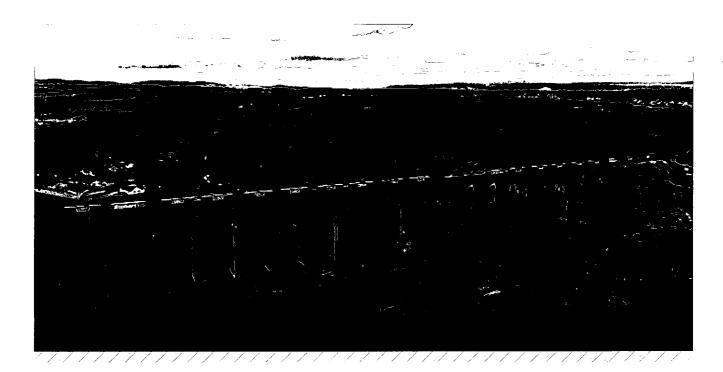




Throughout the pandemic, in a difficult and unprecedented time, we have been reminded daily of the huge role the railway plays in people's lives by connecting people and businesses to jobs and opportunities, and goods to markets.

We know that rail is crucial to Britain's economic prosperity, and as the nation looks to recover after the pandemic, these benefits are even more critical for passengers and freight users, as well as the rest of society. Rail can move millions of people quickly and cleanly over short or long distances, in cities, and in the countryside. By becoming even greener and taking cars and lorries off the road, rail will help to support the Government's priorities to level up and meet its net zero target.

Putting passengers first remains our key focus and it is thanks to our colleagues' hard work, flexibility, and dedication this year that we have been able to provide those essential services to the people we serve. We achieved a record number of short-notice timetable changes and kept



the railway running despite evolving government guidance and varying passenger numbers. The industry came together in a new way to better understand passengers' needs by considering new travel and working habits. This innovation and collaboration have enabled us to respond quickly to passenger demand, which will be vital in restoring people's confidence in rail, encouraging them to take the train again, and eat, drink, and shop at our stations.

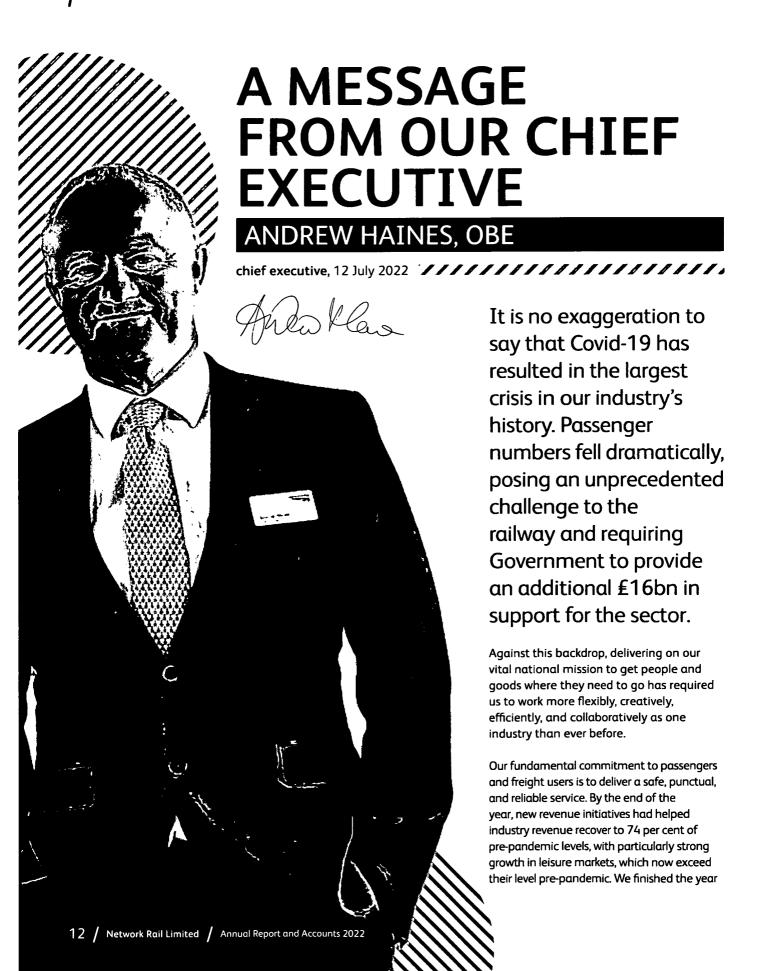
At a time when passenger numbers have fallen compared to pre-pandemic and the cost of living has risen significantly, the industry relied on significant government support. This year, the Government announced the biggest ever planned public investment in our rail network, through the £96bn Integrated Rail Plan for the Midlands and North. As we build back better and greener, this investment will level up opportunities across Britain by making train journeys faster, more frequent, and more reliable for passengers wherever they live.

For this support to continue, we must demonstrate value for money and become more efficient, delivering on our commitment of £4bn efficiencies for operations, maintenance, and renewals, across Control Period 6. That's why we must invest wisely and effectively, reviewing our plans for delivering new infrastructure projects in an environmentally sustainable way, so that rail can continue to support economic growth and make the most out of every pound.

To realise these benefits and provide passengers with an efficient railway, we have to have industry reforms. We have made changes to how we operate, and our new devolved structure is already helping to provide a better service. As we transition towards Great British Railways, we look forward to working together better and more easily, to prioritise passengers and freight, and to create a safe and reliable service.

Throughout the pandemic, our focus on the safety of our colleagues, passengers, and the public has been unwavering. Safety is always our top priority and because of that we have been devastated by the loss of one of our colleagues this year. It is a painful reminder of why we must work hard to get everyone home safe every day. Our thoughts are with everyone affected, and we will do everything we can to make the railway safer for everyone.

I end by thanking our executive leadership team for their work and commitment to putting passengers first. There is always more to do, of course, but I have absolute confidence in them, and Andrew Haines, our chief executive, to do what is necessary to create a safe and reliable railway that works for everyone. And of course, I want to say a huge thank you to all our Network Rail colleagues, contractors and suppliers who have delivered the best possible service for passengers and freight users throughout these challenging times.



with 73 per cent of passenger trains running on time, which was within our expectations given the busier timetable and increase in passengers, though below the higher levels of performance delivered during the pandemic. Our target for next year is to sustain this level of performance.

With Covid-19 variants impacting demand, we used targeted communications to help passengers travel with confidence, including promoting station cleaning initiatives. Passenger satisfaction scores were the highest recorded by the RDG Wavelength survey, with a score of 7.93 (10 being excellent). Meanwhile, the rail freight sector continued to play a key role in transporting goods, providing critical support over a festive period impacted by wider issues in the supply chain, though a combination of infrastructure failures, severe weather and crew illness undermined performance.

Delivering a reliable railway is only possible because of the hard work of colleagues right across the industry, who demonstrated enormous dedication, flexibility, and collaboration to keep people and goods moving under the most trying circumstances. Operational colleagues again successfully enabled a significant number of shortnotice timetable changes to adapt to evolving government guidance and fluctuating demand. This shows just how far the industry has come since the disruption that did so much damage to the railway's reputation back in 2018.

We have been talking to our workforce and trades unions since early 2021 about the ongoing impact of the pandemic and the need for us to modernise and get the industry back onto a sustainable financial footing. While we are seeing the regrettable return of industrial action to the railway, we are working hard to reach a swift resolution to put an end to disruption and focus all of our efforts on the continued recovery of the railway.

Throughout this period of uncertainty, the safety of passengers, the wider public and our colleagues has remained paramount. The collision at Salisbury in October 2021 was a stark reminder of the importance of managing seasonal risks, and while we have made improvements, in January 2022 we felt the tragic loss of our colleague in Ipswich when driving during his working day.

Over the last two years we have significantly reduced risk for our track workers, including removing hundreds of thousands of unnecessary maintenance tasks. Unassisted lookout working has been reduced by 98 per cent, with our progress recognised by the Rail Accident Investigation Branch (RAIB). We are presently deploying new safety equipment, which

by the end of 2022 will virtually eradicate human forms of lookout working on our railway for the first time since the railway was invented. We did this without impacting the service provided to those using the network.

In March 2022 RAIB published its report into the tragic loss of life at Carmont, Aberdeenshire, following the derailment of a passenger train in August 2020. The report made it clear that there are fundamental lessons to be learnt by Network Rail and the wider rail industry to make our infrastructure more resilient. Immediately following the accident, we inspected similar locations and drainage systems across the length and breadth of the country.

We also commissioned two independent taskforces led by world class experts to help improve our understanding of extreme rainfall events and how to better manage our cuttings, embankments, and drainage systems. Their recommendations have been translated into action plans by our Weather Risk Task Force, which are now being delivered through an integrated plan bringing together national initiatives and regional activities to manage weather risk. Many of our drainage and operations initiatives have already started to have a real impact on the railway.

Delegates travelling to COP26 witnessed first-hand the service disruption caused by intense storms and we began 2022 with three consecutive major storms - Dudley, Eunice and then Franklin. We are experiencing periods of extreme weather more frequently. It was a significant cause of delay in the year, and the second largest cause of passenger train cancellations for Network Rail. Responding to more extreme weather and climate change is a multi-generational challenge for the railway and is a central theme of our planning for Periodic Review 23 which will establish our outputs and funding for the next Control Period.

I was delighted when in November 2021, Prime Minister Boris Johnson chose to visit the TransPennine Route Upgrade to mark the launch of the Government's £96bn Integrated Rail Plan for the Midlands and North. This is the biggest ever public investment in Britain's rail network, which will deliver faster and better journeys for passengers while boosting connectivity across the Midlands and North by transforming East-West and North-South links. This investment, alongside others around the country, represents a significant vote of confidence in rail's future.

Such significant government support can only be sustained if we make the most out of every pound, becoming more efficient and better value for money. We beat our target

for operational efficiencies for the year by £10m, taking us to £840m, an increase of 18 per cent from 2020/21, and setting us on course to deliver £4bn of efficiencies in Control Period 6. Our record in delivering against our efficiency plans has now been publicly acknowledged by the Department for Transport, by the Office of Rail and Road and by the Public Accounts Committee, which represents a significant improvement on historic performance. Looking ahead, we have started a major programme of change and modernisation across our organisation. Delivering and implementing these changes over the coming months will be essential to put rail on a sustainable footing for the future.

We are also becoming more efficient in delivering enhancement schemes, with £840m in efficiencies realised this year, taking us to £1.9bn for Control Period 6-50 per cent of our overall forecast. This is being achieved by reassessing how we plan and deliver new infrastructure projects from the bottom-up, by instilling the principles and procedures from our Project SPEED programme to cut the time and cost of project delivery.

A prime example of this approach was the reopening of the Dartmoor Line in November 2021, which saw the reinstatement of passenger services between Okehampton and Exeter for the first time in nearly half a century. By putting SPEED principles into action, adopting faster processes and mindsets, as well as working closely with Great Western Railway and Devon County Council, we were able to deliver this complex project ahead of schedule and with a £10m saving.

Delivering across all our objectives can only be achieved through teamwork and we are committed to building a workforce that better reflects the communities we serve. The percentage of women in our workforce continued to nudge upwards from 18.4 per cent to 19 per cent over the most recent reporting year (2021/22), though our gender pay gap increased slightly given the predominance of new starters in entry level roles. In recognition of our progress Network Rail was named in the Times Top 50 Employers for Women. While we are encouraged by this progress, there is still more to do to make Network Rail and the railway more inclusive and an attractive place for women to work.

The proportion of people from black, Asian and minority backgrounds in Network Rail at the end of the year was 9.5 per cent. We have set ourselves a target of 13 per cent black, Asian and minority ethnic representation across the organisation by 2024 – in line with the proportion of the population as a whole. This is the second year in a row that we voluntarily published our ethnicity pay gap report. Releasing this data

is a critical step in recognising where we must do more to create a fair and diverse community for our colleagues. Our ethnicity pay gap increased by 1.7 per cent to 6.7 per cent in 2021 and it remains above the latest national ethnicity pay gap average of 2.3 per cent. This gap tells us that there is still an underrepresentation of black, Asian and minority ethnic employees in higher paid roles, and more work to do to increase the diversity of our workforce. Our Race Matters project continues to hold the business to account and increase the ethnic diversity of our organisation.

Finally, I'd like to highlight the important progress we continue to make on sustainability. In a world of competing calls on funding, the railway has a unique role to play in supporting sustainable economic recovery and growth while helping Government to meet ambitious net zero targets. I was proud of the work we did last year to help the UK and Scottish governments host a successful COP26 and showcase the contribution rail can make. It was exhilarating to bring net zero rail to life by welcoming HRH Prince of Wales, the Prime Minister, and local schoolchildren on board two hydrogen-powered trains developed by our partners at Porterbrook and Vivarail.

We have continued to deliver key milestones as part of our sustainability strategy and to show that being greener is central to who we are and how we operate. We have worked with our supply chain to identify ways to reduce our carbon emissions and over two-thirds of our suppliers have now committed to signing up to science-based targets.

Such collaboration is vital to putting passengers first and winning them back to the railway. The shift to working from home for millions of people will continue to present challenges for years to come and we must continue to find ways to save money, work more efficiently and flexibly and protect the future of our railway. We know our passengers' needs have changed and our devolved structure with empowered local leadership teams is already helping us to work in a way that prioritises passengers' needs. This includes working closely with train operators at our managed stations and delivering a faster and better value experience for passengers. Great British Railways represents a significant opportunity to deliver a simpler, better and more affordable railway for everyone and effective collaboration across the sector is ever more vital as we progress towards it.

I am proud of what we have achieved this past year thanks to the hard work and commitment of our railway family. I look forward to working together over the coming year to create an efficient railway that's fit for the future and provides the best possible service for passengers and freight users.

ABOUT NETWORK RAIL

Who we are and what we do

We own, operate and develop Britain's railway infrastructure. This covers approximately 20,000 miles of track; 30,000 bridges, tunnels and viaducts; and thousands of signals, level crossings and stations. Our rail network spans the country, providing a service for passengers and freight that underpins daily life and economic growth. We also manage 20 of the busiest train stations and we are responsible for timetabling.

Our purpose is to get people and goods to where they need to be, and in turn to support the UK's economic prosperity. Our role is to run a safe, reliable and efficient railway, serving our customers and communities. We oversee the running of the railway as an entire system and work closely with train operators to deliver train services as safely, reliably and punctually as possible. We lead the industry's planning for the future of the railway and we are committed to a sustainability agenda.

We own land throughout the country, the vast majority of which is used for operational purposes. Where possible, we make land available for housing development. In addition, we consider ourselves to be Britain's biggest neighbour and routinely consider our impact on lineside neighbours.





NUMBER OF **PASSENGER JOURNEYS**

2021/22

2020/21



AMOUNT OF **FREIGHT** (bn net tonne kilometres)

2021/22

2020/21



Over 2,500

THURWING THE

stations, the 20 largest are managed by Network Rail





bridges, tunnels and

Our funding

Network Rail Limited is a company limited by guarantee. It does not have a share capital and therefore does not issue shares. As such, we do not pay dividends to shareholders. Our profits are re-invested into improving the railway network and providing a better service for passengers and freight users.

Network Rail is also a public sector arm's length body. While we don't have shareholders, the Secretary of State for Transport is our sole 'member'. Our framework agreement with the Department for Transport sets out how we will work together in terms of corporate governance and financial management.

The Office of Rail and Road (ORR), our independent regulator, decides how much money it thinks we need to run our business efficiently and to deliver what the UK and Scottish Governments have asked for. The ORR then fixes the amount we can charge train operating companies for using the railway network.

Income

Our income is a mix of grants from the UK and Scottish Governments; payments from train and freight operators that use the railway; and a small amount of income from our real estate portfolio, e.g. rental income from shops at stations. We also work closely with organisations willing to pay for projects that benefit them, our passengers and our freight users.

Funding cycles

We work in five-year funding cycles called Control Periods (CP). The UK and Scottish Governments let us know what they need from the railway network in each CP and how much they can afford to pay for it. The 2021/22 financial year is the third year of CP6, which runs from April 2019 to March 2024. It is our responsibility to deliver a railway which is efficient, reliable and safe. We must deliver reliable train performance daily and we are held to account for this throughout the CPs.

Network Rail's vision and devolution

Our vision

"Putting Passengers First"

We're continuing to implement this vision to be a company that is on the side of passengers and freight users. We want to be considered efficient, dependable and a company people are proud to work for. We have embedded a customer service mindset across our business to support this vision.

We developed our Putting Passengers First vision to address feedback received from customers, stakeholders and employees in 2019. It accords with our intention to deliver a more sustainable, efficient and joined-up

railway. We identified six strategic priorities for delivering our vision and we describe these below. They are a vital consideration in the stakeholder actions we take.

Devolution

The devolution of Network Rail remains an important part of our strategy. We have devolved accountabilities and established platforms for us to deliver value for money to those we serve. We are continuing to ensure that the regions and routes meet the needs of their passengers, customers and communities.

We are entering a time of transition. We refer elsewhere in this report to rail industry reform and the intended role of Great British Railways (GBR). See, for example, the Corporate Governance report on pages 112. We understand that GBR will build on the model of devolution that has been central to the Network Rail approach over the last few years.

Our culture

Our corporate values accord with the customer service mindset and the Putting Passengers First vision we continue to implement.

We empower our people to always be safe, to care about the railway, its users and each other, and to put teamwork at the heart of all we do.

Our corporate behaviours include accountability, challenge, collaboration and customer focus.

In addition to passengers, our customer service mindset applies to Network Rail colleagues, irrespective of the part of the business they work in, and to other stakeholders. We want to ensure that all Network Rail employees are aware of our vision and are thinking about how best to serve users of the railway.

Our strategic priorities

To help us deliver our Putting Passengers First vision, we have identified six strategic priorities:



Safety



Train service delivery



Efficiency



Sustainable growth



Customers and communities



People

Safety

Our safety vision is Everyone Home Safe Every Day.

Safely running the country's railway is of paramount importance to us. Our safety vision applies to passengers; other members of the public (for example, those living and working near the railway); and our employees and contractors. Safety is a vital factor in the decisions we make during our improvement works. We regularly measure our safety performance and work hard to improve where we can.

Train service delivery

We understand that passengers want a punctual and reliable train service. We are focussed on reducing delays and disruption for passengers and freight users by seeking to stop faults occurring. Improving both how we work and the technology we use to quickly find and fix faults means that we can return service levels to normal as promptly as possible.

Efficiency

The delivery of an affordable and efficient railway is a key priority. A substantial proportion of our funding comes from taxpayers. We understand our responsibility to spend this money wisely and to work as efficiently as possible to deliver value to our customers. The greater our efficiency, the more money we have to invest in providing an improved service for passengers.

We're continuing to use the latest technology and practices to speed up our work safely, both on and off the track. Completing improvement work more quickly means we're saving money and causing less delay and disruption for passengers and freight users.

Sustainable growth

It remains the case that one of our priorities is to work to improve the railway infrastructure where there is a strong business case to do so.

We reported on our Environmental Sustainability Strategy 2020-2050 last year. It commits us to delivering a low emission railway (we have set ourselves a reduction in carbon emissions target to be met by the end of the current Control Period); a reliable railway service that is resilient to climate change, with improved biodiversity of plants and wildlife; and minimal waste and sustainable use of materials. See the Environmental Sustainability section on page 77.

Customers and communities

We're continuing to improve the service we provide to our customers and communities by listening to what they need and responding appropriately. We have set ambitious targets to assist in terms of putting passengers first and being a more collaborative partner. We have also prepared detailed plans for various train station improvement works.

As reported last year, we're working closely with lineside neighbours - the people and businesses who live and work next to the railway - and looking to minimise the impact our track works may have on them. We have also continued to reduce the time it takes us to respond to any complaints we receive. We have seen our best ever performance in this area across 2021/22, and as a result have set an even more ambitious target for 2022/23.

People

We are reliant on our people to ensure that we can implement our vision to put passengers first. We recognise the importance of having a diverse workforce and of providing an environment in which everyone can be and achieve their best; can feel content; and, we hope, feel proud to work for us. We are very supportive of mental health initiatives and have set a target to reduce work-related mental health absences.

We strive to ensure our people feel safe without the fear of discrimination, and to ensure our people work in an environment in which they can fulfil their potential and feel valued. A diverse and content workforce will, we believe, reflect the diversity of our passengers and of the communities we serve and operate in. We believe this will enable us to understand and address what our stakeholders need from us.

Our business model – how we are organised

We are organised into five geographical regions, each with its own managing director who is a member of the Executive Leadership Team: see the map on page 31. Those regions are sub-divided into a total of 15 routes. As a result of our devolution programme, many decisions that were previously taken centrally now take place at region or route level. The people making the decisions are closer to their passengers and freight users and have a better understanding of what they need. This enables us to deliver any changes more effectively.

Regions

The five regions lead on local resourcing strategy and planning activities, bringing together engineering capability and management of our assets: these include track, bridges, signals, cuttings, etc. The regions are accountable for improving the railway network within their geographies, and are responsible for aspects of longer-term planning, including timetables and project business case development.

For more information on each region, please see their individual reports:

Eastern on page 32 North West & Central on page 38 Scotland's Railway on page 44 Southern on page 50 Wales & Western on page 56

Routes and route services

Routes are responsible for the daily running of the railway, thereby bringing decision-making closer to passengers. The responsibilities of our routes include maintenance and renewal work, for example carrying out repairs to our assets over the short to medium term.

Our Route Services directorate supports our routes, regions and functions. This is accomplished by the provision of network operations, freight, telecoms and

technical expertise, and a number of different customerfocussed services to regional customers and other parts of our business.

Route Services includes, among other teams: commercial and procurement; supply chain operations; business services; IT services; asset information services; and engineering services. The team oversees the delivery of national programmes and initiatives. It focuses on the provision of services for the benefit of passengers and also freight customers. Its work complements our Putting Passengers First vision.

Network-wide directorates System Operator

This takes a whole-system view of the railway and provides industry leadership in the development of longterm network strategies and advice to funders. Its work integrates the railway service we hope to deliver and the production of the railway timetable.

Technical Authority

This directorate has network-wide accountability - in accordance with our Licence to Operate and Safety Authorisation - for setting and monitoring compliance with the policy, strategy and control frameworks relating to the following:

- safety;
- · engineering;
- asset management;
- security; and
- environment and sustainability

Core professional functions

CFO directorate

This is made up of eight functions:

- Group Finance;
- Property;
- Legal and Corporate Services;
- · Audit and Risk;
- Planning and Regulation;
- · Corporate Finance and Business development;
- · Corporate Commercial; and
- the Rail Investment Centre of Excellence

These functions deliver the company's legal reporting and compliance requirements with our independent regulator - the ORR - and with third parties. They also lead the development and delivery of network strategy and our business plan.

In addition, the CFO directorate provides professional leadership and assurance on capital delivery affordability and holds the business to account for delivering sustainable efficiencies.

Human Resources (HR)

This function leads the development and delivery of our people strategy and policies across the business. It works with the regions and functions, according to need and demand, to provide professional HR leadership and services. The team also delivers strategic transformation initiatives.

Due to pandemic-related changes, we have had to make difficult decisions in this reporting period: these accord with an industry-wide approach. Our HR function has had a key role in industrial relations and workforce engagement and in the implementation of workforce reforms. We explain further in the Corporate Governance report, page 112 (see the 'Modernising management' sub-heading on page 113) and in the How we Engage with Stakeholders report, pages 101 (see the 'Modernising management' sub-heading on page 101).

Communications

The Corporate Communications function is responsible for ensuring Network Rail presents a consistent narrative which places our customers at the heart of everything we do. It operates a business partnering approach with national functions and services; our devolved organisations have their own communications teams.

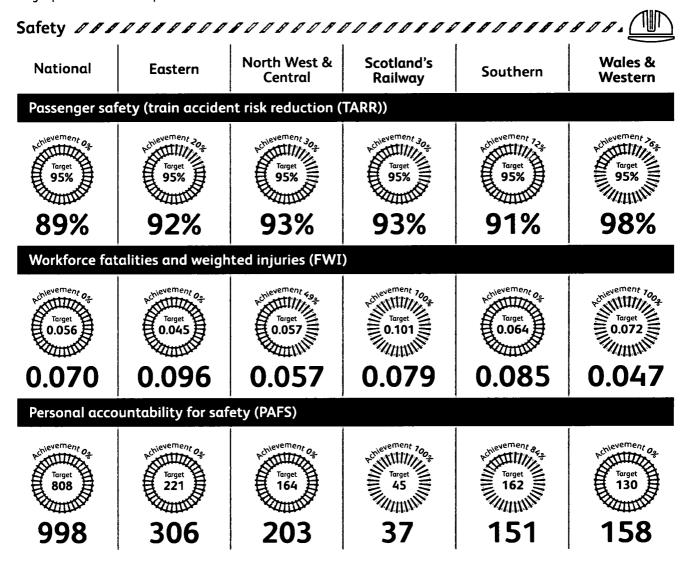
Measuring our progress

We assess how well we're doing in delivering our vision through our scorecard measures. Our progress measurements align with the strategic priorities described above. See the 'How we performed 2021/22' report on pages 20 to 25 for more information on our scorecard and the ways we measure progress.

HOW WE PERFORMED

2021/22

The National and Regional scorecard targets are shown in the centre circle. The figure below is the actual performance achieved. The Achievement figure above the circle shows where actual performance sits within the target range, with on target performance at 50 per cent achievement.



Passenger safety (train accident risk reduction (TARR)): This measures achievement of the key risk reduction activities planned in the year. TARR is made up of milestone and volume targets, both of which have different achievement weightings. A higher figure represents a better performance against target.

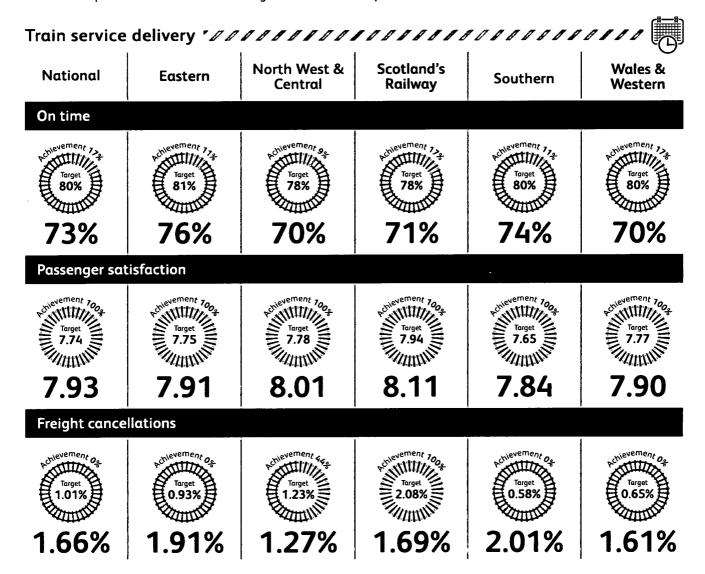
The target was to achieve 95 per cent of planned volumes and milestones. We completed 89 per cent of our planned projects to cut the risk of train accidents over the year, falling short of our target for train-borne monitoring and fleet reliability. We also missed the national milestone on the creation of standards for access points, which was deferred to next financial year.

Workforce fatalities and weighted injuries (FWI): This is a measure of workforce safety. It is an index based on how many injuries, or fatalities, our people suffer while at work. Each incident is weighted depending on the severity and the measure is calculated per million hours worked. A lower figure represents a better performance against target.

We missed our target of 0.056. While we made further improvements in the year, we also felt the tragic loss of our colleague in a road traffic accident.

Personal accountability for safety (PAFS): This is a measure of how well we are improving our culture and behaviours to help keep ourselves and our colleagues safe. The measure assesses the combined reduction in breaches in Life Saving Rules and high potential events.

We ended the year significantly behind target, mainly due to speeding offences. Half of the vehicles in our Network Rail fleet have now been fitted with speed warning systems and offences reduced in the final third of the year, helping us to achieve a 20 per cent reduction in Life Saving Rules breaches compared to 2020/21.



On Time: This measure is the percentage of recorded station stops called at early, on time, or less than one minute late.

We finished the year with 73 per cent of trains running on time. Given the busier timetable and increase in passengers, performance was below the 79.7 per cent target set to the exceptionally high levels delivered in 2020/21, but remains above pre-pandemic levels.

Passenger satisfaction: This measure is reported as a mean score of passenger journey satisfaction on a scale of 1 to 10 (1 being poor, and 10 excellent). It is based on outputs from the 'wavelength' surveys: 'Overall, how satisfied were you with this particular journey on a scale of 1-10?'.

Passenger journey satisfaction finished the year with a very strong wavelength score of 7.93 against a target of 7.74, recognising the consistently strong responses over the year.

Freight cancellations: This is the number of Network Rail and other operator caused cancellations, as a percentage of freight trains run. This measure is a subset of the regulatory Freight Delivery Metric (FDM). A lower figure represents a better performance against target.

The target was to maintain the level of freight cancellations at last year's strong performance. Increases in infrastructure failures have resulted in higher cancellations this year. This year also saw one of the worst periods in the last four years for cancellations due to severe weather, flooding and high winds. We ended the year at 1.66 per cent, worse than our overall target of 1.01 per cent.

National	Eastern	North West & Central	Scotland's Railway	Southern	Wales & Western	
Financial performance measure (FPM):						
E41m	-£71m	-£24m	-£51m	Formula Formul	Torget £0m	
Enhancement milestones					23111	
Porter Target 90%	Target 100%	Portieuement 700. Torget	Torget 50%	Torget 100%	Target 50%	
Effective volumes						
Torget 100%	113%	Turget 100%	Target 100%	96%	Torget 100%	

Financial performance measure (FPM): This measure is an assessment of Network Rail's delivery against the previous year's business plan (BP21). The measure is an aggregation of the three individual FPM measures (profit and loss, renewals and enhancements).

This year overall we did better than our plan, saving £41m on a like for like basis. Key areas where performance was better included property income, schedule 8 (network disruption payments), schedule 4 (planned network closure payments) and acceleration of management reform savings. These benefits were partially offset by higher costs in renewals, mainly due to track with some sites being more complex and asset condition being worse than expected.

Enhancement milestones: This measure is the number of milestones completed ahead of time or on time, as a percentage of all milestones planned for delivery in the year.

We achieved 19 out of 20 enhancement milestones ahead of schedule or on time, which equates to 95 per cent against a target of 90 per cent. The missed milestone related to the development of a new station on the East Coast Main Line in Scotland (Reston), which was impacted by the storm events and which opened in late May.

Effective volumes: This is a measure of how much additional life our track renewal activities add to our assets, which provides a medium-term view of sustainability. It is calculated as a weighted aggregation of renewals volumes, where the weighting distinguishes between activity types and their different impacts on asset life.

We finished the year slightly ahead of target, delivering 101 per cent of our budgeted renewals work. Additional works were delivered, particularly on track (switches and crossings) and signalling, to help deliver a safer and more reliable railway as passengers returned to travelling with us.

Sustainable growth ODDDDDDDDDDDDDDDDDDDDDDDDDDDDDD



National	Eastern	North West &	Scotland's	Southern	Wales &
Environment	al sustainability in	Central	Railway		Western
Torget 79%	Target 50%	Target 50%	Target 50%	Target 18%	Target 50%

Environmental sustainability index: This is an index representing performance against four key environmental measures: percentage of waste recycled, percentage of waste diverted from landfill, percentage reduction in carbon emissions, and percentage reduction in non-traction energy usage.

We ended the year at 79 per cent, ahead of our target of 50 per cent. We finished ahead of our target for recycling and diverting waste from landfill. We also finished ahead of target for cutting our carbon emissions. We finished behind target for non-traction energy use, partly as a result of the increased activity in our stations.

North West & Scotland's Wales & **National** Eastern Southern Central Railway Western Complaints handling باement وي evement 76. pchievement 9 TITITITI

Complaints handling: This is a measure calculated from the number of complaints, the average age of open service requests, and the turnaround time of closed service requests.

We achieved 91 per cent for handling complaints, ahead of our target of 50 per cent. We have seen a reduction in the number of complaints this year and the average age has also shifted downwards, remaining under the 28-day target every period.

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People OCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCC							
National	Eastern	North West & Central	Scotland's Railway	Southern	Wales & Western		
Employee engagement index							
Target 61%	Torget 67%	Torget 64%	Target 67%	Target 61%	Target 58%		

Employee engagement index: This is a measure representing the proportion of employees surveyed who responded favourably to key questions on engagement. It is calculated using the 'say, stay, strive' methodology, which measures if employees are speaking positively about the organisation, have a desire to be a member of the organisation and are motivated to exert extra effort that contributes to the organisation's success.

The full Your Voice survey in September 2021 indicated an engagement score of 57 per cent, down from 58 per cent in the June 2021 pulse survey. Encouragingly 54 per cent of our colleagues took part, which means over 23,000 colleagues provided valuable feedback, but we finished behind our target of 61 per cent.

Regional Performance

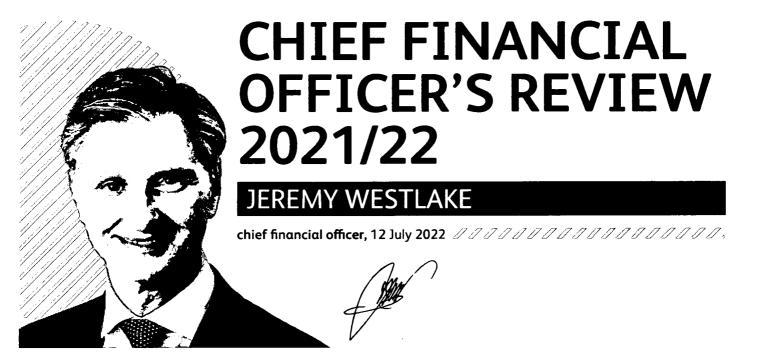
Eastern: Scorecard performance was behind target, at 46.2 per cent. We saw strong passenger satisfaction scores and good performance in the enhancement milestones measure. We also finished the year well ahead of budgeted renewals work, delivering 113 per cent of target. But safety performance was impacted by the workforce fatality in Anglia.

North West & Central: Scorecard performance was above target, at 57.2 per cent. We saw good performance across the individual customer measures, and also finished ahead of target in passenger satisfaction. Safety performance was mixed, meeting workforce safety improvement targets, but marginally missing milestones in reducing train accident risks. Enhancements were met, but we missed our effective volumes target, delivering 91 per cent of budgeted renewals work.

Scotland's Railway: Scorecard performance was behind target, at 42.6 per cent. We delivered all our safety measures, with strong levels of passenger satisfaction across the network. But our expenditure was £5m more than planned this year.

Southern: Scorecard performance was above target, at 51.8 per cent. Performance was good across customer scorecards, with strong levels of passenger satisfaction across the network. Enhancements were met and we have improved the way we handle complaints.

Wales & Western: Scorecard performance was behind target, at 50.1 per cent. Train service delivery was impacted by increased services and passenger numbers plus extreme weather events. We exceeded target for the train accident risk reduction measure, with a strong focus on removing the risks of vegetation. We had fewer safety incidents and we improved the way we handle public complaints, achieving a faster turnaround time. We also outperformed our Environmental Sustainability target, reflecting the region's ambition for a greener railway.



This financial year was the third year of Network Rail's five-year spending plan, covering the period from 1 April 2019 – 31 March 2024. This review will look back over the last year where passenger levels partially recovered to approximately 60 per cent of the pre-pandemic levels. The continued support provided to our direct customers, such as the passenger operating companies, by the Governments in Westminster and Holyrood has meant that they have been able to continue to pay amounts owed to Network Rail as they fall due. In addition, Network Rail has been able to use the risk funds available in the five-year spending plan to mitigate increased Covid-19 related costs. As a result, there has been no material change to our delivery plan and we remain on a firm financial footing.

Network Rail has taken actions to offset lower station retail income and additional Covid-19 related costs. As a result, we've made a profit this year that is broadly in line with our plans. Every penny of this profit is used to fund our railway investment programme.

We are on target to make a further £500m of savings on top of our original £3.5bn five-year efficiency programme. This year we delivered around £840m towards the combined £4bn target by productivity improvements, securing more efficient access to carry out work, and through leveraging new technologies. This means that over £1.9bn of the £4bn target has been achieved in the first three years of this Control Period. We are delivering to our plans and meeting our challenging targets.

Key financial highlights

- Revenue remained at £9.6bn. Increases in retail income from shop units at stations as we emerged from the pandemic were offset by less train performance regime income, mainly as a result of more congestion on the network, as the timetable returns to a more normal service.
- Operating costs increased from £6.4bn to £6.6bn as inflationary pressures were largely absorbed and there was an additional provision made relating to the pension valuation.
- Operating profit was £3.0bn, compared to £3.2bn in 2020/21.
- Profit before tax was £0.3bn (2020/21: £1.6bn).
 The profit is used to fund our railway investment programme. The decrease relates to increases in the value of legacy Retail Price Index (RPI)-linked bonds previously issued to fund the railway.
- Investment was £6.1bn compared with £5.9bn last year

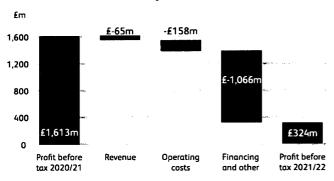
due to an increase in enhancements (£0.2bn) in line with our business plans.

 Net debt increased to £56.1bn from £54.7bn due to increases in the valuation of RPI-linked bonds.

Financial summary

This review will focus on financial performance in 2021/22. This year we made a profit before tax of £0.3bn (2020/21: £1.6bn.) The decrease was mainly due to the indexation uplift of £1.2bn when valuing the legacy RPI-linked debt. The increase in the indexation uplift is due to inflation being much higher compared with last year. Revenue was similar to last year and operating costs showed net increases, as although inflationary pressures were well-controlled there was an increase due to accounting adjustments for pensions.

Profit movements since last year



The graph above shows how profit moved from this year to last showing a £65m reduction in income, an increase in operating costs by £158 million and Financing and other costs increasing by £1,066 million. The result being profit before tax fell from £1,613 million to £324 million.

Revenue

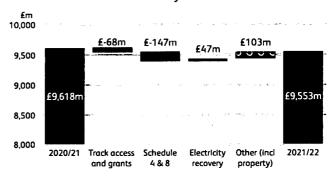
Revenue decreased in the year to £9,553m (2020/21: £9,618m), a decrease of £65m. Grants and track access charges decreased by (£68m) as we required less grant funding to meet operating and finance costs. For further details, see Grants recognition policy on page 176.

Schedule 4 and 8 performance and access regime income decreased in the year by £147m. Train performance declined largely as a result of increased traffic as the timetable returned to more normal levels, and weather events.

Our other income increased by £103m as a result of the partial recovery in retail income from shopping units at

stations as we emerge from the pandemic. Network Rail passes through the electricity costs for the railway network, and this amounted to an additional £47m this year.

Revenue movements since last year



The graph above shows how revenue changed year-on-year. This shows a fall in Track Access and Grant income of £68m, a fall in Schedule 4 and 8 incomes of £147m and increase in electricity recovery of £47m and an increase on other income (including property) of £103m. As a result, revenue declined from £9,618m last year to £9,553m this year.

Operating costs

Net operating costs this year were £6,594m. This increased by £158m from last year's expenditure of £6,436m, net of efficiencies. The year-on-year movement was driven by increases in electricity costs as a result of inflationary pressures, at £50m; and increases in pension accruals because of the impact of changes in financial assumptions (including inflation) on the amount required to meet future pension obligations, at £113m.

Employee costs

Staff costs increased by £173m, largely due to increased pension costs of £113m and because of a release of previously reported performance-related pay provision in the comparative year at £78m. Although headcount at the end of the year was 1,817 lower than at the start of the year, average employee numbers fell only slightly to 44,255 from 44,356. This was because most of the leavers left the business in the latter part of the financial year.

Tax

We have significant brought forward tax losses, not recognised as a tax asset in the accounts. As we continue to invest heavily in the railway network, we therefore pay relatively small amounts of corporation tax. The change in corporation tax rates, to 25 per cent from 19 per cent (effective from April 2023) increased the amount set aside for future tax payments, the deferred tax provision, by around £2bn.

The tax expense of £925m comprises corporation tax at £10m and deferred tax at £915m (2020/21: £277m). The deferred tax liability now stands at £5,121m (2020/21: £3,350m).

Financing costs

Finance costs for the year were £2,844m. This is higher than last year's charge of £1,741m, largely because of the impact of much higher inflation, increasing the value of RPI-linked bonds and higher prevailing interest rates.

Investment

This year we delivered £6.1bn of railway investment (2020/21: £5.9bn). Enhancements that will increase the capacity of the network have amounted to £2.2bn (2020/21 £2bn). This included £1.6bn of DfT-funded schemes, £0.2bn funded by Transport Scotland and £0.4bn of other grant-funded projects. Major schemes included TransPennine improvements, East West Rail, HS2-related projects, East Coast Main Line improvements and in Scotland, improvements relating to the Inverness to Aberdeen and Edinburgh to Glasgow lines.

All of these schemes will improve connectivity, reduce Great Britain's carbon footprint and drive economic development. For example the TransPennine Route Upgrade will improve journey times, enhance the reliability of this busy part of the network and enable a reduction in greenhouse gas emissions in the region.

We have also invested £3.9bn (2020/21: £3.9bn) on renewals this year. This included £1.1bn of track renewals, which delivered nearly 1,200km of new track and replaced almost 900 switches and crossings. In addition, £0.8bn was spent on signalling renewals, £0.8bn on structures, including around 81,000 square meters of bridges, £0.3bn on electrification assets, £0.3bn on buildings and property including improving stations for passengers, and £0.6bn on other renewals including telecoms, IT, plant and equipment, drainage, intelligent infrastructure and faster electrical isolation equipment. In the year, we delivered 104 per cent of our seven key renewal volumes (2020/21: 112 per cent).

Financial performance measures and efficiency

Financial performance measures and Efficiency are two methods of measuring how Network Rail has delivered better value for money for our customers and funders. Our key performance indicator, the financial performance

measure (FPM), measures our performance against the regulatory determination and our in-year targets. This means our baselines for FPM already include the targeted efficiency savings for the Control Period. Meanwhile Efficiency, as required to meet the £3.5bn plus £500m target, is measured against the like-for-like costs at the end of the previous Control Period.

Efficiency reporting is focussed on the day-to-day costs of running the railway (opex, maintenance and renewals) while the financial performance measure assessment also includes turnover and enhancements. We're constantly working to reduce the cost of the work that we deliver.

We continue to make good progress in our commercial efficiencies, productivity and securing more efficient access to carry out work, and through leveraging new technologies. Overall, FPM finished £41m ahead of our original plan (2020/21: £163m behind targets). This result (£41m) was the net position as we outperformed the profit and loss target by £172m, and enhancements by £22m offset by an underperformance in renewals by £153m.

Profit and loss FPM was ahead of target due to lower train delay costs as a result of fewer train services and accelerated workforce reform savings, partially offset by reduced retail and variable track access income. The additional costs and lost income were primarily as a result of the pace of rail recovery.

Renewals' underperformance of £153m on expenditure of £3.9bn was mainly due to some sites being more complex than expected and requiring additional resources to deliver works. This was at a time when many other national infrastructure works had been put on hold entirely.

The outperformance in enhancements (£22m) is due to a number of initiatives using better contracting strategies, including early contractor involvement as well as early scope definition.

Looking at our five-year efficiency programme for operations, maintenance and renewals (OMR), we built on the first two years, further savings of £840m, slightly ahead of our target in the third year of the Control Period, adding to over £1.1bn achieved by the start of this financial year. So, it has now cost more than £1.9bn less, on a like-for-like basis, to run the railway in this Control Period than the prevailing cost base in 2018/19. Key elements of this programme are commercial savings, early supplier engagement benefits, improved access, industry reform, and productivity related gains from new technologies.

To deliver better value for rail users and tax payers the Plan for Rail reforms has targeted reducing annual running costs by £1.5bn by 2026/27. Network Rail will achieve its part by its current efficiency programmes and by working with organisations across the industry.

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 uses an income approach. The basis of this valuation is set out in note 12 to the accounts and comes from an assessment of the cash flows that are forecast to arise from the asset.

Cash flows arise from the asset as it amortises. 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. Amortisation is used by ORR to calculate the regulatory income requirement and our charges to customers or grants from governments.

The impact on the RAB of index inflation at £3.7bn, partially offset by the rate at which the RAB amortises faster than depreciation, resulted in the valuation of the railway network increasing by £1,844m (2020/21: decrease £1,812m). After considering the changes in valuation, depreciation, additions and disposals, the year-end valuation of the railway network was £75,890m (2020/21: £71,998m).

An alternative valuation method for the railway network, depreciated replacement cost (DRC), is used in DfT Group accounts. Applying a DRC valuation to the railway network results in a higher carrying value than Network Rail's income-based valuation, as it reflects the replacement cost for the entire network.

This includes significant elements funded before the RAB was introduced, such as earthworks, long-life structures, and operational land. Together, they comprise much of the value for DRC purposes and are essential to the operation of the railway network.

This cost-based approach therefore measures the significant economic benefits of the entire network to Great Britain, which exceed the monetary returns receivable by the holder of the railway network licence. The DRC approach is used in Network Rail's accounts solely to derive

the weighted average asset life of the railway network. The weighted average asset life is used to calculate the depreciation charge.

Borrowing

Since becoming a public sector body in September 2014, Network Rail has borrowed directly from Government and no longer issues debt on the capital markets. Investments are funded by grant and from cash generated from operations, and fresh borrowing is used only for refinancing maturing loans. The regulatory settlement for CP6 provides strong security for future income and the DfT loan agreement provides a robust loan refinancing platform. During the year ended 31 March 2022, we borrowed £7.9bn using the DfT loan facility to refinance maturing borrowing with DfT (£7.6bn) and commercial bonds (£0.3bn). RPIlinked bonds increased in line with the RPI index. As a result, net debt rose from £54.7bn to £56.1bn.

Financing arrangements

We do not expect to undertake any new net borrowing during 2019-2024. Instead, our activities are largely funded by grants from DfT, Transport Scotland, and revenue from customers. We have a loan facility with DfT for £31.9bn, which will be used to refinance maturing government and external debt in the period 2019-2024. The 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 was in June 2020). The cash required to pay the interest due on borrowings (to DfT or to bondholders) is provided to Network Rail Infrastructure Limited (NRIL) through the financing costs grants.

Grant agreements with Department for Transport (DfT) and Transport Scotland (TS)

Eight separate grants are in place between Network Rail and DfT/TS. 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

We manage our interest and foreign exchange risk by using derivative financial instruments (hedges). All these arrangements were entered into prior to us becoming an arm's length public body and will reduce over time as our external debt is retired.

We measure our 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 don't intend to trade these hedges but use them to minimise our financial risks.

If the hedges are economically effective (i.e. 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 our 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 £157m (2020/21: £176m). This gain largely represents the reduction of the fair value of interest rate derivatives liabilities as swaps mature.

Pensions

Network Rail is party to two 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. Our accounting deficit as at 31 March 2022 decreased to £2,259m (2020/21: £2,899m) as changes in financial assumptions were augmented by gains on assets. On a funding basis, the schemes have seen the value of their assets increase in the year and they are still fully funded, meaning that the value of pensions assets is expected to grow to meet pension obligations as they fall due. Both Network Rail and members continue to contribute to the schemes.

Post balance sheet events

Since the year-end there have been a series of strikes by our employees. This has not materially affected our financial position.

Summary

The world has changed significantly in the past couple of years and we must adapt too.

Our recent experience in the pandemic has shown that when the rail industry works together as one, then challenges can be overcome effectively. For example, through the swift implementation of new timetables as the country and its railway recover from the impact of the pandemic and we provide more rail services.

Against this backdrop we delivered a satisfactory outcome on our key financial targets. We also stayed on course to meet both our £3.5bn efficiency challenge for the 2019-24 Control Period and the extra £500m of further savings targeted last year.

The next year will require the business to continue delivering our plans to build back better. Increases in the cost of energy, commodities and services will impact our business, our staff and customers alike. Against this backdrop we must maintain our focus on cost efficiency while setting in motion the steps required to transform the rail industry to deliver better value for its customers.

Gross wages and salaries are a large proportion of our expenditure and in the last year levels of pay did not increase, despite inflationary pressures. This is an area we would like to address and we know, with the cost-of-living crisis, how important a pay increase is to our people. But any increase needs to be one that taxpayers and rail users can afford, and a satisfactory outcome to pay negotiations is important if we are to continue to deliver the rail recovery and our strategic objectives.

Looking beyond the pandemic recovery period, rail will be an increasingly important part of our national infrastructure. Of course, patterns of travel and rail usage will have changed, such as the reduced morning and evening peak-time commuter traffic. The rail industry will need to respond to these changes and make the railway more affordable for taxpayers and rail users alike.

However, what has not changed is that rail has so much to offer our country – it is clean, green, safe, convenient and a vital driver of economic growth.

The rail industry and we as a company are committed to providing the infrastructure for building a greener and lower carbon society, which delivers a better, more reliable and cost-effective railway that continues to put passengers and freight users at the heart of everything we do.

NETWORK RAIL REGIONS AND ROUTES

- (Eastern
- (1) Anglia Route
- (2) East Coast Route
- (3) East Midlands Route
- 4 North & East Route
- North West & Central
- (5) Central Route
- 6 North West Route
- (7) West Coast South Route
- Scotland's Railway
- (8) Scotland Route
- Southern
- (9) Kent Route
- (10) Managed Stations
- (11) Network Rail High Speed
- (12) Sussex Route
- (13) Wessex Route
- Wales & Western
- (14) Wales & Borders Route
- (15) Western Route







Eastern spans approximately one third of the network, covering a broad stretch of England from the Essex coast to the Scottish border and serving the key conurbations of London, Leeds, York, Newcastle, Cambridge, Derby, Leicester, Nottingham, Norwich and Sheffield. The Region is a diverse mix of commuter routes serving these cities as well as long-distance high-speed services on the East Coast Mainline. It is also the backbone of the UK freight rail network, connecting UK cities to major ports at Felixstowe, Immingham, Harwich, Tilbury and London Gateway.

Safety

Workforce safety

In January 2022, we suffered the tragic loss of Michael Smith, a colleague who died in a road traffic accident in Ipswich. Due to police investigations, we don't have further details on the cause but we will be relentless in understanding and applying any learning once we have full visibility. The level of Life Saving Rules breaches this year is dominated by speeding incidents and is still too high. The implementation of vehicle telematics will transform this measure. The removal of the additional hire vehicles used to manage Covid-19 infection risk has commenced and will further contribute to improved performance in this area.

Our Lost Time Injury Frequency Rate (LTIFR) stands at 0.212 and is the lowest in our history but our Fatality Weighted Injuries (FWI) ended the year at 0.096, which is at its worst. We're seeing too many near misses in areas such as electrical and track safety. The largest impact on performance is still slips and trips and we continue to work on ways to reduce this through improved access, walkways, lighting and better fitting boots. We've seen some significant successes this year, notably our regional campaign, aligned to the Track Worker Safety Task Force, to eliminate the practice of working on the track while relying solely on a person to spot and warn of an approaching train.

We continue to deliver on our promise to look after the health and wellbeing of our people. Our targets for attendance at our employee medicals (to assess the key health risk areas) have been met. However, we want to exceed that target and address the number of missed appointments throughout the year, which can and will be improved upon. Proactively, we've focussed a number of safety weeks on educating frontline teams on good manual handling, as well as embracing more technology and planning of work to remove the need to manually handle. As a result we have reduced the number of manual handling incidents by 12.5 per cent from a peak of 0.06 in Quarter 1 2021/22. We have not delivered our aim to have 30 per cent of our team trained in mental health first aid, achieving only 28 per cent in the past year. Mental health remains one of our largest reasons for absence and the frequency and length of absence reflect national upward trends. We also have two worsening cases of Hand Arm Vibration Syndrome (HAVS), which we're managing.

We have reshaped our approach to safety in the last year. Local plans have been in place since September and are

driving local ownership. We've also focussed on developing our capability and creating a culture that makes it inevitable that everyone goes home safe, every day. All routes and delivery functions now have a Risk Management Maturity Model (RM3) (there is more information on RM3 on pages 89 to 90) based capability assessment and will have programmes of work in place in 2022 to strengthen and build on areas such as leadership, collaborative working and learning. This year we progressed well with improvements in our risk assessment and accident investigation capability.

Passenger safety

We've delivered 92 per cent in our Train Accident Risk Reduction this year, however we're experiencing greater instances of higher potential incidents at present. There's no specific trend, and our focus is on creating a better understanding of how we work with our railway partners to manage the risk they share with us. We have a plan to proactively respond to the recommendations emerging from the Carmont tragedy and subsequent investigation. A key aspect of this is a step change in our activities and resources to support greater levels of drainage inspection and maintenance across our region and ensure effective exchange of information between key parties.

Level crossing risk remains at an all-time low, but the reduction is plateauing, and the effort required to improve will mean that further gains will be harder to come by. In the year we successfully resolved a significant risk presented by the introduction of the Class 80x fleet, which uses horns that while meeting the standard do not operate as designed, creating risk at some level crossings.

Train service delivery

Eastern Region has focussed throughout 2021/22 on maintaining the strong levels of train service performance observed during periods of reduced service operation linked to Covid-19, with challenging performance targets established in support of achieving this. Across Eastern Region, an 'On Time' performance level of 75.6 per cent was achieved, which was below the target of 81.1 per cent. However, within that, operators such as c2c, Greater Anglia, LNER and TransPennine Express performed well against individual operator targets. Anglia Route has delivered the highest level of 'On Time' performance across all of Network Rail's routes, achieving 82.7 per cent. Freight performance has not achieved the challenging targets established for the year, with equivalent metrics ending at 93.3 per cent which is 1.8 per cent below target.

Throughout 2021/22 train service levels needed to respond to increases in demand at different rates across each of the Eastern Region's routes, as leisure travel in particular recovered more quickly than business and commuting travel. Changes to train service levels have also been influenced by the impact of Covid-19 on train crew availability and more latterly industrial relations issues, with operators such as Northern, TransPennine Express and Govia Thameslink Railway implementing revised timetables to align with resource availability. The introduction of the May 2021 timetable saw performance degradation in the East Midlands, with East Midlands Railway subsequently making alterations to train services in support of improving punctuality.

Network Rail's performance in the Eastern Region has seen the trend in delay incidents and associated delay minutes slowly rise through the year, though remaining below pre-pandemic levels, largely linked to the increase in train service levels. The direct impact of the Region's own railway asset reliability on train service performance has remained consistently good through the last 12 months. This asset performance has contributed significantly to an overall reduction in delay incidents versus target as seen in national level performance statistics. The Region has observed an increase in external incidents (e.g. trespassing, vandalism and cable theft), especially in the North following the easing of lockdown restrictions. This is the single largest delay cause across both North & East and East Coast routes in 2021/22. We're committed to working across the Region and with partners and stakeholders to reduce such incidents.

The impact of more frequent extreme weather continued to be a focus for the Region, with several named storms generating significant impacts on performance associated with wind and flooding, a trend continuing from 2020/21. We continue to implement actions associated with our environment and sustainability strategy, to produce new drainage, earthworks management and flood prevention schemes across our region. Reducing the impact of seasonality on train service performance remains a focus for the Region, with both East Midlands and North & East seeing an increase in delays associated with the Autumn period despite an increase in railhead treatment volumes.

This year saw the introduction of Lumo services on the East Coast Main Line and the May 2021 timetable introduced more services on the Midland Main Line. We continue to work in support of timetable change opportunities in the near future, such as the introduction of a new timetable on the East Coast Main Line to help

improve journey times and train service levels, and the full introduction of Crossrail services.

Financial performance and efficiencies

Eastern region has committed to £1bn of efficiencies across our Operating, Maintenance and Renewals funding (OM&R) through Control Period 6 by adopting new technology, ways of working, optimising access strategies and modernisation, among other initiatives. The region has exceeded the planned efficiency trajectory for 2021/22 target by £19m, in delivering £251m of efficiencies this year (against a 2018/19 baseline). A key area of focus has been building confidence in our future efficiency plans with stakeholders, including our regulator, the Office for Rail and Road (ORR).

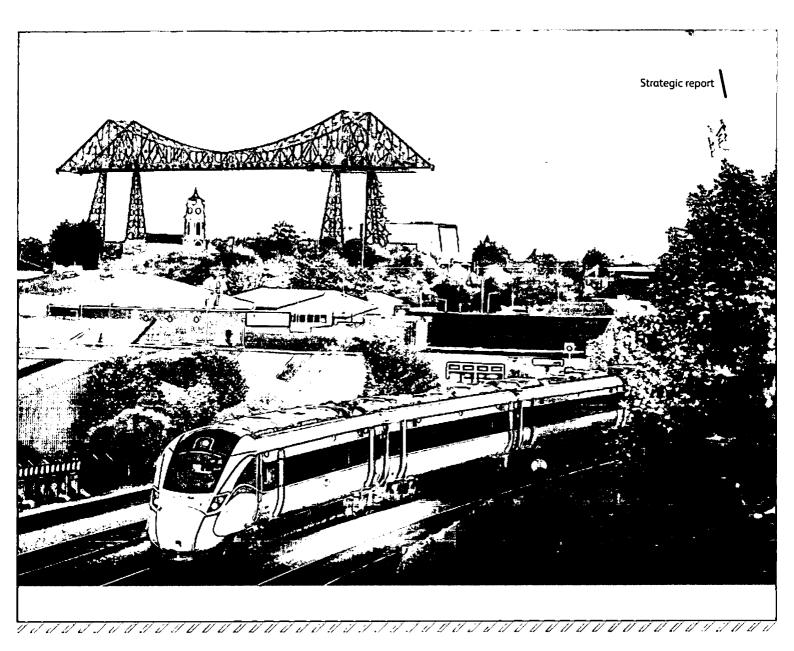
We've also made progress against our Enhancements efficiencies programme which delivered £362m in 2021/22 and is now planning to achieve £1.3bn of efficiencies across Control Period 6. One key enabler of this is Project SPEED (Swift, Pragmatic and Efficient Enhancement Delivery) which seeks to apply lean principles to cut the cost and duration of projects.

This year we've invested £2.5bn to operate, maintain, renew and enhance our network, which was £198m (7 per cent) less than the original annual budget. This was in the main due to enhancements where Project SPEED efficiencies have been realised, contributing to reduced spend as well as portfolio spend phasing changes aligned to client requirements, government spending reviews or in some cases programme slippages.

Eastern delivered 113 per cent of the renewals key volumes annual budget, with outperformance achieved across Signalling and Track Switches and Crossings (S&C) standing at 140 per cent and 136 per cent respectively.

Our most notable key volume metric failing to hit target was in Overhead Line Equipment renewals, in which we only achieved 56 per cent of target levels in the year.

Our focus for the year ahead will be on improving productivity and working with the wider industry to develop cross industry efficiencies. We will play our part in delivering the £1.5bn per annum of savings that the Plan for Rail reforms aim to deliver by 2026/27, in parallel with achieving our Control Period 6 Operations Maintenance and Renewals £1bn efficiencies programme.



Sustainable growth

Over the past year we've continued delivering significant enhancements, with a number of major interventions providing a better network for our customers. The upgrade of the East Coast Main Line has unlocked additional capacity and more reliable journeys. It's improved a major economic artery linking millions of people in London, the East, the Midlands, the North and Scotland.

Our teams delivered industry leading work at King's Cross and Werrington, recognised with industry awards: the Rail Team of the Year for Network Rail and industry partners for King's Cross remodelling, and the Infrastructure Project Excellence Award for the Werrington Underpass portal push, which was a UK engineering first.

Investment to improve capacity at Leeds station with a new platform and remodelled track has also been undertaken. We have completed the construction of Middlesbrough

Platform 2 extension, enabling the launch of LNER services to London.

We've successfully opened a new station in Soham five months ahead of schedule, which will improve wider connectivity to the local community. Further works continued in Crossrail, with completion in Anglia expected in 2022. Finally, we've completed the electrification of the Midland Main Line between Bedford and Corby and have commenced the next phase progressing north towards Market Harborough.

The TransPennine Route Upgrade Programme (TRU) remains a key investment priority, and the largest programme in Network Rail's portfolio. The publication of the Integrated Rail Plan (IRP) in November confirmed the government's ambitions for the programme. The programme will deliver journey time reductions, capacity improvements and the electrification of lines between Manchester, Leeds and York.



Our business development continues to grow. We've attracted £144m of new third-party investment this year, which takes our total to over £500m in the last three years.

Customers and communities

We've made significant improvements during the last financial year to the service we provide to our neighbours. Our devolved structure now means we are closer than ever to our important regional stakeholders and communities. As such, we're now handling service requests much faster – even on complex cases – and customers are updated throughout the process.

At the end of 2020/21 we had almost 700 active service requests, which was too high. By the end of 2021/22 we'd reduced this to fewer than 300. As our caseload has fallen, escalated complaints have reduced as have turnaround times. We're committed to focusing on improving our reputation and relationships with our wider stakeholder audiences – being a good neighbour is very important to us.

Across the region we've engaged with political stakeholders, with over 250 meetings, over 400 proactive updates about our work, and more than 450 written enquiries answered. This work has seen our reputation for good engagement increase by 11 per cent in our latest Member of Parliament polling.

We've collaborated with our operators to improve the passenger experience across the region and to welcome them back to the network. Together we've improved accessibility, installed new CCTV cameras, removed litter, and installed new cycle hubs and waiting shelters.

WiFi has been rolled out across all our managed stations. So free access is now available across the Eastern Region at Liverpool Street, King's Cross and Leeds stations.

And as part of the wider industry recovery campaign to encourage a return to rail travel post-pandemic, we held #wherecanwegotoday events at King's Cross and Leeds stations. The events brought together 14 organisations, spanning many train operating companies, Community Rail and Network Rail colleagues.

People

Our people strategy is focussed on attracting, developing and retaining the best people and is delivered through four pillars: leadership capability, talent and succession, strategic workforce planning and industrial relations. Our September 2021 employee engagement score was 56 per cent, and we have plans to address the feedback.

Our inclusion of under-represented groups has improved. We've seen a continuation of the increasing trend in the proportion of female employees (14.7 per cent) and those from black Asian and minority ethnic groups (7.25 per cent). Our leadership diversity is also improving year-on-year, with greater proportions of management positions filled by women and black, Asian and minority ethic employees.

Having the right number of people, with the right skills when we need them remains a key priority. Our approach to strategic workforce planning is focussed on addressing demographic, technological and skills changes.

We're committed to achieving the public sector apprenticeship target, which means that 2.3 per cent of our employees will commence a new apprenticeship within the financial year.

Our leadership challenge is to develop and empower our leaders, giving them the right tools, skills and behaviours to do the right thing for their teams. We have a leadership development framework, which is accessible and can be tailored. This includes the Eastern led 'LEAD' programme targeted at new line managers and supervisors.

Our talent and succession strategy aligns individual development and high potential people to business requirements and builds succession plans for our critical and key roles.

We have achieved Good Business Charter accreditation for being a responsible employer and business. This demonstrates a commitment to employee wellbeing, employee representation and customers.

Some things we're proud of

Our largest success this year concerns our workforce safety and is associated with the near elimination of working on the track while relying only on a person to spot and warn of an approaching train i.e. without line blockage and/or other technology to assist. There's a level of risk reduction associated with that change that means our workforce is up to 200 times safer now than they were working with a lookout only. To further protect our people, we're also implementing additional safety measures and technologies that reduce the risk created by signaller errors.

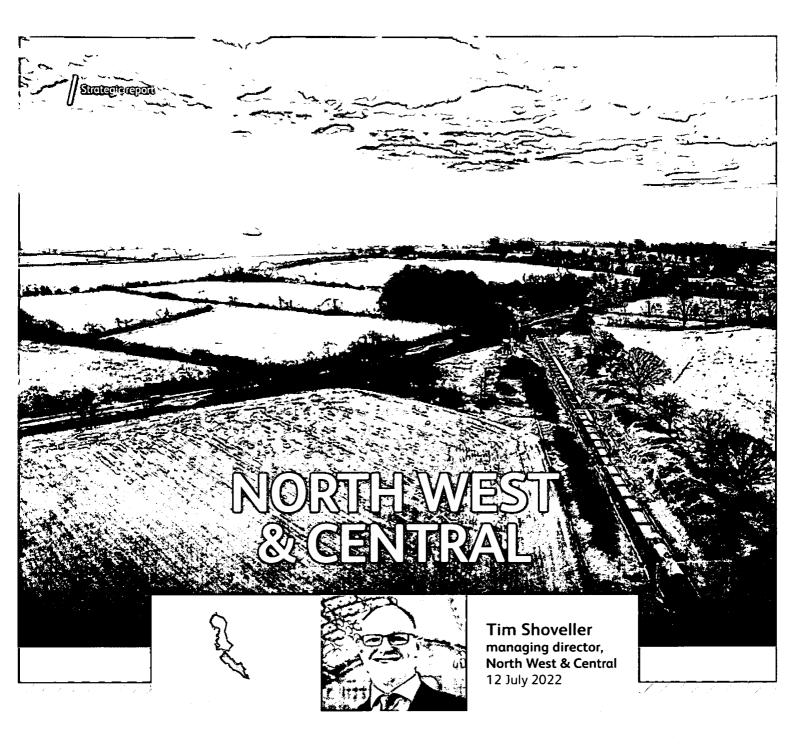
Some things we want to improve

Safety has always been our priority. In the coming year we plan to focus on our safety culture in the region. We must address trends in our statistics like our Fatality Weighted Index (FWI) and Lifesaving Rules breaches and we will continue to drive relentlessly so that it becomes inevitable that our people go home safe, every day.

As the Civil Examination Framework Agreement (CEFA) contract came to a commercial close in 2020/21, the retendering of the examination services was awarded under the new Eastern Region Examination Contracts (EREC) (Structures). 2021/22 was a challenging mobilisation year as we transitioned the significant annual work bank to the new suppliers while addressing legacy issues associated with resourcing succession planning and backlog noncompliance. The new delivery strategy will sustainably improve our non-compliance position of Civil examinations across the region within CP6.

Plans for the year ahead

We will continue playing our part in helping the country recover from the pandemic and do our utmost to encourage passengers back to the railway now restrictions are fully lifted. We have also committed to work even closer with our operators to make joined up industry decisions for our passengers, freight users and taxpayers and drive to achieve our part of the £1.5bn industry cost savings. Our focus on productivity and efficiency will be key as we look to reform working practices and play a principal role in the industry and nation's economic recovery.



North West & Central (NW&C) is the 'Backbone of Britain' – the economic spine linking London, Birmingham, Liverpool and Manchester. We run the West Coast Mainline, one of Europe's busiest mixed-use railways. We connect workers with jobs, goods to market and people to their loved ones. Every week we move food, consumer goods, building materials and fuel around the country. We serve long-distance business travellers, commuters and visitors to world-beating destinations, all delivered through the lens of our service equation:



Safety

Health and safety performance across the region has been varied over the past year. However, we have ended the year with significant improvements in the reduction of the severity of our accidents and incidents. Our Train Accident Risk Reduction (TARR) measures have been delivered by increasing the volumes of drainage and vegetation management being carried out. We also achieved a 50 per cent reduction in the number of infrastructure failures that result in an unsafe state, all of which leads to improved passenger and public safety. We have improved the collaboration and alignment of our strategic plans for drainage and earthworks developed as a response to the Lord Robert Mair Review following the tragic events at Carmont. Implementation of our plans is being progressed through our Regional Slope Review panel.

Our workforce Fatality Weighted Index (FWI) has nearly halved from 0.096 to 0.057 over the last 12 months. meeting our ambitious target, and our Lost Time Injury Frequency Rate (LTIFR) has increased from 0.321 to 0.330. Workforce health and safety improvements over the last year have been driven by a range of initiatives that include reducing the number of hours our workers spend working on lines that are open to train movements, reducing unassisted lookout hours from 23.1 per cent at the start of March 2020 to 1.05 per cent at the end of March 2022, and implementing several technological improvements for protection and warning teams.

We are starting to implement processes to take isolations of the electrified overhead line network remotely, using motorised switches to reduce manual activities on track and the associated time taken. This will improve both safety and productivity as the process is rolled out across our network. We have installed a new In-Cab Safety System to reduce occupational road risk, a significant contributing factor to our Personal Accountability for Safety measure. We have also improved boot fitting, lighting and work access points to reduce slips, trips and falls, which are our largest cause of workforce injury contributing to a third of all accidents.

We launched our All Aboard roadshows across North West & Central with 3000 colleagues attending so far, with more events planned for the future. All Aboard is an opportunity for colleagues to come together to reflect on the themes of safety, modernisation and diversity and inclusion. It's a chance for us to consider what we're doing well, and where we need to make improvements to promote a safe and transparent 'speak up' culture. This approach complements ongoing programmes of engagement to encourage colleagues to discuss safety more openly, alongside a focus on mental health campaigns to de-stigmatise and increase education around mental health.

In summary, our health and safety performance has been varied over the past twelve months, but we are confident and optimistic about the future. We recognise and understand our risks and gaps in compliance and have plans in place or under development to make improvements. The recent organisation change merging our Health Safety and Environment (HSE) team into our Directorate of Engineering and Asset Management has created opportunities for the new Safety and Engineering Directorate to concentrate on improvements that positively 'move the dial' within HSE and inform a systemwide approach.

Train service delivery

We know that what passengers care most about is having a reliable journey. Train service delivery is linked to our management of the railway infrastructure and other key factors, including extreme weather events, the timetable and passenger numbers. We measure our performance through a metric called On Time. On Time performance this year was around 9 per cent higher than pre-pandemic levels based on integrating lessons learned throughout Covid-19 and continuing to deliver and embed improvement programmes. While marginally below last year's achievement, this was expected because we have seen a region-wide increase in passengers returning postpandemic and a consequent increase in train services running, requiring an enhanced response from our own operational and maintenance delivery teams as well as from our train operator partners.

Autumn and winter storms left a trail of debris and power disruption across all three routes – West Coast South, Central and North West – causing line blockages and disruption to many thousands of passengers. Our responses have been quick and robust, with teams deployed across the region at pace. As a result, we have been able to return the railway to a near-normal service across most of our routes within a short timeframe.

We activated Project Alpha in November 2019 to address declining train performance at the beginning of CP6, focusing on improving asset reliability, removing longstanding timetable frailties, and mitigating external causes of disruption such as trespass, vandalism, and extreme weather. Project Alpha has delivered positive results and continues to improve train performance for passengers.

In November 2021, the ORR published its final assessment of progress against its 2020 investigation into poor levels of regional performance. It concluded that we had substantially addressed all 25 recommendations and fulfilled the intended outcomes of the investigation.

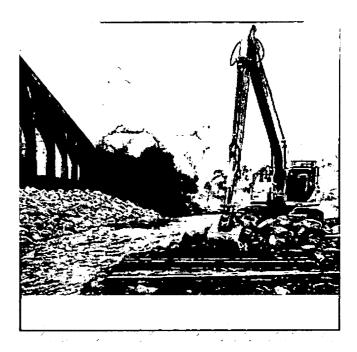
The planned May 2022 and December 2022 timetable changes will see some operators returning to near prepandemic levels of service. Despite the performance risk from increasing train and passenger numbers, our target is to sustain current levels of performance.

Overall, passengers' satisfaction with their journeys has increased over the year. Satisfaction with most customer journey stages has seen a consistent increase over the course of the year and we have exceeded our target in this area. This has been achieved through close working with our industry partners to improve passenger experience, including wayfinding improvements at Birmingham New Street and improved passenger information screens at London Euston.

Freight performance has declined in 2021/22 following a high in the previous year. This downturn has been driven by increased traffic on the network, driving up overall delay, alongside the impact of severe weather events. The improvements we implemented to the timetable in December 2021 contribute to an improving forecast for freight performance next year.

Efficiencies

Being responsible for taxpayers' money, we must demonstrate that we run an efficient operation, delivering value for money. We are doing a really good job at this, after outperforming against our efficiency targets last year, our targets for this financial year became tougher but we outperformed these targets again, with further cross industry efficiency initiatives being generated through our Regional Efficiency Boards, working in partnership with train operators. A recent example of this collaboration occurred when the Department for Transport (DfT) asked for our support to help find the Driver & Vehicle Licensing Agency (DVLA) a new office within Birmingham. Due to the changing work patterns common across the country, we were able to offer the use of the fourth floor in our central



Birmingham office to the DVLA, saving us around £1m per year while still providing enough capacity for our workforce.

We have added further investment into the railway through our renewals plans, which have grown by £163 million during the year, as further funding is devolved from our Risk fund alongside revenue outperformance. Additional volumes include £20 million for Signalling Power Distribution cables for Acton Grange and Carnforth to Gretna. The remaining works include the continuation of OLE resilience, signalling at Kingsmoor and a split across remaining assets largely within Track and Earthworks.

Covid provided opportunities to deliver major renewals more effectively, benefiting from reduced traffic. Examples include our track and drainage renewals approach at Kilsby tunnel, on the West Coast Main Line in Northamptonshire, in January 2022, delivering further flood resilience work more efficiently to this crucial part of the network. Our post covid revenue recovery continued to make positive strides forwards as we closed the year at 75 per cent of pre-covid levels in the final week of March.

In collaboration with the East West Rail Alliance, we're restoring the Oxford to Cambridge line by removing and replacing the flyover between Bicester and Bletchley on the West Coast Mainline. Using new, modern methods we built a protective 'box structure' which meant we didn't need to close the line below the flyover and we delivered the project ahead of cost and time.

Sustainable growth

Enhancement and investment projects will transform the railway for the future, and we have completed all project milestones early or on time. A key success was the completion of Trafford Park re-signalling over the August bank holiday in 2021 to improve reliability and safety on this economically vital route into Manchester.

We secured additional funding this year to deliver improvements to the railway to further enhance passenger experience. This includes electrification of the line between Wigan and Bolton to improve passenger journey quality with longer electric trains, and platform lengthening across 21 stations in the Greater Manchester and Leeds areas to support new trains being brought into service with additional passenger capacity.

As highlighted above, the storms Dudley, Eunice and Franklin caused widespread disruption on our region. A key priority for us is to enhance our extreme weather forecasting capability and to improve how we manage our drainage infrastructure, as more extreme weather events become increasingly frequent.

We have performed strongly in managing waste, largely through scrutiny of and challenge to our supply chain, which generates the largest amount of waste through construction projects.

We had a unique opportunity to position rail as a green, carbon-friendly alternative during the COP26, the United Nations Climate Change Conference held in Glasgow. With global dignitaries travelling from France to Scotland on trains on our network, we successfully delivered an extensive media campaign to both our staff and our passengers, highlighting the importance of rail as a clean, green mode of transport for passengers and freight.

Customers and communities

Living and working next to our railway can be difficult at times, and we try always to be a considerate and understanding neighbour. Through our customer and communications team, we provide accessible information and a single point of contact for complaints.

During the pandemic we received complaints about noise from people working at home and safety concerns on trains and at stations. Despite these challenges we continued to

hit our targets, providing customers with a quality service even in difficult circumstances.

We actively work with our train operator colleagues to effectively engage with our shared stakeholders. This includes the continuation of our Rail Industry Board, our Senior Freight Engagement Forum, parliamentary drop-in sessions, and a number of future planning and listening round tables. This is complemented by ongoing engagement with stakeholders on issues that matter to them and us – including progress to align regional and our customers' business plans so that we have shared goals.

We are committed to improving passenger accessibility and investing in Assisted Travel Lounges, disability awareness training, and technology to provide smarter information. We're enhancing our stations by widening walkways, widening platforms at London Euston, reducing ramp gradients and installing tactile paving, alongside the Access for All programme.

Our charitable programme for Control Period 6 is Routes out of Homelessness. We undertook, with charitable partner Shelter, one year of outreach services to support people at risk of rough sleeping around Birmingham New Street and Manchester Piccadilly stations. We supported 132 people to move off the streets and into temporary accommodation, and 13 people secured permanent accommodation. We have extended the service into a second year and have collated used lessons learned and are sharing these to share around our business and with rail industry partners. If accommodation benefits are maintained over the next 12 months, the pilot will have delivered a social value of around £1.5 million, representing a 264 per cent social return on investment.

People

A people-focussed business, our ambition is for North West & Central to work together as one team where everyone plays their part. In the aftermath of the pandemic our engagement score tells us that there's some way to go to improve how colleagues feel about working here. In September 2021 colleague engagement was 58 per cent, a decrease of 2 per cent from 2019. Colleagues said that we don't manage change well and that we need to do more to explain our business strategy and plans, as well as what. modernisation means and why it's vital.

We responded by starting the roll-out of our All Aboard colleague roadshow in September 2021. The roadshow brings colleagues together to discuss safety, cultural inclusion and modernisation with senior leaders. It's a chance for us to provide clarity about our cultural and business challenges, to reflect on what we're doing well or what needs to be better, and to hear first-hand how colleagues are feeling.

As modernisation has gained pace, we have adapted our approach to colleague communication, focusing on face-to-face - both in person and via technology - to enable two-way conversations and to 'pulse check' the hot topics that our colleagues want to know more about.

We also recognised the need to upskill our leaders to manage the challenges ahead. Engagement scores about the perception of senior leadership had decreased by 13 per cent since our 2019 Your Voice survey. Close to 60 per cent of our workforce negatively responded to questions assessing the perception of senior leadership in our region.

Partnering with an external organisation, we put in place a development programme for our executive team, who have been working to rebuild and redefine what leadership means for North West & Central. This has included clarifying how we share key priorities with colleagues and our 'must do' principles to underpin decision making.

This programme of leadership development will cascade throughout the organisation in the months to come, upskilling people leaders to engage their teams with the change ahead.

Crucial to our success is having the right people in the right roles. We have made improvements to our recruitment processes to create a level playing field and overcome gender, race and other bias that may impact recruitment decisions. The success rate of women and applicants from ethnic minority backgrounds has improved over the year as we improve our processes and continue to train our managers.

In 2021 our Director of Engineering and Asset Management assumed the role of our equality and diversity Executive Champion, demonstrating our commitment to realising the ambitions of our regional inclusion strategy. North West & Central have close to 200 diversity and inclusion champions across all roles and grades. For the first time we brought this group together to review our strategic aims and feed back to us on how we can make this real for our people. As we move forward into 2022, our network will play an integral role

in leading on the local implementation of diversity and inclusion initiatives.

A success

As a result of lower passenger demand due to Covid-19, we worked together with train operators to take longer and higher frequency blockades in the Kilsby area, resulting in better efficiencies and faster renewals. This required an industry-wide agreement to take an approach outside of the existing framework. We have applied the learning from this to identify further opportunities when demand was lower to carry out engineering work causing less disruption to passengers, less impact on revenue and more efficient engineering works.

An improvement needed

We need to improve how we manage safety of the stations in our region following a review of incidents, including the roof collapse at Northwich station in May 2021. We are trialling an approach with Northern to put in place a radical station management model using one team to deliver safety and efficiency benefits.

The need to improve was highlighted further at Cheddington station when, following an inspection, the timber structure under platform 4 resulted in an unplanned closure in January 2022 due to the extent of decay. Working closely with train operator London Northwestern, passenger handling and communication of the closure was rapidly implemented to safeguard passengers and to enable work to proceed as quickly and as safely as possible before reopening.

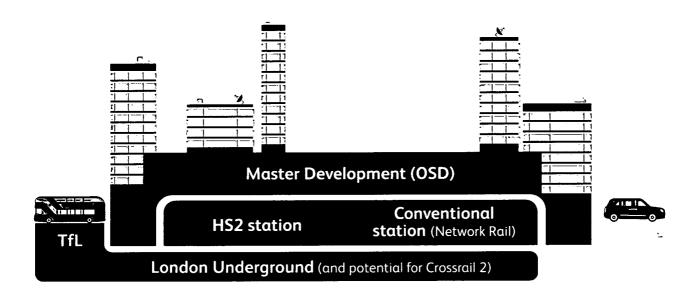
All our station assets are inspected on a yearly basis as a minimum. We are working through our entire estate and modernising the infrastructure using modern materials and construction forms, but the need to intervene on any one station is not taken in isolation. It is aligned with investment decisions and timelines determined based on a balance of risk, performance impact, available budget and asset condition across the entire operational property portfolio.

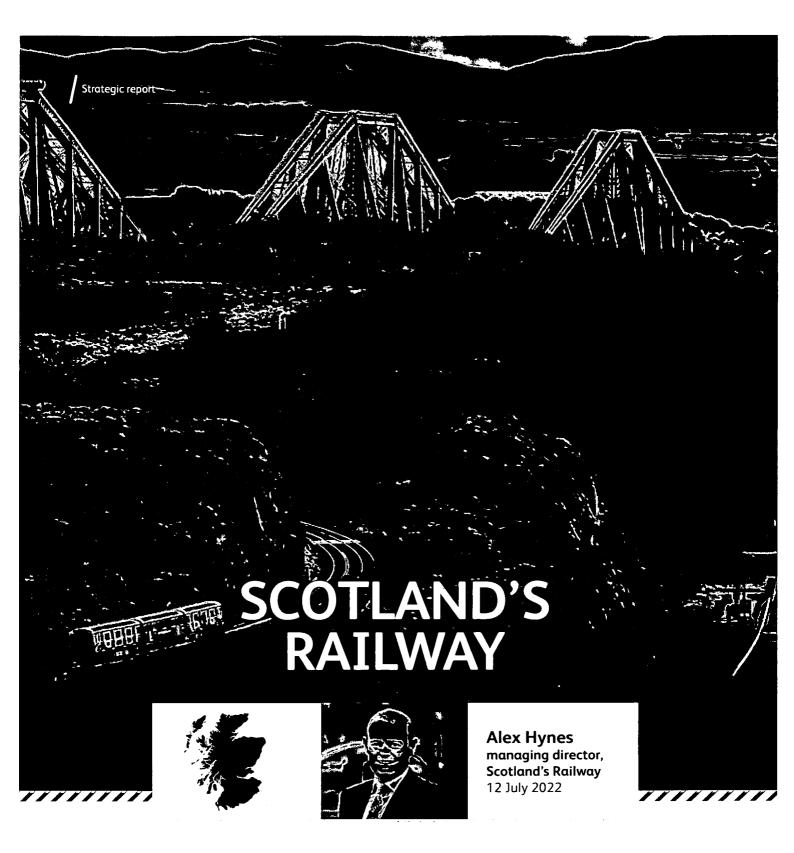
Plans for the year ahead

How we plan now to not only attract passengers back to the railway but also provide reliable services running to a timetable they can trust, is crucial for the industry's future. Our focus is to support our passengers to travel with confidence. This means ensuring our managed stations welcome passengers, and through working closely with our industry partners, continuing to focus on delivering a great service to our passengers, freight users and taxpayers, while enabling economic growth.

We are embedding a whole-system approach to create greater alignment and collaboration between all parties who influence railway investment, both internally and externally, enabling further value and efficiencies to be realised. The Euston Partnership alliance (underpinned by a tripartite agreement including Network Rail) is one example where we will continue to work closely with stakeholders as three major projects take flight in Euston. The Euston Partnership was formed firstly as an integrator to manage business cases, sponsor requirements, and align technical and design specifications; secondly, to consolidate existing delivery teams, co-locating and sharing suppliers where possible. How that works in practice is true collaboration between Network Rail, HS2, Lendlease, Camden Council, Transport for London (TfL), Greater London Authority, West Coast Partnership and the DfT to deliver three major projects happening at Euston. The alliance pulls together everyone working on, impacted by and interested in:

- the new HS2 station
- improvements to the existing Network Rail station
- the proposed oversite development





Scotland's Railway keeps passengers and freight moving - and communities connected - across a large and diverse network of more than 2,800 miles of railway, including world-famous structures such as the Forth Bridge and Glenfinnan Viaduct.

With the easing of lockdown, our railway has a vital role to play in underpinning social and economic recovery. Passenger numbers are gradually recovering and we are working hard with train operators to attract more customers back on to rail.

Our railway provides a vital lifeline, not just for commuters between our seven cities, but for our rural communities and business customers too. We will play an integral role in our nation's post pandemic recovery, providing links between communities and employment, industries and markets.

The new operator of ScotRail, ScotRail Trains Limited, commenced ownership on 1 April 2022 and we have been working closely with them. We are developing a wide range of cross-company initiatives with ScotRail Trains including more joined up activity at stations and linking up backoffice support functions to provide a more streamlined service for our customers.

Safety

As an industry, we are committed to learning the lessons of Carmont and to working together to deliver on the recommendations made by the Rail Accident Investigation Branch.

The tragic loss of our two colleagues, driver Brett McCullough and conductor Donald Dinnie, and our passenger Christopher Stuchbury, continues to affect how we think about safety and drives us to improve how we operate and maintain our network every day.

Workforce safety continues to improve in comparison to target and previous years. The number of accidents has reduced compared to 2020/21 and the number of lost time or reportable accidents has also fallen.

Slip, trip and fall events continue to be the most prevalent incidents and our sure-footed campaign has successfully achieved a reduction in these. We are beginning to align with the national safety framework, and we continue to make good progress with the safety task force, achieving key milestones in the programme. Our safety culture change programme is progressing well with completion of a pilot and the establishment of plans for a rollout across Scotland.

A Scotland Safety Task Force was created to manage the delivery of the two Office of Rail and Road (ORR) improvement notices on planning and technology - both are due to be completed in July 2022. The planning improvement notice centres on how maintenance schedules, tasks and any work arising are planned into available access (both Engineering Access Statement possessions and line blocks) and is 98 per cent complete.

Road driving related events continue to present a persistent risk. Our driving improvement plan is currently under way focusing on training, technology and engagement with colleagues.

Scotland's Railway understands that poor management of health and wellbeing-related risks can lead to negative impacts on physical health, behaviour, commitment and productivity. We are developing health and wellbeing plans that allow for the assessment and management of different health risks. We will also alter current control measures that are predominantly aimed at managing the consequences of mental illness rather than preventing them.

Passenger numbers, the number of vulnerable users, and station visits by the public for retail activities are forecast to increase. We are, and will remain, focussed on reducing station accident risk and further mitigating the hazards that cause slips, trips, falls and accidents at the platform/train interface. The threat of antisocial behaviour and violence is a focus area as we join with other travel industry partners to introduce strategies that combat and reduce the risk of violence towards colleagues and passengers.

We continue to deliver robust risk assessments for level crossings to reduce risk to crossing users and the railway. We maintain a bold response to any change in operational risk at our level crossings, deploying additional controls to reduce the risk.

Train Service Delivery

Before the pandemic, Scotland's Railway ran more than 2,500 passenger trains and up to 50 freight services every day. We adapted quickly to the lockdown, changing travel patterns and public health guidance, reviewing the timetable while making sure we supported passengers who needed to travel. As more people now return to rail, we will continue to adapt, and from May 2022 Scotland's Railway plans to run 2,150 passenger services daily (notwithstanding any potential industrial action activity). While the pandemic has resulted in a reduction in passengers, there has been an opportunity to grow freight business on Scotland's Railway and our performance in delivering for freight in 2021/22 has been strong. Meanwhile, Caledonian Sleeper performance was a success story in 2021/22, exceeding their right time arrivals target of 81 per cent for the financial year.



Train performance in 2021/22 started well and we performed better than target on our train performance measures in the first quarter. However, from quarter one, several issues began to emerge that had a significant impact on our ability to sustain performance. The first quarter brought with it very warm weather, and we saw declining performance on days when average temperatures exceeded 20 degrees celsius. Train crew shortages due to Covid-19 began to increase and peaked sharply in quarter three, necessitating a reduced timetable for ScotRail services until early 2022. The introduction of this timetable saw immediate improvement in performance, however the last quarter of the year was heavily impacted by two named storms.

In 2021/22 Scotland's Railway delivered 71.1 per cent of services On Time, 6.5 percentage points worse than the 77.6 per cent target. ScotRail's public performance measure percentage in 2021/22 was 90.2 per cent, 2.3 percentage points worse than the 92.5 per cent target.

Extreme weather continues to impact performance. There have been seven named storms this year, five of which occurred in the 23-day period between 29 January 2022 – 21 February 2022, causing widespread disruption and damage to our infrastructure. Maintaining performance levels during increasingly disruptive weather events is a key challenge for Scotland's Railway.

We have implemented a number of strategies to manage the impact, such as speed restrictions during periods of intense rainfall. In addition, our integrated control is the first in Great Britain to establish a 24/7 specialist weather team, which is bringing a comprehensive oversight to the ever more severe weather caused by climate change. This is being supported through a combination of more geotechnical engineering experts

and new dedicated teams for drainage inspection and maintenance. We are aligning our asset activity to make sure we have an integrated approach to earthworks, vegetation and drainage management. Scotland's Railway is also at the forefront of deploying remote monitoring equipment, which gives us early alerts to problems on the network.

We have also seen an increase in trespass events on the network this year. Incidents increased by 30 per cent in 2021/22 when compared with 2020/21. Finally, autumn 2021 was the worst autumn for train performance since 2018. A thorough post-autumn review has identified several locations where driver reports significantly increased, such as in the Fife Circle, and we have responded by increasing the coverage of the Rail Head Treatment Train for autumn 2022 in this area. There were also two named storms (Storm Arwen and Storm Barra) in the 2021 autumn season, which had a negative impact on performance.

Four issues drove most of our poor performance during the year: extreme weather, the impact of Covid-19 on staff availability, route crime and the impact of autumn weather.

We continue to invest in maintaining our infrastructure to provide a safe and reliable railway for passengers and freight operators, and passenger satisfaction results remain strong. As we emerge from the pandemic we expect to see passenger numbers increase, although not to the levels seen prior to Covid-19.

We continue to work with train operators to drive performance improvements. ScotRail and Network Rail have developed a joint performance improvement plan to arrest the current decline in performance.

Efficiency

This year we delivered £64m of efficiencies (against a 2018/19 baseline) compared with an original plan of £82m. Schedule 4 and Schedule 8 (the financial compensation scheme between Network Rail and train operators) were impacted by several adverse weather events towards the end of the year, settlement of prior year insurance claims and an increase in the impact of existing insurance claims. Other income has been impacted because of the reduced timetable and corresponding reduction in income from variable track access as well as earning less revenue from retail operations in our managed stations as a result of the pandemic.

Operating costs have risen within maintenance and operations. Some of these pressures have been mitigated by identifying efficiencies while the remainder have been offset against our risk fund. With a limited level of risk funding remaining for Control Period 6 and the likelihood of further pressures, we have commenced a major review exercise with the aim of identifying additional spending reductions and developing specific mitigations for all identified financial risks. We are engaged with the business on workforce reform which will deliver financial savings through initiatives such as agile working. Over the last two years, Network Rail has devolved business decisions and accountability to five regions, one of which is Scotland's Railway. These new ways of working within Network Rail, and also closer collaboration with ScotRail, will provide a better service for our customers while also delivering cost reductions. Within Renewals, spending demands are rising because of increased cost pressures such as inflation.

Progress on major capital projects over the year has been strong and we continue to develop our enhancements programme, in particular around decarbonisation. A key focus area is the development and delivery of efficient electrification, with emphasis on actively driving down the unit rate per single track kilometre by optimising our commercial and access arrangements while safely challenging our standards in place. Our biggest Renewals project in the Control Period relates to Carstairs and this has been partially deferred to later years in the Control Period.

Sustainable Growth

Severe weather is having an increasing impact on the network both in frequency and scale. Work to make the network more resilient is ongoing.

Flood resilience works at 14 'repeat flood locations' on the network have been successfully completed this year,

including sites such as Slochd, which has long history of earthworks instability and significant flooding. So far approximately 50 per cent of planned works within the current Control Period on high-risk structural scour sites have been completed and additional works are in progress. We have implemented improved landslip detection by remote condition monitoring (RCM) at over 30 sites, to monitor earthworks failure during extreme rainfall events. Plans are in place to roll this out to more locations.

The Scottish Government has several challenging targets around reducing carbon emissions and Scotland's Railway is at the forefront of helping to deliver these ambitions. During 2021/22 we developed and published our Sustainability Strategy, outlining our 10 priority areas with a delivery plan for each. We are developing strategies which will deliver carbon reduction through further electrification and decarbonisation of our property and vehicles. Currently, our network is 60 per cent electrified and we aim to have increased this to 94 per cent by 2030.

This was a pivotal year for transport decarbonisation. We are expanding the reach of the sustainable rail network by developing and delivering new stations at Reston and East Linton on the East Coast Main Line and a new station at Inverness Airport. Reston opened in May 2022 and will provide access to public transport for communities in the south of Scotland, connecting them to key employment centres and leisure destinations such as Edinburgh and the north of England.

We have made good progress with the electrification of the Glasgow Central to Barrhead and East Kilbride lines and strong progression of the decarbonisation agenda on the Fife and Borders routes. Not only will these projects provide new, quiet, green trains for our passengers, they will also encourage modal shift from road to rail.

Our non-traction decarbonisation workstream focuses on energy and carbon reduction in our estate (offices, depots and stations), our critical infrastructure such as signalling and level crossings, and our road vehicles.

Customers and Communities

We have established our 'One Team' steering group, which brings together the different train operating and infrastructure teams at the Network Rail managed stations - Glasgow Central and Edinburgh Waverley. The steering



group has identified several initiatives, which we will look to develop in 2022/23.

In addition to this, we commissioned two independent accessibility audits across both of our managed stations, to ensure we have an accurate view of the accessibility experience we deliver at Central and Waverley. These audits will be used to identify areas of improvement and opportunities to enhance the station experience.

We have also developed our customer insight framework, which will enable us to inform strategic planning and investment work such as the Perth and Inverness masterplans, with specific research. This will support the establishment of action plans to improve the railway's offering to passengers, attract non-users and support the Scottish Government's ambitions for the rail network.

To further enhance this work, in collaboration with ScotRail, we are carrying out an exercise to better understand our passengers. Not all customers are alike; their preferences, demands, buying power, and other characteristics will differ over a wide spectrum. Customer segmentation, or clustering, helps to divide the market into subgroups with similar interests and attributes. Customer segmentation will help Scotland's Railway to tailor its services and offerings, its price strategy, and its marketing messaging to improve its reach to different groups. Driving passenger satisfaction and encouraging a return to rail travel, this work was finalised in March 2022 and the next stage is to launch the profiles with the support of our internal communications team.

People

In summer 2021 we launched our new People Strategy for 2021-2023 called 'You in the Making'. The overall vision is to 'create an environment where everyone does their best work to create the best railway Scotland's ever had'. It has four main priorities:

- 1) A simpler, more efficient organisation
- 2) Brilliant managers and leaders
- 3) A safe, inclusive and engaging culture
- 4) Right people, right place, right time

Beneath these four priority themes sit 12 individual elements such as: agile working culture, organisational design and structure, headcount efficiency, diversity and inclusion, leadership development, management capability and recruitment and selection.

Our employee engagement results for 2021/22 were on average 67.5 per cent - above target and the highest across Network Rail. Our surveys suggest that our employees are positively engaged at work, and only around one in 10 feel disengaged. We have seen a decline in the results from 2020/21 into 2021/22 and we have in place a number of key actions to improve in areas where employees feel less engaged. The reduction in survey results is, we believe, broadly related to two factors: the impact of the pandemic on our ability to collaborate and connect with colleagues, and pay constraint as a result of the industry-wide financial challenge. A further consequence of the latter is ongoing workforce reform. We recognise this is a challenging time

for all employees, however, we are confident that once this process is complete, Network Rail will be more dynamic, efficient and agile.

We are making good progress on connecting with colleagues across multiple channels, with engagement levels across our bi-monthly Microsoft Teams live events and Yammer remaining steady. There is positive engagement across a range of health and wellbeing campaigns and strong positioning ahead of the Everyone Home Safe Every Day programme. Future energies will be focussed on elevating the voice of frontline colleagues by supporting our Home Safe leaders in better, more authentic conversations. We have also established a Scotland's Railway Leadership Group, which meets regularly to work with our top 60 leaders and influencers to encourage collaboration and development across our departments.

We have also launched a significant culture change programme centred around agile working, with development of hybrid working and improvements to our offices to encourage more diverse ways of working and better use of the limited space. This will save approximately £2m per year at the same time as giving our colleagues much more control over how they structure their time on the job. This will, we believe, lead to higher levels of engagement and productivity. Through the start of 2022 we also held a successful campaign focusing on completion of the Stand up for Race Equality training and we continue to prioritise improving our diversity and inclusion through local initiatives and recruitment.

Something we're proud of

To support the delivery of the Passenger Experience Strategy and Network Rail's 'Putting Passengers and Freight First' commitment, we have been developing a Scotland's Railway Customer Service Academy. Using existing training material developed by the national customer strategy team, we have created a nine-month development package which sits across both Network Rail and ScotRail. The Customer Service Academy will look to develop our people by taking them through an extensive programme that will enable them to better understand the key requirements needed when delivering excellent customer service. Offering mentorship from the senior leadership team, we will provide an environment to encourage self-reflection and identification of personal developmental requirements. A mix of course work along with self-led learning will enable colleagues to deliver excellent customer service and act as ambassadors for Scotland's Railway. The customer service academy will act as a culture change catalyst and a springboard to support the development of future leaders. The first cohort started their learners' journey in May 2022.

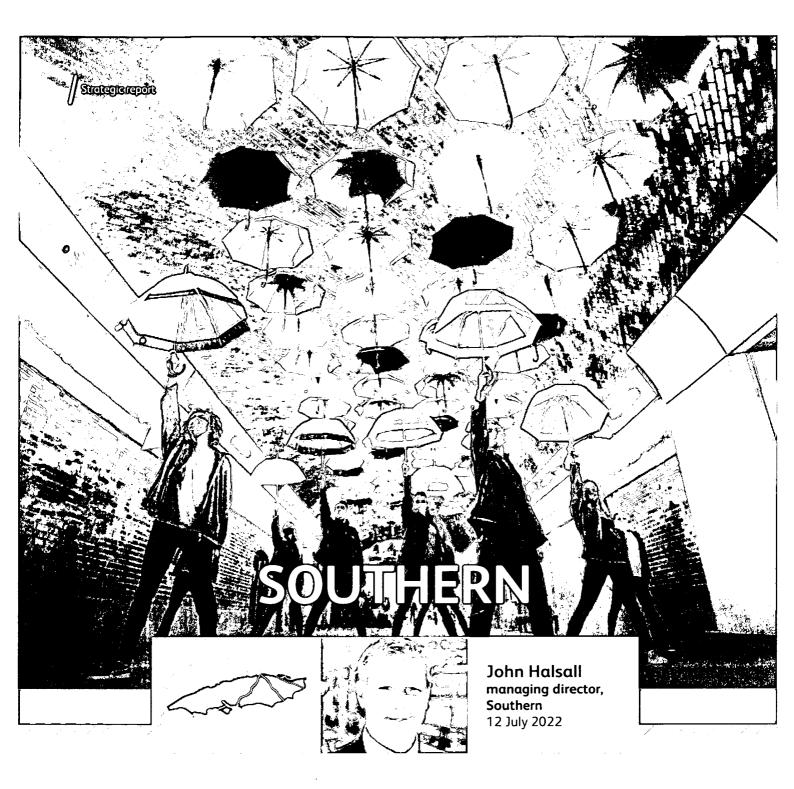
Something we need to improve

Safety is always a priority on Scotland's Railway. Road driving related events continue to present a persistent risk to our workforce. Our driving improvement plan is currently under way focusing on training, technology and engagement with colleagues.

Plans for the year ahead

Our four key priorities for the year ahead are; running a reliable railway for our customers, Everyone Home Safe Every Day, reducing costs and continuing to develop our plans for net zero. Although the pandemic has brought with it financial challenges, it has also given us an opportunity for the industry to review its current operating model and identify new ways of working to build back stronger for the future.

In addition, we are working on developing our business plans for the next Control Period and working closely with our stakeholders inside Scotland's Railway to ensure that our priorities are aligned to meet the requirements of our passenger and freight customers, despite the coming headwinds.



The Southern region comprises of Wessex, Sussex, and Kent routes as well as Network Rail High Speed. We link major towns and cities including Bournemouth, Southampton, Portsmouth, Brighton, Canterbury, Ashford and Dover to each other and the capital.

We're responsible for managing large London stations such as Waterloo, London Bridge and Victoria and every day carry large numbers of commuters to and from the capital, as well as serving Gatwick Airport and Southampton sea port. We operate some of the busiest and most congested rail lines in the country and how we perform impacts the lives of millions of passengers, our lineside neighbours and the freight companies that depend upon us.



Safety

Our workforce safety has not been good enough this year and we missed the targets we set ourselves for both fatality weighted index (FWI) and lost time injury frequency (LTIFR). The primary cause was an increase in minor incidents (such as slip or trip) causing significant injury (broken bone or dislocation), and falls and manual handling events. As well as holding a cross regional 'stand-down' to focus on the issue, our approach to turn this around is contained in our recently launched 'Thumbs Up' Southern safety plan. We must create an environment where people are comfortable to challenge and question if they are unsure or believe work is unsafe. Evolving our culture, along within training and more tactical interventions, is a key component of 'Thumbs Up'. We know we can improve because 18 months ago we were leading the way.

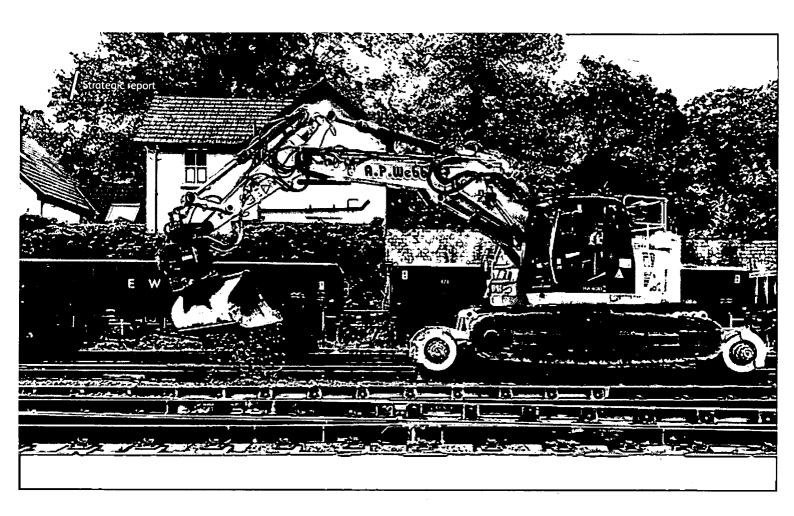
More encouragingly, our personal accountability for safety measure (PAFs) improved during the year. Driver training and the introduction of the new vehicle safety warning system helped us reduce numbers of minor road vehicle speeding offences, which are breaches of our Lifesaving Rules and the most significant element of this measure. With nearly 60 per cent of our road fleet fitted

out, Southern is leading the way with the adoption of this technology. We will reach 100 per cent coverage next year and this provides a further opportunity for improvement.

We continue to make improvements in monitoring and supporting our people with their health and wellbeing, with mental health remaining at the forefront. Our drug and alcohol testing rate is up, health surveillance rates are up and we have supported our people with healthy eating advice, particularly when they are working shifts. We are making good progress in terms of mental health training with 325 line managers trained, 100 new mental health first aiders in place and 20 wellbeing ambassadors appointed. While we still have more to do to ensure continued improvement, we were delighted to be awarded a Bronze award from the charity Mind for achieving change in workplace wellbeing.

Train service delivery

The high levels of on-time train performance in 2020/21 were achieved against the context of fewer train services and lower passenger numbers in the second year of the pandemic. Although not back at their pre-pandemic levels,



the number of train services and passengers increased in 2021/22, making sustaining 2020/21's levels challenging. Nevertheless, this was the target we set ourselves on the regional scorecard and, while our on-time performance was reasonable, and the number of delay incidents was lower than pre-pandemic levels, both fell short of what we achieved in 2020/21.

At a local route level, to align with our operators' contractual targets, we took a different approach by agreeing targets that accounted for our best view of the increases in passenger numbers and trains. Broadly, we met most of these.

With Govia Thameslink Railway (GTR), the 'on-time' measure finished just ahead of our route target; although train cancellations, caused primarily by driver unavailability, were a challenge throughout the year, causing disruption to passengers. We are supporting GTR to try to solve this industry challenge but, given further planned timetable increases in May, this remains a concern.

Arriva Rail London performance was strong, beating targets across most lines of route. Encouragingly this was delivered with train service levels the same as prepandemic and with a substantial return of passenger volumes. The London Overground concession is now experiencing an average of over 75 per cent of pre-Covid

passenger levels, with the highest of these - the Gospel Oak to Barking Line - welcoming back nearly 100 per cent of pre-Covid levels.

Southeastern passengers experienced a more mixed year and, despite improvements in asset reliability and speed restrictions, we continued to see high levels of subthreshold delays. These are small delays where the prime cause is not understood or captured by our system, and so are difficult to fix. We are committed to working with Southeastern to improve this situation and are helping them to develop a simpler timetable to deliver a notable improvement in On Time delivery. We expect this to be operating by December 2022.

While overall South Western Railway performance is ahead of target, there remain some specific areas of concern including: the increased impact of weather across the route, the resilience of assets on the Waterloo to Woking corridor, electrical power resilience and the signalling assets on the Portsmouth Direct line. Plans are in place to address these areas of concern, for example through critical corridor asset plans, remote condition monitoring for extreme rainfall on earthworks, and local performance hubs now dedicated to specific lines of route.

The year saw several single large impacting incidents that have affected our freight users, such as the derailment

at Salisbury, poor track condition at Crawley New Yard, the Bearstead blockade, and the impact of the February storms. We are challenging ourselves and our freight colleagues to improve our delivery through route-wide deep dives with clear, tangible actions that will be incorporated in each Route's joint performance strategy and deliver benefit within the year.

Efficiency

We delivered our efficiencies of £190m in the year (against a 2018/19 baseline) in line with our plans and remain on track to deliver our CP6 core efficiency plan of £833m. In addition to this we are committed to delivering our modernisation plans for the region.

Retail income at our managed stations continues to recover well along with passenger numbers. We disposed of several property assets in the year, including a leasehold sale at Cannon Place for offices above Cannon Street station, taking advantage of favourable market conditions to secure value.

A key financial focus for next year will be seeking industry efficiency from better collaboration with our operators. While initial opportunities have been identified and we have seen some benefits from the greater use of blockades for maintenance and renewal activity, establishing a whole-system approach is an opportunity that we want to further exploit.

Sustainable growth

We are very pleased to have achieved all route and regional enhancement milestones, delivering improvements for passengers as well as preparing and submitting new and updated business cases for future enhancements. We have also secured funding to progress key passenger improvement at London Victoria and Peckham Rye stations.

Project work continued at Gatwick station. This included improving the track layout to help reduce delay and make the railway easier to operate, along with improvements to the passenger concourse and accessibility to the airport from the railway station. We are on programme to complete this project next year.

We made good progress in developing the new CP7 delivery model which is based on 'Project-13' principles



and sees greater integration with the supply chain. Four 'Southern Integrator Delivery' partner packages were taken to market (Electrification and Plant, Buildings and Civils, Signalling and Track) and the procurement will conclude next year.

Customers and communities

We have continued to provide a proactive approach in terms of engaging with passengers, stakeholders and communities, focusing on quality over quantity. Our new external comms strategy is really starting to show results, with more positive TV coverage than ever before. Away from traditional media, we have a thought leadership content plan with railway YouTuber Geoff Marshall, who has more than a quarter of a million subscribers. Geoff has already published his videos on Landport Viaduct, the Brighton mainline blockade and Thanet Parkway.

We've made the most of the relaxed restrictions in terms of Covid-19 to offer our stakeholders a range of visits and tours to our locations. This included hosting the Rail Minister at Waterloo in the aftermath of the storms, inviting her to open our Access for All scheme at Eridge in Sussex, and running a regional familiarisation day with GTR to Three Bridges ROC and Victoria station. We've also



had the opportunity to celebrate other 'openings' such as the St Mary Cray Access for All scheme with the local MP and the rededication of the Victory Arch at Waterloo on its centenary, with a number of guests from across the wider rail industry.

In terms of customer complaints handling, we saw the number of complaints, average open age and escalations decrease in the last quarter. As we look ahead to the new year, our focus is on the quality of our customer service responses, measured through national assurance and real customer feedback, in line with our new scorecard measures.

'Access For All' schemes providing lifts and step-free access were completed at St Mary Cray, Eridge and Canterbury East stations. At the larger Network Rail managed London stations, such as London Bridge, Waterloo and Charing Cross, we have been working hard to help encourage travellers back to rail by focusing on the passenger experience. For example, we partnered with the Mayor's Office as part of the 'Let's Do London' campaign, with each station hosting special appearances by cast members of musicals in London starting with an appearance from the cast of Dirty Dancing at Waterloo.

People

We were disappointed with our overall Your Voice engagement score of 57 per cent as this has been a key focus for us over the past six months. We expect that the work planned on our culture programme and the positive reception we have already had to our Safety Thumbs Up campaign will see our overall position improve.

As we look to the future, over the next few years we will be putting our whole leadership population (2,600 people), through our Management Development programme, aligned to our culture programme, to give our people the tools to lead with confidence.

We made good progress in the year with our cultural journey. A region-wide listening programme delivered over 7,500 insights on our existing culture. Over many months we have distilled what we heard into three key themes - caring, complexity and learning. These three themes have developed into what we now call our three principles:

- keep it simple
- · show you care
- · listen, learn and improve

Our culture programme, which will support the adoption of these principles across the region, was launched with a leaders' event in March and will be followed by events for all our managers throughout next year.

where our people work on the railway with only lookouts to warn them of oncoming traffic. This has undoubtedly made the railway a safer place to work, and the focus is now on making this change sustainable and manageable.

Something we're proud of

In the Southern Region, we have continued to do more to separate people working on the railway from trains in traffic. The acceleration of our Track Worker Safety Programme has been a great success and we have almost eliminated the incidents of unassisted lookout working,

Something we want to improve

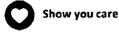
Conversely, as already mentioned, our underlying safety performance has deteriorated this year. Improving this through our Thumbs Up safety programme and our culture programme is a key priority.

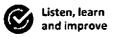
Plans for the year ahead

As we have emerged from the pandemic, we have taken the opportunity to refresh our regional operating model to make sure that we really are Putting Passengers First, looking to the future. Our refreshed operating model was launched at an event for our senior leaders in March and is intended to provide clarity to Southern's identity and purpose as a devolved region. The key points are:

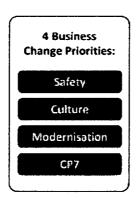
- · Our vision is to keep Putting Passengers First; this will be achieved by delivering four ambitions covering our safety, people, efficiency and service.
- We will deliver improvement by vigorously prioritising change in four business areas of safety, culture, modernisation and CP7.
- As we do this, we will live by three principles: show you care; listen, learn and improve; and keep it simple.

BETTER TOGETHER









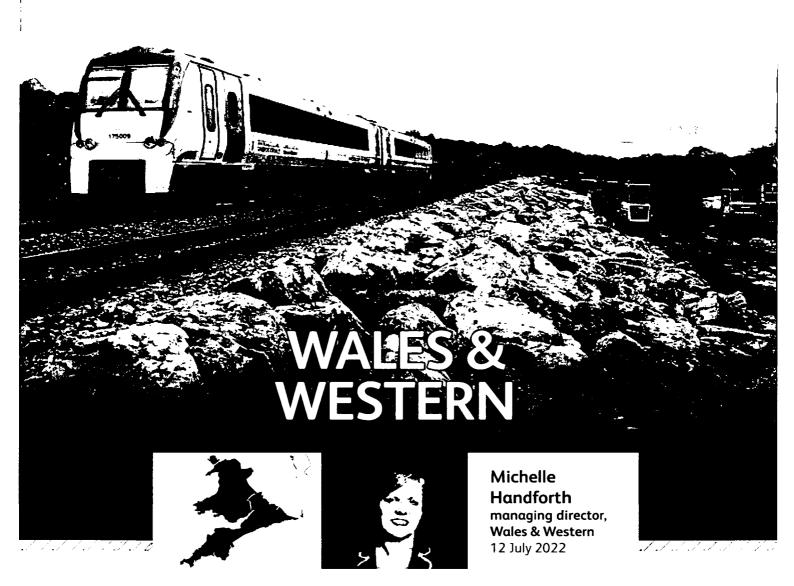




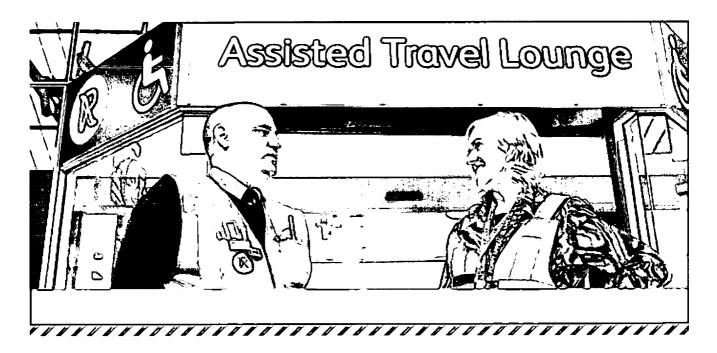
freight users



We had a great response to this from our senior leaders and we now need to embed this into the region at all levels, to deliver on our business change priorities. This will enable us to deliver for passengers and freight users and to ensure that the Southern region is a sustainable and valued part of the regions' wider economic fabric.



Connecting two nations and two capital cities, we serve people, businesses, and communities the length and breadth of Wales and borders, in Oxfordshire and the Thames Valley, in the west of England and on the southwest peninsula. We connect people and freight to international airports and ports, including Heathrow. Our current priority is to encourage passengers back to the railway, running even more trains on time.



Safety

2021/22 remained a challenging year for frontline colleagues as well as those home-working. We continued to provide mental health training, with over 300 trained in mental health first aid or line manager mental health awareness. We became signatories to the Rail Mental Health Charter led by the Rail Safety and Standards Board (RSSB).

Workforce accidents and their severity have continued to reduce. Our fatality weighted index (FWI) is better than the targets we set ourselves this year. We've improved the locations our teams use to access the railway, preventing slips, trips, and falls. Since 2020-21, through the Track Worker Safety Task Force, we've reduced the hours our colleagues have worked on the track while trains are running by 93 per cent, significantly reducing a key safety risk. To improve our personal accountability for safety (PAFS) measure we're fitting speed warning systems into our vehicle fleet. We plan 100 per cent fitment by August 2022.

We launched our new colleague safety improvement plan. This focuses on our safety culture, first line assurance, leadership capability, separation of people from trains and on track plant, Lifesaving Rules, and communications. We continue to monitor success through the risk management maturity model (RM3). More information on RM3 is available on pages 89 to 90.

Following the investigation into the derailment at Carmont in Scotland, we've increased drainage maintenance allowing us to triple our annual inspection and maintenance work. We've also established a Slope Safety Review Group to share best practice, innovation, and track progress against our improvement plan.

Public, passenger and asset safety improved across our key measures. We launched new safety awareness campaigns at our managed stations. However, at Challow in Oxfordshire a passenger train collided with a piece of engineering equipment that was left on the line following completion of rail repairs. We are implementing new equipment checking procedures and exploring technological solutions to prevent this happening in the future.

Train service delivery

In 2021/22 we wanted to achieve the high levels of performance delivered in 2020/21, which were predominately due to fewer train services and lower passenger numbers. During the year, as services and passenger numbers increased, we didn't achieve the targets we set ourselves with our On Time measure at 69.6 per cent against a target of 80.2 per cent. However, our performance was better than 2019/20, the year before the pandemic. Running a busier network meant that any incident affected a greater number of services. The severe

storms, especially those in February 2022, also impacted the service we provided.

To improve our performance in Wales and Borders route we established a joint working group with train and freight operating companies. As a result of increased collaboration and targeted actions, performance improvements have already been realised, with even more planned for delivery in 2022/23.

Performance in Western route has previously been impacted by train detection equipment between Paddington and Airport Junction. A new modern system was installed in December 2021 that is more reliable and has increased the average time between service-affecting failures by over 70 per cent already. We've also worked jointly with train and freight operating companies to deliver improved performance between Didcot Parkway and London Paddington.

Trespass and vandalism significantly increased during lockdown restrictions, peaking in April 2021. We were able to reduce trespassing incidents throughtout the year by investing more money in anti-trespass measures on bridges and stations and working closely with the British Transport Police to proactively patrol key locations.

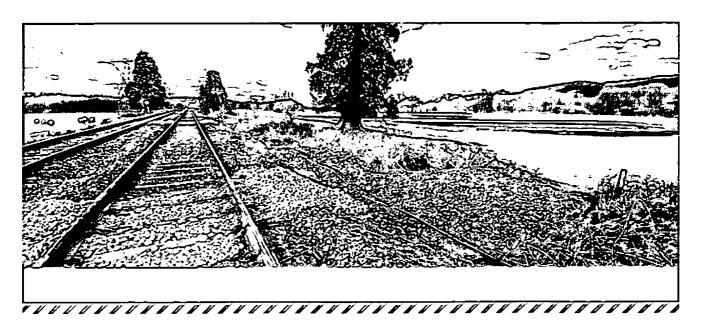
Efficiency

We continue to manage our business within our Control Period 6 (CP6) funding settlement. We've delivered £121m of efficiency in 2021/22, £2m more than planned. We're planning to deliver an additional £99m of efficiency during CP6 to take us to an overall plan of £570m. Modernising how we work is key to achieving these additional efficiencies. Our management modernisation has delivered £13.5m of annual savings so far and we continue to focus on optimising access, challenging commercial arrangements and using new technology to drive efficiencies further.

We've created an Industry Efficiency Board, independently chaired, and represented by all our regional operating companies. The role of this board is to support revenue growth and play our part in delivering the £1.5bn a year of savings that the Plan for Rail reforms aim to deliver by 2026/27.

We experienced three named storms during February 2022 with a cost impact of £17m. A red weather warning was issued in parts of the region for storm Eunice, resulting in the decision to run no trains in Wales for a full day to protect colleague and passenger safety. The storm clear-up meant passengers continued to experience cancellations in the days that followed.

We've experienced challenges in the delivery of our capital works portfolio during 2021/22. While we've seen significant efficiency delivered, particularly in enhancements, we failed to deliver our planned renewal volumes in full. These works are now planned for delivery in the remaining two years of CP6.





Sustainable growth

We delivered all bar one of our scorecard milestones. In November 2021 we reopened the Dartmoor Line between Okehampton and Exeter to passenger services, in record time and achieving efficiencies of £42m. This is the first line to be reinstated under the 'Restoring your Railway' initiative and has been welcomed by the local community.

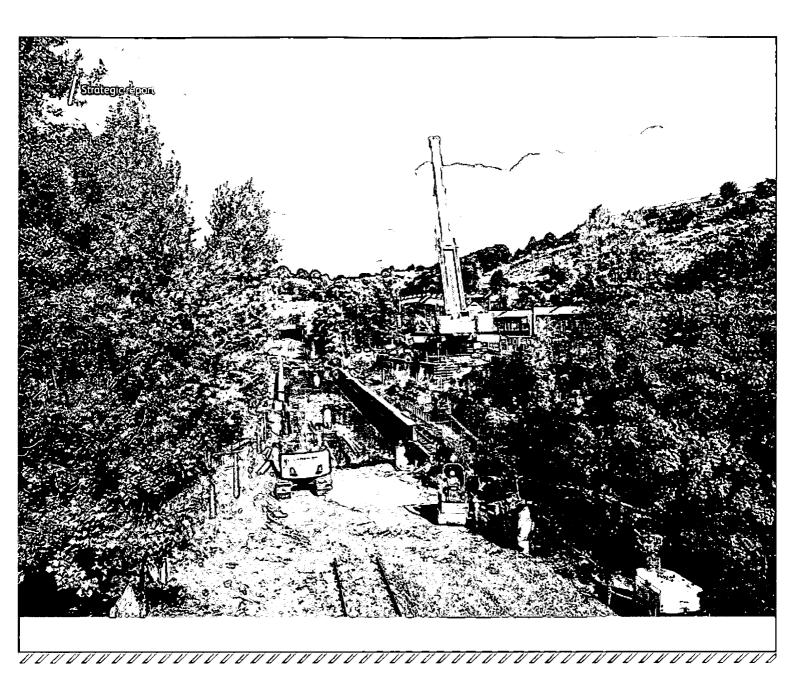
At Bristol Temple Meads station we combined work on the new eastern entrance with track replacement work, saving £4m as the railway was closed for less time than if the works had taken place separately. We also installed tactile paving along the edge of the platforms to improve safety and support passengers who are visually impaired.

In Stonehouse, Gloucestershire we worked on behalf of the Cotswold Canals Connected Project to reinstate a railway

bridge over the canal. This will allow boats to pass through for the first time since 1968. In 2022/23 we'll be working to secure more income from local authorities and trusts to drive further social and economic benefits.

Investment in sustainability continues with 160 electric vehicle charging points installed at Reading station plus charging points at a Network Rail maintenance depot in Swindon for our own fleet. We successfully trialled a timberloaded freight train from Devon to Pontrilas Timber in Abergavenny, removing 76 lorries from the road.

We've delivered many weather resilience schemes, such as Vineyard Farm between Hereford and Abergavenny, installing 8,000 tonnes of rock armour, delivered by train. To inform future biodiversity and habitat management works we delivered demonstration projects and released the first ever Wales & Western State of Nature Report.



Customers and Communities

The number of complaints we receive has halved in the past five years, due to proactive engagement with our lineside neighbours and local communities. Through a dedicated customer complaints team and industry collaboration, we have worked to rectify issues quickly when they do arise. We've increased our pre-notification of planned works in the community and during 2022/23 we'll be incorporating measures to assess the quality of our complaints handling.

Stakeholder engagement has continued, mainly using technology. We won a Constructing Excellence award for the replacement of Crumlin River Bridge in South Wales. Despite a limited planning window, the project started on time and was completed within the nine-day closure of the railway. We received no complaints from lineside neighbours or road users and received widespread positive

feedback. Our communications weren't as successful during Houndiscombe bridge renewal in Plymouth, with concerns raised about pedestrian safety on a poorly lit diversionary route. The signage along the route was reviewed and lessons have been learned around fully understanding stakeholder needs.

At Paddington station we completed the redecoration of the Clock Arch, which was highly commended in the Railway Heritage awards. We completed the construction of the assisted travel lounge at Reading station, working with local user groups to shape the look and feel of the facility. At Bristol Temple Meads station, new toilets were installed and the Brunel Statue was relocated to a more visible position. We've also worked closely with communities in Wales, assisting Transport for Wales Rail to establish the Llandudno Station Hub, which hosts a job café and the Conwy Valley Community Rail Partnership.

People

We've also supported colleagues as they return to the workplace post Covid-19 by updating our working policies, practices and supporting hybrid working where possible.

Our employee engagement results are not at the levels we'd like to achieve, which is reflective of the significant change and challenges the industry is facing. We've launched our PROUD colleague recognition scheme following feedback that more could be done to recognise and reward the great work our people do. The scheme allows anyone on the region to recognise a colleague, with awards given every month.

We're becoming a more diverse region, with 17 per cent of our workforce female and 7 per cent from ethnic minority backgrounds. We relaunched our disability matters group, and our Welsh and race matters steering groups are meeting regularly with increased membership. Recognising the effect discrimination can have on safety, we also ran Stand up for Race Equality conversations for all regional colleagues.

Our frontline accommodation facilities are not up to the standard expected from our employees. A Fixing Your Workplace project was initiated to make improvements at our frontline locations. Work was completed at Exmouth Junction, Gloucester signal box, and Castle Cary, with significant improvements planned for 2022/23 throughout the region.

Something we're proud of

We successfully undertook major track replacement works outside Bristol Temple Meads station to support improved train service delivery. Residents were kept updated before and during the works with over 80 Twitter updates sharing key information. We created a temporary depot to service CrossCountry trains, which kept 80,000 passengers moving. We temporarily extended platforms at Bedminster station to bring passengers from the south by train rather than lengthy bus journeys. As a result, we received only eight complaints over the eight-week project, which was a great success. The project has reported an efficiency of £41m.

Something we want to improve

We want to deliver a greater Wales & Western railway by providing excellent customer service to passengers and users of freight. We'll continue to work collaboratively with all industry partners to achieve this, over the next two years we will be investing more than £1.2bn in renewing our assets to support improved train performance. We will work closely with High Speed 2 to minimise the disruption from building the new station at Old Oak Common. A key focus is the completion of improvement works to remove temporary speed restrictions allowing trains to run at normal speeds and therefore reducing delays.

Plans for the year ahead

We're determined to deliver a great Wales & Western regional railway. Working with our industry partners we'll continue to encourage passengers back to the railway, ensuring more trains arrive and depart on time. We recognise that the industry must become more efficient and we'll be working even more collaboratively to achieve this through our Industry Efficiency Board. We'll continue to enhance our network and will be delivering further works in Dawlish as well as implementing a more modern signalling system on the Cambrian Line in Wales. We'll continue to support infrastructure readiness for the Elizabeth Line with 12 trains per hour running between Paddington and Abbey Wood from 24 May 2022. Direct services from Reading to Shenfield are expected to be available later in 2022. Work on the new High Speed 2 station at Old Oak Common is due to start and we'll be working across the industry to ensure we continue to operate a high-performing railway.

ROUTE SERVICES

SCORECARD OUTTURN 2021/2022: 68.4%

Route Services works closely with our customers, the regions, routes and supply chain to deliver better outcomes for passengers and freight users. We're made up of six teams:



Business Services (BS)

manages the support systems needed to keep Network Rail working effectively. This includes human resources services, financial systems, national records, training and collecting information about our assets.



Commercial and Procurement (C&P) sources and manages our strategic

contracts. We manage more than 3,600 suppliers and £3.9bn of spend every year.



Engineering Services (ES)

improves performance and reduces risk by delivering design and engineering services.



Information Technology (IT)

shapes, builds and runs the information technology services needed to support the railway and keep the network moving.



Network Rail Telecom (NRT) provides the telecoms connectivity that

provides the telecoms connectivity the supports the operational railway.



Supply Chain Operations (SCO)

delivers the materials, machinery and components and keeps our railway moving by ensuring everyone has what they need and when they need it.

Our performance in 2021/22 was good, showing on our scorecard as 68.4 per cent. We've built on a strong start and will continue to deliver for our customers, passengers and freight users through the rest of the Control Period 6 (2019-2024).

Safety

We measure our safety performance by the number and severity of injuries to our workforce (fatality weighted index (FWI)) and the number of times our Lifesaving Rules are breached (personal accountability for safety, (PAFS)). This year we achieved our FWI target, however we missed our PAFS target.

We recognised we needed to make a fundamental change to our safety culture and we want to also have a caring and inclusive culture. This is why we launched our Safe Service transformation programme in early 2021. The programme has been achieving its milestones this year and the improvements are becoming embedded. This will make a real difference to our workforce safety.

This year we focussed our efforts on improving the safety of our plant and machinery, following a tragic fatality at our depot at Eastleigh. We identified over 1,600 enhancements that would make the equipment safer to use. We've already delivered half of them and will implement the rest next year.

We continued to carry out health surveillance on our highest risk colleagues, and compliance hit 97.7 per cent. These assessments led to us putting in place health management plans for four employees, and also identified that our work on reducing exposure to silica dust was making a positive impact on the health of our team.

Train service delivery

Many of our services support maintenance activities carried out by the regions. We supply materials, plant and trains to maintain and renew the infrastructure. Occasionally, delivery of these services doesn't go as planned and the lines are unable to reopen on time, causing delays to journeys. This year we reduced these delays by a third, meaning we disrupted significantly fewer passenger journeys and freight users.

We also replaced 130km of track using our fleet of "High Output" trains during times when the railway was closed. This meant we were able to improve reliability while having little impact on the train service.

Efficiencies

At the start of the Control Period we committed to delivering £308m of efficiencies and are further exceeding this target to support the economic recovery of the rail industry. This year, we were aiming to make efficiencies of £16m and we managed to achieve £144m.

The main achievements this year have been:

- Improvements to our training services in Business Services
- · Savings in the way we manage our fleet of engineering trains
- Changing how we buy concrete sleepers
- Putting in place a more cost effective support contract for Network Rail Telecom

As well as this, Commercial and Procurement managed to make efficiencies contributions of £198m on behalf of all of their customers. This is £16m more than planned and

was achieved mainly by sourcing and managing contracts more smartly. We delivered efficiency contributions of £87m on signalling and telecoms, £31m on corporate services and £12m on infrastructure.

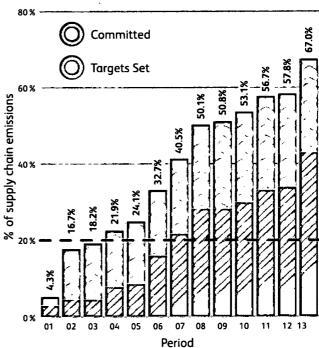
Sustainability

We're committed to providing the most sustainable products and services to our customers. This year we continued to implement our sustainability delivery plan, which included the delivery of 245 ultra low emission vehicles (ULEVs) and 25 zero emission vehicles (ZEVs). By 2027 we want all of our cars and vans to be ZEVs and we're on track to achieve this.

We also reuse and recycle millions of tonnes of materials every year. This year we recycled 99.6 per cent of all used materials replaced by our regional customers, which is more than our target of 99 per cent.

We continue to make excellent progress on setting supplier Science Based Targets (SBTs). 107 suppliers have agreed to set SBTs within the next 24 months and another 105 suppliers are looking at getting on board.

Percentage of supply chain emissions where the suppliers have committed to Science Based Targets



We held SBT workshops in collaboration with National Highways, HS2, HS1, TfL, and East West Rail, which were attended by 1,925 people. These workshops provide suppliers with practical information to help them to reduce their carbon emissions. We'll continue to hold similar workshops to help support our supply chain.

People

People are key to our success and we need to work collaboratively with our regional customers to deliver improvements for our passengers and freight users. This year we delivered a mental wellbeing campaign, which aimed to increase awareness and support for mental health. We also delivered race equality training to more than 4,700 of our colleagues (95 per cent) in Route Services.

Every year we set ourselves targets for improvements in diversity amongst our colleagues. This year we aimed to increase the proportion of female staff to 30.5 per cent and black, Asian and minority ethnic employees to 13.5 per cent. We didn't do enough to make these improvements and narrowly missed our targets. We know we have more work to do to create an inclusive workplace for everyone and we're developing our plans for how to achieve this.

Something to be proud of

This year we transformed the way we collect data about our regional customers' assets. This information is used by the regions to know when to maintain assets before they fail, which means fewer train delays. We've been working collaboratively with our rail industry partners and there is now a passenger train on the West Coast Main Line providing overhead line data to our regional engineers. This paves the way for more efficient ways of obtaining this data and we'll continue to roll this out nationally.

We've also fitted additional equipment to our switches and crossings inspection trains, which means that our regional customers will no longer need to inspect them visually. This delivers an improvement to safety and train performance and allows the regions to deploy their employees onto other activities.

Area of improvement

We're responsible for the maintenance of almost all lifts in stations and recognise that they provide disabled passengers with access to the railway and employment. However, we also know that too many of them fail and for too long, so three years ago we embarked on an improvement programme. We've invested heavily but performance has still not met passenger expectations. We're focusing on ensuring that all repairs are "right first time", as many of the failures are a repeat. We've also listened to feedback about the lack of passenger information when lifts are taken out of service for renewal and improved communications. This year we've trialled the use of a stair lift at Manchester Piccadilly station while we renew a platform lift, which has meant that all passengers are able to access the train services there.

Year ahead 2022/23

Our number one priority remains embedding our Safe Service programme. This includes encouraging more of our team members to become "Safe Service Champions", as we've seen the success of this approach this year.

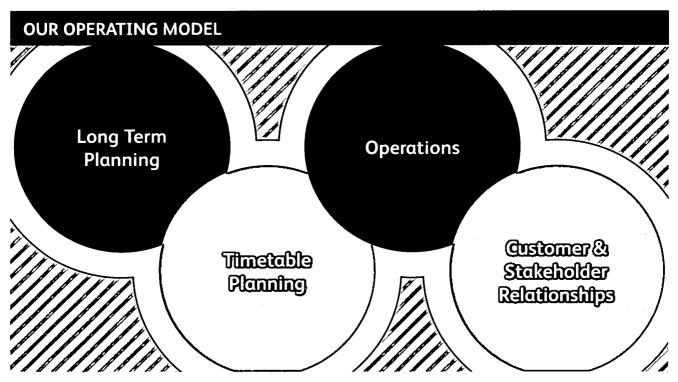
We'll also look ahead to the challenges and changes that the rail industry is facing and will be reviewing how we deliver our services to ensure we remain focussed on the ones where we can demonstrate value.

SYSTEM OPERATOR

SCORECARD OUTTURN 2021/2022: 73.74%

Our purpose as the System Operator is to make sure the railway works as one and is both seamless and high performing. We do this by working as a partner across the whole railway to support the delivery of high levels of safe and efficient operational performance – contributing to an excellent experience for passengers and freight users.

Over the last year we've streamlined our organisation to better reflect the core Network Rail business processes for which the System Operator is accountable. Our focus is on improving what the network is capable of by planning for the future, providing high-quality analysis and advice, producing the timetable, delivering the national operational railway strategy, supporting freight growth and managing customer and stakeholder relationships. We launched a new operating model in November 2021 to reflect our role:



New System Operator operating model, November 2021

We've embarked on a journey of modernisation and transformation. Launching the new operating model in November 2021 (see above) was the first step on that journey and allows us to be flexible as the industry evolves. We want to be ready for the railway of the future, putting passengers and freight users at the heart of everything we do.

Safety

Safety is a top priority for Network Rail and over the last year we've implemented practical measures to improve how we manage functional safety. We're currently in the process of integrating these activities under the new System Operator Health and Safety Manager. There has been good progress so far and by the end of the second quarter of 2022, we look to have a well-developed functional safety plan that will build on established practices.

Our 21st Century Operations programme has created an improved database to record individual competence and progress has been made in improving the skills management system (Competency Management System (CMS)) with assessment cycles being more focussed on learning and development. Increased staff competence reduces the risk of errors, making the railway safer.

Funds from the Freight Safety Improvement Programme will allow us to improve walkways and lighting for drivers at depots, and we'll equip charter stock with controlled emission toilets (CET) to remove effluent from the network, thereby improving the safety of colleagues working trackside.

Train service delivery

Our Network Operations and Freight & Customer teams have worked with regional colleagues to improve train service performance and to enable more trains to run on time for our passengers and freight users.

The Timetable Planning team has made improvements to quality and is achieving efficiencies through the development of new tools and capabilities, including some early deliverables from the Industry Timetable Technical Strategy programme.

The Industry Timetable Process Reform programme delivered its first outputs in December 2021. Based on industry collaboration we created a high-level concept design for a new flexible and dynamic timetable process of the future. We've now launched the next phase of the programme which is called Better Timetables for Passengers and Freight Users (BTPF). This phase will develop the detailed industry timetable process, define a target operating model for the timetable planning community and create an industry transition plan.

The Freight team works with the regions to ensure an efficient running railway at all hours, in keeping with the dynamic and 24/7 nature of the sector, as well as providing the levels of performance and safety required to give confidence to our customers and to entice new business on to rail. Freight has a Service Delivery Management (FSDM) team dedicated to providing 24/7 operational direction and communication with regions, while our integrated Regional Freight Management team is responsible for the smooth running of daily freight operations.

Efficiencies

We have continued to work closely with our sponsors and industry partners to further improve cost efficiency. By implementing the System Operator transformation and achieving management modernisation objectives, our headcount will be greatly reduced compared to February 2021, by focusing on efficient use of available resources through a simplified and more targeted operating model. To reduce the impact this has on train service delivery we'll make use of better operational data and automation, enabling our teams to work more efficiently on value adding tasks.

Further efficiency in the Capacity Planning team will be attained in the long term through the implementation of the Industry Timetable Technical Strategy (ITTS) programme, allowing timetable systems across the industry to communicate with each other using better data and adaptive technology to eliminate a reliance on manual data entry and legacy systems.

Trials of our Axiom network model have been completed for the five small geographies. These showed that an operational digital twin could be built in a cost-effective way and work is proceeding on the next stages prior to the end of CP6. Through a joint effort by Technical Authority, Route Services and System Operator we are using Axiom to show that a 'digital sectional appendix' can be created, and that this can replace all paper records for operational purposes, ultimately reducing bureaucracy across the industry.

Sustainable growth

The United Kingdom needs to make demonstrable developments to improve the sustainability and carbon footprint of its transport network, and the rail sector plays a key role in supporting these goals. Together with the Great British Railways Transition Team, the System Operator is examining how the industry can work smarter to grow freight rates over the next three to seven years, taking more lorries off the roads. We want to support an increase in freight net tonne miles transported by more than 15 per cent by 2024.

System Operator is coordinating industry plans to act on the changing threat of climate change and weather, based on the proposals made in reports by Sir Robert Mair and Dame Julia Slingo. The Weather Risk Task Force (WRTF) is driving improvements including strengthening the infrastructure in areas and delivering new decisionmaking tools, enabling signalling teams to better manage extreme weather conditions and improve the train service for passengers.

Customers and communities

We're always striving to be better for our customers, passengers, freight users and neighbours. We engage with key stakeholders in strategy development to identify customer and end-user strategic business priorities to reflect in our plans.

The System Operator aims to help make stations inclusive and welcoming places, encouraging more people to travel by train. To support this vision, we are currently delivering Access for All, which supports 150 schemes at franchised stations delivering accessible benefits to 234 stations across England, Wales, and Scotland. We have also put together a station tool kit which is a go-to guide for

anyone connected with stations to find everything to do with stations.

Our aspiration for CP7 is to continue to make stations safe, secure, and sustainable places that are customer and community focussed, reflecting local needs and opportunities and improving accessibility to and from the railway.

People

The System Operator Human Resources team has supported improvements across the function. For example, we're promoting wellbeing through mental health training for line managers and challenging our understanding of diversity and inclusion through activities such as reverse mentoring and blind resumé screening.

This year, we were able to acknowledge the achievements of our colleagues through the introduction of a local rewards and recognition programme that celebrates the exceptional achievements that System Operator people have delivered during the year.

We've seen the addition of a new cohort of System Operator graduates and young people have had the opportunity to land valuable work placements through the government's Kickstart programme.

Regulatory issues

We've continued to collaborate across the industry to develop and publish the timetable with a joint objective to enable the public to book with confidence 12 weeks before travel. This has not always been possible, largely due to the impacts of the pandemic and needing to maintain the overall safety and performance of the railway. Our internal working timetables have been subject to changes and we have worked hard to publish the timetable eight weeks in advance, giving the travelling public and freight users less time to plan their journeys. We'll continue to work with funders and industry partners to improve the timescales in the next year.

We've made improvements in better understanding the capacity of the network to run trains. Our analysis informs decisions earlier in the process, for example helping us to exclude non-viable timetable options early on, avoiding wasted effort. We've also begun to evaluate operational

simulations, which will aid the development of timetables so we can better understand the impact of changes on capacity and performance.

Description of one success

In 2021 the Covid-19 pandemic continued to impact the country, significantly affecting passenger demand for rail travel. Building on the lessons we learned the previous year we worked collaboratively with the industry to implement more frequent timetable changes, reacting to the ever-evolving situation, to build the best timetable for our passengers and freight users.

We successfully delivered three Working Timetable changes instead of the planned two, helping to progressively reintroduce services as passenger demand returned in May, September, and December. We were also able to respond well to the emergence of the Omicron variant of Covid-19 in late December, which led to many operators experiencing acute resource shortages and the need for further timetable changes at short notice in January and February to reduce services accordingly.

The revised timetable provided opportunities for us to successfully promote additional freight paths, especially in the run up to Christmas.

One key improvement

The Timetable Change Assurance team (or Industry Programme Management Office) has continued to strengthen processes and oversight in the provision of independent assurance associated with timetable change.

The timing of the East Coast Mainline and Crossrail timetable change are good examples of where the assurance process has effectively identified material risk and influenced stakeholder and funder decisions to avoid impacting passengers and freight users.

While the assurance team can identify and escalate risks across the industry, it doesn't always lead to early or effective decision-making, which remains an opportunity for further improvement.

Year ahead 2022/23

As System Operator, we are at the operational heart of the railway. We operate the invisible system that keeps our passengers and freight flowing seamlessly and the whole railway performing safely and reliably.

We'll continue to explore how our customers perceive our performance and how we can provide an improved experience in the years to come. Our vision for the future is to improve the industry's capabilities and to enable a railway that can plan reliably and deliver cost effectively.

We'll do this by providing superior analysis and consulting, producing high quality timetables, and managing relationships with the broader industry to better serve passengers and freight users.

TECHNICAL AUTHORITY

SCORECARD OUTTURN 2021/2022: 52.17%

The Technical Authority was established during 2020 as a centre of expertise, accountable for setting technical guidance for Network Rail and the railway system. We cover safety, health and wellbeing, environment and sustainable development, security, engineering, technology, capability, compliance and incident investigations.

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We find creative ways to apply technology for a better railway, cut red tape and provide strong competence and assurance regimes to manage the railway effectively. To help us achieve that, we're closely connected with UK and international institutions and businesses from the Railway Safety Standards Board (RSSB) to the International Union of Railways (UIC).

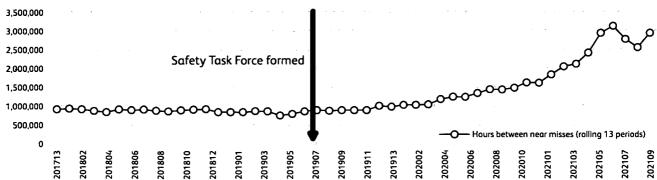
High profile activities include tackling safety, health and wellbeing risks to our workforce, reducing the emissions of the railway and adapting to climate change. Our research, development and innovation (RD and I) with technology underpins improvements in these areas and is also critical to drive a more cost-efficient railway. This year we've started to track benefits from projects under our research and development portfolio, driving a focus on deployment and helping customers benefit from innovation.

Safety

Network Rail launched the Safety Framework following the tragic deaths of railway workers at Margam (2019), Roade (2020), Eastleigh (2020) and Surbiton (2021). Every Region and Function has developed their own plan; and every Region and Function has evaluated their performance using the Risk Management Maturity Model to evaluate our strengths and weaknesses to inform local safety plans.

Over the last two years, Network Rail has made a considerable effort to significantly reduce the use of 'lookouts' for trackside working. We have simultaneously achieved a significant reduction in near misses between track workers and trains while having very little impact on customers. Since forming the safety taskforce in September 2019: We are now working 3,000,000 hours between Near Miss incidents compared with 750,000 hours; and there has been a 98 per cent reduction in unassisted lookout working.





A key focus with the Home Safe Plan is risk assessment and we are systemising our risk assessment to support compliance against our corporate standard and consistency through the Risk Assessment Management System. We have constantly assessed and refined how we manage our Covid-19 controls to keep our staff healthy and systems operating during the pandemic. We have developed and released a risk assessment course to further support our level crossing managers.

The health of our staff has been a key factor and we have developed and used improved approaches for good mental wellbeing, set out to enhance our drug and alcohol control framework and enhance how medicals are delivered to improve the health of our staff.

Our periodic safety, health and environment plan reports our health and safety results in detail. Along with the delivery of 9,581 health, safety and wellbeing medicals, our annual health surveillance programme delivered a compliance of 96.6 per cent against the background of Covid-19. Our drug and alcohol programme continues to highlight cause for concern, identifying 38 cases this year: 14 for cause positives, seven periodic, one post-incident, nine pre-appointment and seven random.

We record our Health and Wellbeing Index (HWI) to underpin future enhancements using the tool developed by rail industry stakeholders with health economists and based on established health economics valuations. Indications show the four largest components of the Network Rail HWI will be the number of sickness absence instances related to mental health conditions, the number of cases of cardiovascular conditions, the number of sickness absence days, and the number of cases of respiratory conditions.

We have continued work to tackle trespass through the You vs. Train campaign, as part of the trespass improvement programme which has brought together and co-ordinated a wide range of stakeholders to tackle railway trespass. We will shortly complete trials on technology to support monitoring at the end and edge of platforms to tackle opportunities for trespass.

We launched a campaign targeting situational awareness, recognising that we put ourselves at risk when we're distracted from paying attention to our surroundings: 'Beware the Bubble'. Public safety at level crossings remains a particular priority. A range of new equipment has been completed under the RD and

I Portfolio to increase and improve options for public railway crossings, including: more cost-effective solutions to upgrade crossings; footbridges that offer a more cost-effective solution to grade-separate footpath crossings; and retrofit equipment to discourage and reduce vehicles attempting to negotiate half-barrier crossings when trains are approaching.

Having developed a new approach to assess whether the benefit from options to improve a crossing is grossly disproportionate to the cost and applied to projects, including the Northumberland Line upgrade and also as part of the Ely Area Capacity Enhancement project, we have now published a guide to bring this approach into standard practice.

We have made substantial progress toward answering the recommendations made by Lord Mair and Dame Slingo in the aftermath of the Carmont tragedy in August 2020. Updated national policies and a new drainage technical strategy give regional asset engineering teams clearer guidance and support for managing their earthworks, drainage systems and lineside assets. Collaborative RD and I investment with the European Space Agency is developing a cutting-edge approach to monitoring changes outside the rail boundary which may present hazards to trains. Close collaboration between asset management and operational colleagues has delivered immediate passenger safety improvements including the Convective Alert Tool, which informs in near-real time where extreme rainfall may pose a risk to underpin quick effective decisions.

Train service delivery

Applying innovation to better manage train performance, we have deployed a Service Recovery tool in Central Route and are scaling up for use across North West & Central Region by Summer 2022. It reduces delay minutes; improves efficient use of management and performance staff time by easily identifying incidents that should be investigated first; and provides learning that leads to standardised service recovery procedures, to improve passenger experience through clearer communication and messaging during and after incidents.

Switches and crossings, allowing trains to move between tracks, present a vulnerable part of the track system prone to service-affecting failures and generating substantial maintenance and renewal costs. Over recent years we

have developed more durable switches and crossings and this year reached the point of proving a version, which is already showing dramatically reduced failure rates and reduced maintenance and is earmarked to be used for half our planned renewals. This becomes ever more important with the expected increase in freight traffic post-pandemic.

We continue to focus on creating an 'intelligent infrastructure', developing new technologies to sense, monitor and analyse equipment. This reduces failures and enables maintenance teams to take a preventative rather than reactive approach, also driving out cost as a key enabler for modernising maintenance and reducing manual pedestrian inspections. A substantial suite of digitalisations is now complete.

Having developed a decision support tool in 2020/21 to help electrification engineers reduce the amount of time spent on track and physical work undertaken, the tool has been further developed for use at scale this year, ready for national roll out in 2022. It is expected to offer up to £10m a year in benefits.

Efficiencies

The costs of managing infrastructure is a major part of Network Rail spend. Technical Authority guides, and identifies opportunities for, regions to increase the costeffective life of assets and reduce demand for future renewals. We're supporting planning for Control Period 7 through whole life cost models, learning from across Network Rail, internationally and the results of our research and development.

Since introducing the assessment of financial impacts for standards in 2019 we have identified 86 changes to standards, generating around £100m in opportunities for savings. Challenges to standards continue to be received and reviewed by a cross-industry team. In June 2020 we made standards available free of charge as part of our wider efforts to support small and medium-sized (SME) companies. This is a significant contributor to Network Rail's SME action plan and the efficiency work being driven under the Rail Investment Centre of Excellence.

We continue to innovate new solutions. A solution recently developed and piloted with Scotland region is building 'armour', enabling dilapidated lineside buildings to be brought to a safe and serviceable condition, offering high environmental performance and addressing fire risk from

water leakage. This can be achieved in a fifth of the time and at a tenth of the cost of a conventional rebuild.

Innovations to drive cost from overhead line electrification such as Voltage Controlled Clearance reported last year, saving £40m by avoiding bridge reconstruction in Cardiff - are being included in scheme proposals. It's estimated that these new approaches could save several hundreds of millions for Scotland's Railway alone.

Longer term efficiencies are also being progressed. Our greatest renewals challenge over the next 15 years is to replace signalling that has reached the end of its life. The Target 190+ programme takes a broad view of the challenge and works with industry to halve the cost of renewing our signalling from Control Period 8. We achieved a major milestone this year with publication of a set of specification documents for digital command, control and signalling systems.

Much of our research and development is done in partnership with other organisations, realising over £57m of matched funding so far in Control Period 6, strengthening capability in our supply chain and promoting industrial growth. One source of funding to support innovation led by suppliers is the First of a Kind competition funded by the Department for Transport and managed by Innovate UK. We've worked with the industry to steer this competition to meet Network Rail and wider rail sector challenges.

Customers and communities

We've made significant progress to improve the quality of footbridges and stations, key parts of the railway for customers and communities. Design and prototyping is now complete for our AVA footbridge and works have begun to install the first bridge at the Rail Innovation and Development Centre at Melton Mowbray. It brings a new approach to the way we make the railway accessible for all by using modern manufacturing methods for construction for an expected quarter cost reduction, halving time on site and halving whole life carbon.

AVA is part of the Transport Infrastructure Efficiency Strategy 'living labs' programme, which aims to achieve collaboration for efficiency. As well as applications across other parts of the DfT family, interest is growing from new markets including Australia and the USA.

To complement our 2020 environmental sustainability strategy, we've developed a framework to maximise the social and economic benefits that the railway brings to the economy of Great Britain. The Rough Sleeping on Rail Partnership, to support Routes out of Homelessness (a partnership with five national charities), has equipped staff at stations to understand the issues faced by rough sleepers, have confidence to approach them and signpost to tailored support, including referral to Shelter.

Looking forward, we've produced a guidance document "Addressing rough sleeping at stations" to help ensure we're contributing to managing homelessness across the railway.

This also provides a focus for colleagues volunteering in community engagement and fundraising to tackle homelessness and brighten the future for vulnerable people.

People

We target support for regions to develop our people as the foundation for building capability. This year included environmental sustainability training to build awareness of the ambitions in our environmental strategy and changing the way we work to achieve decarbonisation; and rolling out a toolkit and processes to accelerate innovation to help regions address changes locally with technology.

A key priority for us remains to look after the safety, health and wellbeing of our workforce and drive-up diversity and inclusion. Building on our celebration of the role that women play in engineering and innovation, we have this year worked with the Railway Industry Association to profile Dannii Stephenson, a project manager within Technical Authority.

A substantial gap remains against our ambitious internal short-term (2024) diversity targets. However, we have scaled up activity to create widespread ownership for a more inclusive environment, increasing the network of diversity and inclusion champions.

Success and opportunity

Innovation is fundamental to reforming rail. Recognising the importance of bringing everyone into innovation, we launched our innovation journey at the UK Rail Research and Innovation Network 'Innovation Hub' in Doncaster. This provides our first permanent physical presence at a rail innovation facility where we set out the journey for innovation in rail and engage visitors with an interactive explorer tool for RD and I, to help suppliers contribute to future success.

For product acceptance, we monitor and report the percentage of certificates issued within 40 days from the time a compliant application is received. 2021/22 is the fifth year we have reported against this measure and now the third year where we have issued at least 80 per cent of certificates within the 40-day target. To drive a transparent and efficient process we have established a system to support product approval that goes live in April 2022.

Year ahead 2022/23

Our focus for 2022 will prepare for rail reform, supporting modernisation of maintenance and reinforcing safety culture through the safety framework while continuing to implement changes in line with our Carmont action plan. We will enable our regions to extend the life of assets, achieve efficiencies from changes to standards, and drive RD and I to benefit from Britain's leading-edge universities being showcased in June with the UK's hosting of the World Congress on Rail Research. This will be further underpinned as we establish arrangements to support the facilities to test and demonstrate technology at the Global Centre for Railway Excellence in South Wales. We will develop the case for opportunities to use a control technology called Radio Based Limited Supervision to accelerate cost and safety benefits from signalling.

OUR PEOPLE

NETWORK RAIL



42,181 employees

18.77%

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81.23 %

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9.46 % black, Asian and minority ethnic 81.32 % white 7.68 % unknown 1.53% prefer not to share



Of those who shared their data 5.19 % indicated that they were LGBT+



3.24 % disabled 65.41 % non-disabled 29.88 % not known 1.48% prefer not to say

MANAGEMENT NETWORK RAIL

(EXCLUDING BAND 4)



12,628 employees



29.95 %

MINIMI



70.05 %

MAKKAKKAK



11.74% black, Asian and minority ethnic 83.05% white 3.12% unknown 2.1% prefer not to share



Of those who shared their data

6.18 % indicated that they were LGBT+



3.88 % disabled 72.52% non-disabled 21.61 % not known 2% prefer not to say

Fit for the future

2021/22 saw us continuing to support our people through the issues of living and working in a pandemic. However we were also responding to the complexity and financial challenges we face as an industry such as the need to modernise for us to be more efficient and the need to work together - including with our trade unions - to drive change for a sustainable future for the railway. We have also been ensuring we're set up to deliver the Williams-Shapps plan rail commitments in readiness for Great British Railways, through a whole-system thinking approach. The introducing of dynamic ways of working means we are improving working practices both safely and efficiently, as well as reducing our operational costs. This enables us to build the capability of our people and organisation, driving improvement from a whole-system perspective for the future of the wider rail industry.

We're striving to be a simplified, modern, and flexible organisation that is safe, high performing, efficient, sustainable, and truly service-led, working closely with the Great British Railway Transition Team. This needs us to create a workplace that transforms the value of work, making it better, safer, and more efficient. Our people strategy majors on creating better work. Better jobs lead to better lives and help to bring a culture that encourages collaboration, connected leaders and a sense of belonging; one where everyone feels valued, safe, and able to release their potential.

Our guiding people objective is for our employees to be empowered to do their best work, supported by the best leadership they've ever had. This enables us to deliver great service for the benefit of our passengers. Our people are fundamental to us achieving this.

We recognise the significant impact the pandemic has had on our industry. We need to save many millions of pounds, and unfortunately that means some difficult decisions have had to be made to reduce our costs. In view of this we created a Modernisation Programme for Network Rail. Along with our industry colleagues, we also created the Rail Industry Recovery Group and signed an Enabling Framework Agreement.

Our initial focus in modernisation was management. Complexity has driven up the cost of our management with outdated working practices. Therefore significant work is underway with our colleagues and the trade unions to simplify many of our management processes. We also launched an industry-wide voluntary severance scheme, which has provided an opportunity for those in management roles to leave under a mutually agreed timescale. We've reduced the number of managers we employ and expect to have achieved £119m of ongoing savings from our modernising management programme.

The severance scheme was also extended to our nonmanagement roles in support functions, and we saw a further 115 staff leave the organisation under mutual agreement.

Despite the severance schemes, there is still a need to further reduce the number of people in the organisation through redundancies. Organisational change consultations for some regional and functional management roles began in February 2022 with our trade unions. To support our people affected by this, we launched a tailored redeployment service and an industry-wide jobs site for people at risk of redundancy. A career conversion programme has been designed and will be launched in April 2022, which encourages people to retrain in skills areas where we have shortages.

Our future success is dependent on having instinctive industry leadership and a high quality, appropriately trained, inclusive and diverse workforce. This means people with better, safer, value for money jobs that put passengers first and make them proud to work for the railway.

Our journey has started.

Making work better, safer, and better value

As part of our modernisation plans there has been a significant focus on maintenance, which is the biggest single area of operational spend within Network Rail. While we have introduced new technology to improve safety and reliability, we've also collaboratively undertaken trials across six delivery units, which have improved the teams' ability to deliver maintenance more confidently, effectively, efficiently, and safely. Results are being shared with all maintenance delivery units for the approach to be rolled out sequentially.

We have been unable to change the way we deploy our maintenance people for decades. However, this is fundamental to helping us build a sustainable future for the railway. We have been in discussions with trade unions and colleagues through joint working groups to undertake co-analysis of the problems we face, to better understand how we can deploy our people and give them broader skills. In March 2022, Network Rail moved into formal talks on the changes.

Building our culture

Our company values create the foundation from which our culture builds. It's important to us that our people are representative of the communities that we serve; that they feel safe and cared for; and that they are empowered to act and deliver their best work. With teamwork and empowerment, we've been able to progress many areas that strengthen and improve our culture and work continues to address this through the whole-system thinking approach of our change programmes, in order to drive systemic change.

We have developed an award-winning talent strategy that builds on the principle of releasing the potential in everyone while also identifying successors to critical roles and ensuring we have a robust talent pipeline. The retention and development of these people are monitored closely.

During 2021/22, diversity and inclusion remained a priority in Network Rail. We continued to become a more diverse organisation, better placed to provide a more inclusive and accessible railway for our passengers.

Our executive leadership team and senior leaders across the business are committed to improving our culture in relation to diversity and inclusion. Many are participating in reverse mentoring relationships. Diversity and inclusion measures are on business functional and regional scorecards as well as national scorecards. The diversity of the talent bench strength is monitored and reported closely.

We launched a seventh employee network, 'Family Focus', and our network membership now totals over 7,000 colleagues. Each employee network is sponsored by, and receives committed support from, a member of the executive committee. We are also forming a support group for those affected by conflict in the world and those who are helping refugees.

Our Gender Matters project has a number of activities helping us increase female representation both at operational and leadership levels. Removing barriers for women in track roles (including improved facilities at depots and on site) better personal protective equipment, and better awareness of non-inclusive behaviours are helping to improve culture. In leadership roles we now have 30 per cent of our bands 1-4 management grades filled by women, which is an important milestone.

We made significant strides on our Race Matters project during 2021/22, with greater representation of black, Asian and minority ethnic colleagues in management roles and overall. We launched a company-wide stand down programme, 'Stand up for Race Equality'. This has involved everyone in the organisation having a discussion with their team around filmed scenarios based on real colleagues' experiences of racist behaviours impacting on physical and psychological safety. This has been industry-leading and has now been adopted in the supply chain and by other rail partners.

The Disability Matters programme has seen us improving our knowledge in HR and amongst line managers when it comes to providing reasonable adjustments for our disabled employees. As a disability confident leader, we guarantee interviews to disabled applicants if they meet the job criteria.

Throughout the year we had a significant increase in people who are disabled or from the LGBT+ community sharing their data with us. This is an indicator of improving inclusion and enables us to better support our people and also undertake meaningful pay gap analysis.

We again published our gender pay gap report and for the third year we voluntarily published an ethnicity pay gap

report. Both these have increased to 12.9 per cent and 6.7 per cent respectively and we are reviewing the implications for our reward strategy.

For the first time we published a disability pay gap report: a real positive, industry-leading milestone.

We recognise that the big strides we have made in the diversity of our apprentice and graduate schemes could impact pay gaps; although longer term, as the apprentices and graduates progress through the organisation, it will help us close the pay gaps. The number of female new starters has increased, which impacts pay gaps in the short term based on the level they enter the business.

Developing and sustaining our people for the future

Global and industry challenges have had a significant impact on our people. It's important that we help to manage and cope during this period of change and uncertainty. We still need to attract, retain, and develop our people in ways that will sustain them for the future.

We continued to get to know our talent better and have identified great, diverse people at various levels within Network Rail. We have clear sight of successors for roles, along with those who have high potential that is critical to the continued, safe running of the railway. Career development for all our people continues with career conversations, access to development resources and the provision of interactive career ladders.

We welcomed 54 prospective undergraduate and post graduate high potential leaders, who are in progress of completing part of an Accelerated Leaders Programme. Our overall leadership development strategy includes a fresh focus on systemic thinking to address industry problems and this will lead to the introduction of new high potential programmes planned for 2022/23, involving participants from Network Rail and the wider industry.

Our overall approach to talent development was recognised as leading-edge, reflected in being awarded the Best Talent Management Initiative at the 2021 Chartered Institute of Personnel and Development awards ceremony.

Due to the Covid 19 pandemic and further closure of schools in the last academic year we continued with a virtual delivery plan for our science, technology, engineering, and maths (STEM) programmes which enabled us to be flexible to the changing circumstances. We were therefore proud to have delivered 10 national STEM programmes which reached thousands of young people, via virtual events, and where we could, engaging directly with students. We also participated in the Kickstart scheme, providing opportunities for 16-24 year olds to join our organisation.

During the pandemic, many of our people adjusted their routines to work in a smarter, more efficient way. We updated our Covid-19 guidance and support for line managers and employees when changes in legislation occurred, engaging with our trade unions to ensure that our safety standards were maintained. We developed a return to the workplace strategy to reflect changes, which is underpinned with a Wellbeing and Support pack for managers and staff. This clearly highlights tools and support available.

Recognising and continuing the great work done in 2020 on how our people are feeling about working at Network Rail, we gave colleagues two opportunities to share their thoughts across 2021/22. A pulse survey in June acted as a quick temperature check on key priorities, themes, and engagement across the whole business.

The full Your Voice Survey (which is run every two years) was launched in September. A total of 43,184 colleagues were invited to take part and over 23,000 responded. The survey returned an engagement score of 57 per cent across the organisation. This is down two points from the full survey in 2019. The pressure of the continuing Covid-19 pandemic and uncertainty around future changes to the rail industry could all be contributing factors, but the reduction in engagement score has been recognised as an opportunity to understand the feedback and what can be done to build on it.

It was positive to see the highest scoring areas were Diversity and Inclusion (75 per cent) and Your Manager (72 per cent), giving us confidence that we are creating and offering colleagues a diverse and inclusive place to work, where differences are accepted and celebrated. We're committed to driving improvements and have launched an action planning framework that supports line managers to build on the results and find ways of making changes.

The benefit of running these surveys has been recognised across the executive leadership team and there is a strategy in place to continue to listen to our employees through various channels, acting on feedback to keep engagement a priority across Network Rail.

We developed the Management Essentials portal, providing all new managers with 24/7 bite-sized learning, covering user-led development needs. The site has proved extremely popular, with over 134,789 visits.

Self-directed leadership and employee development webinars have also been developed to support the wellbeing and mental health of all employees, covering a wide range of topics. Since the pandemic, we have successfully delivered 119 interactive webinars for 3,447 participants and 8,070 employees have registered for additional events up to end of October 2021.

Despite the pandemic we saw a healthy number of applicants for our current graduate, industrial placement, and apprenticeship programmes, for which we ran a virtual recruitment process – keeping everyone safe.

In September we welcomed 200 graduates and industrial placement students across a range of programmes including engineering, operations, finance, IT, property and project management. We also welcomed 178 apprentices across two intakes in spring and autumn 2021. Of the apprentices who completed their programme this year, not all have been placed in technician roles. This is due to several factors such as high volumes in the cohorts who started three years ago, the process for securing positions meaning that apprentices are not automatically placed into vacancies, and the impact of Covid-19 and modernisation on the number of roles available. Work is underway to enable recommendations to be made to address the issue.

We're looking to welcome 68 apprentices on our spring 2022 intake and recruitment is underway for our September 2022 graduate and apprentice schemes.

Although the intakes this year were smaller than usual, they were still of a sizeable number and represent our continued commitment to our Early Careers programmes and their value in resourcing the future of the industry.

Seven of our colleagues were recognised in the Queen's New Year and Birthday honours lists for their outstanding contribution to our industry, to society and to the communities that they live in, which we are immensely proud of. They clearly demonstrate our values, and we recognise the benefit they bring to our organisation from their outstanding commitment.

ENVIRONMENTAL SUSTAINABILITY

Rail is already the most sustainable form of mass transport, but we have ambitions to become cleaner and greener. It has been almost two years since we launched our 30year Environmental Sustainability Strategy and we now have clear plans under way to achieve our four core priorities: to attain a low emissions railway; to make the railway more resilient to the impacts of climate change; to improve the biodiversity on our estate; and to reduce waste and use natural resources more responsibly. These are complemented by the priorities of our new Network Rail Social Value Framework: to provide economic prosperity; to promote equal opportunity; to support physical and mental wellbeing; and to help the railway and surrounding communities recover from the impacts of Covid-19.



We were able to showcase our ambitions during COP26 in Glasgow with successful events running on alternative energy trains, attracting attention from HRH Prince Charles and Prime Minister Boris Johnson. This demonstrates the key role rail needs to play to address the global climate emergency and to support delivery of governmental and global sustainability goals.

Reducing our emissions

While we recognise that we are already a low emissions form of mass transport, we are committed to do more to support the UK Government's net zero emissions target by 2050 and the Scottish Government's net zero emissions target by 2045.

Transition to electric vehicles

We have a target to transition 25 per cent of our car fleet to Ultra Low Emission Vehicles (ULEVs) by the end of 2022. This equates to 354 cars. This is part of our journey towards transitioning our fleet of cars and small vans (approximately 9,000 vehicles) to fully electric vehicles by 2027. We are well on the way to meeting the 2022 target – 260 of our cars are now ULEVs, and an additional 27 zero emission vehicles and 66 ULEVs are on order for delivery by the end of 2022.

Energy and emissions management

Progress implementing our science-based emissions targets continues through our Decarbonisation Programme. We're currently using 8 per cent less energy and emitting 18 per cent less carbon than we were at the end of Control Period 5.

We've been working towards procuring our first Corporate Power Purchase Agreement for our non-traction energy. Once complete this will provide further progress towards net zero and support emissions reduction in Control Period 7.

We've also begun work to understand how we can move to using renewable energy sources for our traction power. This work is being developed as an early initiative for Great British Railways. Once rolled out, this initiative has the potential to deliver significant emissions and financial benefits.

We continue to install Electric Vehicle Charging Infrastructure across our managed stations estate, with over 400 charge points now in place across the country. As passengers return to the railway, we anticipate the increased demand for these facilities and will continue to install further charging points.

Work to achieve our 18 per cent energy reduction target by 2024 continues with the implementation of findings from more than 120 energy audits. These audits identified potential savings of £3.8m and the equivalent of more than 6,000 tonnes of carbon dioxide.

The Decarbonisation Programme also completed work on developing an award-winning mapping tool that allows regions to identify opportunities for the use of renewable energy technologies. This builds on our Renewable Energy Strategy, which identified locations on our estate where renewable energy can be fed into our power network.

We've begun to use new low carbon components during platform refurbishments. These components have up to 68 per cent fewer emissions than conventional components. We've also used the carbon management standard, PAS 2080, to complete a whole life carbon study of signalling. This demonstrates that future digital signalling solutions have at least a 40 per cent lower carbon impact than existing conventional signalling. The output of this work has fed directly into the East Coast Digital Programme. We're now applying the same level of carbon assessment to other key railway assets. We're also starting to assess and report on whole life carbon on major infrastructure projects.

Number of suppliers committed: 106 Number of suppliers' targets set: 110

A large element of our emissions footprint comes from our supply chain. Reducing the emissions from what we buy will go a long way to helping us achieve our net zero targets. We have a target for 75 per cent of our suppliers, by emissions, to have set their own Science Based Emissions Targets by 2025. So far, more than 67 per cent of our suppliers have committed or set Science Based Emissions Targets.

The table below describes Network Rail's energy (electricity, gas and fuel) consumption and associated Scope 1 & Scope 2 carbon emissions to report under the Streamlined Energy and Carbon Reporting scheme. Although, we contract traction electricity for the majority of the GB rail industry, this is sold to the train operators and classed as scope 3 emissions. Scope 3 emissions is a voluntary requirement and has not been included in the report for this year.

Streamlined Energy & Carbon Reporting 2021/22

Energy consumption used to calculate emissions	Amount	Units
Total electricity used	466,691,281	kWh
Total gas used	54,287,959	kWh
Total fuel for company fleet	267,395,520	kWh

Emissions breakdown – conversion factor kgCO2e

Scope	Emission category	Amount	Units	Conversion factor
Scope 1	Emissions from combustion of gas	9,943.4	tCO2e	0.18316 natural gas
Scope 1	Emissions from combustion of fuel transport purposes	63,967.6	tCO2e	2.19352 unleaded 2.51233 diesel 1.55509 LPG
Scope 2	Emissions from purchased electricity	99,092.6	tCO2e	0.21233 UK Grid mix
	Total gross CO2e based on the above	173,003.6	tCO2e	

Intensity Metrics		Intensity ratio
Number of employees	44,010	3.93 tCO2e / employee
Passenger kilometres (billions km)	39.113	4,432 tCO2e / bn passenger km

Methodology

We have used the EMA SECR tool which follows the GHG Reporting Protocol, populated with invoiced consumption and metered data.

Principal energy efficiency measures (PEEMs)

In 2021/22 our Regions have further developed their strategies to meet energy and carbon targets and employed new staff to deliver the strategies.

We are carrying out a rolling programme of installation of low power air-cooling systems at 315 GSM-R cabins to reduce their energy consumption, with 159 sites completed this year. We have also carried out energy & carbon audits at more than 50 sites and replaced 24 high power lights with LEDs.

Improving air quality

Air quality forms a major part of our Environmental Sustainability Strategy and our ambition is to continually improve it so that our passengers, neighbours, and employees breathe healthier air.

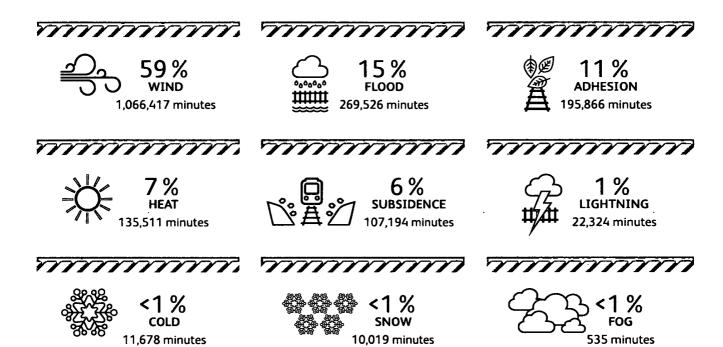
We've listened to feedback that air quality in some of our managed stations could be better and have committed to air quality monitoring across our managed locations to establish baselines. From these baselines we'll develop plans to reduce harmful levels of pollutants, in locations where they are identified, by at least 25 per cent by 2030.

We've published the first rail industry standard in the UK to manage diesel engine exhaust emissions within our stations and depots. The aim of the standard is to see improvements for our own employees, customers, and other rail stakeholders.

We've also been trialling the use of state-of-the-art air quality measurement equipment on our network, gathering real time data in Cricklewood, North London. This enabled us to measure the impact of site procedures before, during, and after changes, to understand the benefits on local air quality. Following the successful trial, we're investigating further opportunities to deploy this technology.

A reliable railway that is resilient to climate change

The industry continues to be affected by extreme weather events with storms Dudley, Eunice and Franklin significantly impacting services across the network in early 2022. The diagram below provides an overview of the impact of different weather-related events and consequent delay minutes during the financial year 2021/22.



Our response to the tragic incident at Carmont in 2020 is still at the forefront of how we improve the network's resilience. The Rail Accident Investigation Branch (RAIB) investigation report into the incident, published in March 2022, made cross-industry recommendations to be acted upon.

We created the Weather Risk Task Force (WRTF) to improve our understanding of our asset vulnerabilities to weather events and impacts and to review our operational response processes to them. The WRTF is also implementing recommendations from the Lord Robert Mair and Dame Julia Slingo Task Forces.

Our commitment to, and progress on, managing the impacts of weather and climate change on the railway is outlined in our Third Adaptation Report to the Department for Environment, Food and Rural Affairs (DEFRA) published in December 2021. This outlines the measures taken by Network Rail over the last five years and those we have planned with key activities in the last year being:

- continued delivery of our 10-year 2020 Seasonal
 Weather Management Strategy to minimise the impact
 of seasonal weather, implement key route strategies to
 manage weather impacts and to avoid or manage 'out of
 control' events
- delivery of the actions in our Control Period 6 Route WRCCA Plans in the Regions, such as programmes of drainage renewal and refurbishment to reduce the risk of flooding, slope stabilisation and renewal of earthworks to reduce the risk of landslips, and enhanced maintenance

- of vulnerable track locations and overhead line equipment systems to combat high temperature impacts
- continued engagement with Government, regulators, rail, transport, and wider infrastructure sectors to share knowledge, collaborate on research, and improve action and co-ordination on adapting to the changing climate.

Other references to actions related to weather and climate change can be found throughout this document.

Our good work on planning for climate change adaptation has been recognised by the Climate Change Committee in their 2021 Progress Report.

Finally, we've reviewed our readiness against the Taskforce for Climate Related Financial Disclosures (TCFD). More information can be found in a new section of this Annual Report on page 83.

Biodiversity

The network we manage is a nationally important corridor and habitat for many plants and animals. We're also responsible for over 200 sites of special scientific interest (SSSI). Whilst we must carry out management of our lineside vegetation for maintenance and safety reasons, it is important we look after the plants and animals that live on our land when doing so.

The work to address the recommendations placed on Network Rail through the Varley Review (2018) has continued, with significant progress made. As a result, we are well positioned to achieve our strategic target to protect, maintain and enhance biodiversity.

We've published design guides that support the business to make better informed decisions on how to manage our land better for habitat management, creation, and transformation, as well as for the management of emissions. These guides have received positive feedback from other transport organisations such as Transport for London.

The satellite mapping completed last year to capture our habitat structure and understand the biodiversity on our network has been added to our mapping systems alongside other lineside management data. For the first time this enables joined-up decision making on how we manage our lineside, with data on both ecology and asset management available side-by-side.

The habitat trials we are carrying out on our Kent Route continue to harness learning about different management techniques in different railway environments. The high-level learning from our first trial sites is:

- cultural change to value nature our front-line colleagues have already started introducing different ways of cutting trees and installing bat and bird boxes
- theory versus practice while some of our initial trials were successful, applying the theory in a railway setting hasn't always been practical and as a result some of our initial trials would be too expensive to apply all over the railway
- rural versus urban we've looked at many rural locations, but with so much urban land next to the railway in Kent our next tranche of work is moving to the city
- improve, don't change the railway already has a lot of important habitats and improving their condition can be far more efficient than trying to create something new
- nature takes time habitats can take many years to establish, during which time the plants and animals living in them will change; the results we have today will look different as we go forward, but because we are recording it, we will learn from it

Circular economy and waste management

We continue to get better at managing our waste and materials. Reusing materials is one way to avoid waste and in 2021/22 Network Rail reused 819,888.87 tonnes. This is a 69 per cent increase on the previous year.

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819,888.87 prepared for reuse

This reuse of materials helped to support an overall reduction in the amount of waste generated, down 1 per cent compared to 2020/21. It's also led to a reduction in the amount of waste sent for recycling, down from 72 per cent in 2020/21 to 57 per cent in 2021/22. This also means that we have been able to reduce the proportion of our waste going to landfill as we head towards our ambition of zero waste to landfill.

Instead of buying and using products or materials and then either recycling or disposing of them when we have finished with them, we are beginning to think about what we do with them at the end of their useful life. This is called circular economy thinking.

We're supporting our steel tenders so that they better consider the lifecycle impact of our use of steel. Similarly, we've set up working groups to consider our use of concrete sleepers. This work is supplemented by partnerships with academic organisations such as Brunel University. We're also working to understand how we can better reuse ballast with improved cleaning and redistribution, as well as better definition and understanding of the specifications for these materials to enable reuse.

Social performance

Managing our social performance is about running a railway that is socially responsible, sustainable, accessible, and safe.

We've published our Network Rail Social Value Framework, which outlines how, in partnership with our supply chain, we add an overall positive value to society over and above the core purpose of the rail network. Within our framework we have four social value priorities which are outlined in the table on the next page.

Economic prosperity	Equal opportunity	Wellbeing
Working with our supply chains and partners we will develop people's skills and support educational attainment, providing opportunities for employment and for training. We'll enhance resilience and capacity of our supply chain.	Working with our supply chains and partners, we'll work towards an inclusive rail network and promote workforce diversity and inclusion.	Working with our supply chains and partners, we will promote commuity integration and enhance people's physical and mental wellbeing.
 No poverty No hunger Quality education Industry, innovation and infrastructure Responsible consumption and production 	5. Gender equality 8. Decent work and economic growth 10. Reduced inequalities	3. Good health and wellbeing 11. Sustainable cities and communities 16. Peace, justice and strong institutions

Network Rail is committed to helping achieve the United Nations Sustainable Development Goals. These priorities contribute to 11 of the 17 goals. Our Environmental Sustainability Strategy 2020-2050, and wider environmental plans, help us work towards the remaining six.

COVID-19 recovery

Working with our supply chains and partners, we'll help get passengers back onto the railway and help local communities recover from the impact of Covid-19.

Rail social value tool

Together with the Rail Safety and Standards Board (RSSB), we've led the creation of the Rail Social Value Tool. We can use the tool to forecast, monitor and evaluate the social value of projects. The tool is a game-changer in enabling us to understand our social impacts, helping us guide investment decisions and better demonstrate the benefits of rail.

Volunteering

Network Rail colleagues can take five days volunteer leave each year to support charities and community projects. In total our colleagues used just over 3,560 volunteer leave days in 2021/22.

Payroll giving

The average number of colleagues donating per period is 3,460. Their average donation is £13.20 per colleague per period.

Tackling homelessness

Our charitable programme for Control Period 6 is Routes out of Homelessness. We undertook, with charitable partner Shelter, one year of outreach services to support people at risk of rough sleeping around Birmingham New Street and Manchester Piccadilly stations. We supported a total of 289 people, of which 132 people moved off the streets

and into temporary accommodation and 13 people secured permanent accommodation. We've extended the service into a second year and have used lessons learned to share around our business and with rail industry partners.

Enabling our sustainability strategy

We've continued to work to improve and update our business processes so that sustainability is considered by every role in the business. We've worked to include sustainability in our procurement processes and have updated our templates for standards development and investment decisions to include sustainability.

In addition to this, a new universal sustainability competence has been launched across Network Rail to better understand our internal awareness of sustainability. We've worked to engage people with this competence and support them to become more aware of Network Rail's Environment and Sustainability policies and strategies through online webinars and the launch of an Environment and Sustainability learning and development SharePoint site. We've also launched a Green Network, open to anyone who is interested in engaging and learning more about sustainability, to help us to achieve our sustainability ambitions.

TASK FORCE ON CLIMATE-RELATED FINANCIAL **DISCLOSURES**

Climate change is the biggest challenge of our time and a key public policy priority. Its impacts are a significant and increasing risk to our operations. The Rail Industry has a massive part to play in reducing Great Britain's carbon footprint.

Network Rail is committed to implementing the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). We commissioned an assessment of our readiness in November 2021. This

considered us to be 'TCFD ready' with well-developed processes in place for governing, managing and disclosing climate-related risks and opportunities. However the review noted that work was still necessary to achieve full alignment with the TCFD recommendations.

The table below provides an index of the TCFD recommendations currently reflected in the Annual Report and Accounts.

Disclosure requirement	Contents	Location
	GOVERNANCE	
	Description of processes and frequency by which the board and/or board committees are informed about climate-related issues	Environmental Sustainability Committee Report

Describe the board's oversight of climaterelated risks and opportunities

Describe how the board or board committees consider climaterelated issues when reviewing and quiding strategy, major plans of action, risk management policies, annual budgets, and business plans, as well as setting the organisation's performance objectives, monitoring implementation and performance, and overseeing major capital expenditures, acquisitions, and divestitures

Audit and Risk Committee Report (pages 130 to 135)

(pages 126 to 127)

Describe how the board monitors and oversees progress against goals and targets for addressing climate-related issues

Environmental Sustainability Committee Report (pages 126 to 127)

Disclosure requirement	Contents	Location
	GOVERNANCE	
	Describe how climate-related responsibilities are assigned to management or committees, how these are reported to the board or a committee of the board and whether those responsibilities include assessing and/or managing climate-related issues	Environmental Sustainability Committee Report (pages 126 to 127)
B) Describe management's role in assessing and managing climate- related risks and opportunities	Describe processes by which management is informed about climate-related issues	Strategic Report, strategic priority measured by environmental sustainability index. (pages 18 to 23)
	Describe how we monitor climate-related issues	Environmental Sustainability Committee Report (pages 126 to 127)
	STRATEGY	
A) Describe the climate- related risks and opportunities the organisation has identified over the short, medium and long term	A description of the processes used to determine which risks and opportunities could have a material financial impact on Network Rail	Strategic Report: Risk management (pages 87 to 98)
B) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy,	The impact on the businesses and strategy in products and services, supply chain and/or value chain, adaptation and mitigation activities, investment in research and development, operations (including types of operations and location of facilities)	Strategic Report: Risk management (pages 87 to 98)
	The impact on financial planning in the following areas: operating costs and revenues, capital expenditures and capital allocation, acquisitions or divestments, access to capital	Strategic Report: Risk management (pages 87 to 98)
and financial planning	How climate-related risks and opportunities are integrated into their (1) current decision making and (2) strategy formulation, including planning assumptions and objectives around climate change mitigation, adaptation, or opportunities	Strategic Report: Risk management (pages 87 to 98)

Disclosure requirement	Contents	Location		
	RISK MANAGEMENT			
A) Describe the organisation's processes for managing climate-related risks	Describe processes for managing climate-related risks, including how decisions to mitigate, transfer, accept, or control those risks are made	Strategic Report: Risk management (pages 87 to 98)		
B) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organisation's overall risk management	Describe how processes for identifying, assessing, and managing climate-related risks are integrated into overall risk management	Strategic Report: Risk management (pages 87 to 98)		
	METRICS AND TARGETS	-		
A) Disclose the metrics used by the organisation to assess climate-related risks	Key metrics used to measure and manage climate-related risks and opportunities. Organisations should consider including metrics on climate-related risks associated with water, energy, land use, and waste management where relevant and applicable	Environmental Sustainability (pages 77 to 82)		
and opportunities in line with its strategy and risk management process	Methodologies used to calculate or estimate climate-related metrics	Environmental Sustainability (pages 77 to 82)		
B) Disclose Scope 1, Scope	Scope 1 and Scope 2 GHG emissions and, if appropriate, Scope 3 GHG emissions (in line with GHG Protocol with methodologies explained) and the related risks	Environmental Sustainability (page 79)		
2, and, if appropriate, Scope 3 Green House Gas (GHG) emissions, and the related risks	Generally accepted industry specific GHG efficiency ratios.	Environmental Sustainability (page 79)		
C) Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets	Key climate-related targets such as those related to GHG emissions, water usage, energy usage, etc, in line with anticipated regulatory requirements or market constraints, or other goals. Other goals may include efficiency or financial goals, financial loss tolerances, avoided GHG emissions through the entire product life cycle, or net revenue goals for products and services designed for a lower carbon economy.	Environmental Sustainability (pages 77 to 82)		

Disclosure Contents Location requirement METRICS AND TARGETS In describing their targets, organisations should consider including Describe the targets the following: used by the organisation • whether the target is absolute, or intensity based Environmental to manage climate-• time frames over which the target applies Sustainability related risks and (pages 77 to 82) • base year from which progress is measured opportunities and • key performance indicators used to assess progress against performance against targets. targets

We've identified areas to work on to improve our processes and disclosure concerning the TCFD requirements. The key areas that we're considering over the next year include:

Assessing the resilience of Network Rail's strategy, taking into consideration different climate-related scenarios, including a 2°C warming

Considering methods to assess climate-related risks and opportunities, including considering internal carbon pricing metrics

RISK MANAGEMENT

"Risk management is about looking into the future. It's about identifying the things that could deflect us from, or support us with, implementing our strategy to run a safe, reliable, and efficient railway. It's about taking steps to stop threats happening and, if they do happen, to have plans ready to mitigate the consequences, and it's about taking the best advantage of opportunities". . Mark Bayley, chair of the audit and risk committee

At Network Rail, it's vital that we effectively manage any threats to keep running a safe and reliable railway for passengers and freight, and that we make the most of opportunities to improve people's experiences of using the railway or working with us. These threats and opportunities are collectively known as risks.

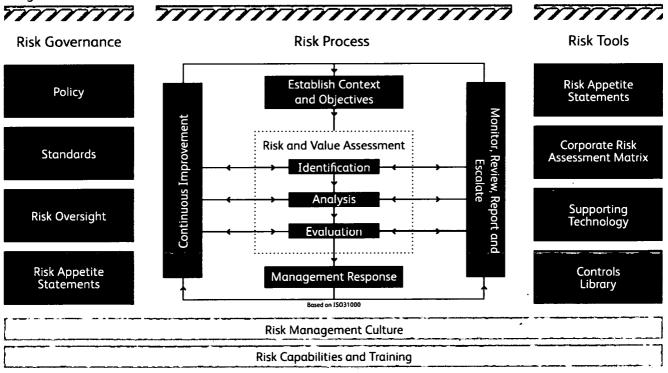
How we manage our risks

At the heart of our operating model is the Governance, Risk, Assurance, and Improvement (GRAI) framework underpinning the way we manage our business. The

framework supports a more joined-up conversation on how key risks are managed. Good risk management and assurance – i.e., checking that improvement actions are in place and that they're effective – strengthens our governance and generates improvements.

To help us identify, assess, and manage our risks, we use a framework based on the ISO 31000 international standard for managing risk, compliant with the Government's Orange Book risk guidance. The framework sets out consistent risk management requirements for all of Network Rail, as well as providing guidance and tools.

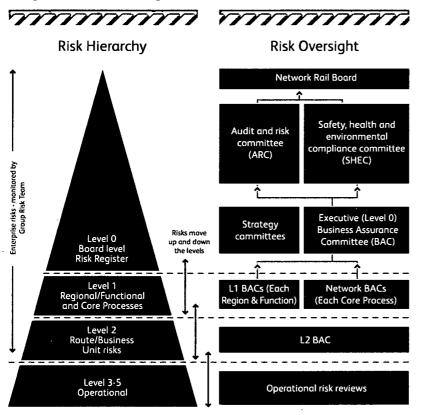
Diagram 1 - Risk framework



Risk oversight

Everyone at Network Rail has a role to play in identifying and managing risks, but the Board is ultimately accountable. Enterprise risks are monitored and governed at the appropriate level of Business Assurance Committee (BAC) or equivalent meeting, as set out in the GRAI framework.

Diagram 2 – Monitoring of different levels of risk



The Board delegates day-to-day monitoring to the audit and risk committee plus the safety, health, and environmental compliance committee for safety risks (see pages 116 for committee information).

Through the year, executive leadership have reviewed risks by strategic theme e.g. at the Level 0 BAC, and/or a relevant national strategy committee.

We update risk ratings, controls, their effectiveness, and improvement actions at least quarterly.

Each risk has one owner. Level zero risks are owned by an executive member.

Emerging risks

In our interconnected, changing world, it is getting harder to predict the future in time to make decisions and act early enough to deal with unexpected, disruptive events. Network Rail uses a combination of external information (such as the National Risk Register and the World Economic Forum's risk reports) and internal expertise to spot potential risks. We regularly review our risk profile to monitor the impact of external events, as we did in the case of Covid-19 and are now doing in relation to the Ukraine conflict.

In January 2022, the Board and executive leadership held a horizon-scanning exercise to consider the effect on Network Rail and the broader industry of five disruptive trends over the next three to five years: people, technology and data, shifting customer demands, energy transition, and political. The result is a watch list of emerging strategic risks which we continue to monitor.

The Ukraine conflict

We continue to update our risk profile as we understand the impact of the Ukraine conflict on Network Rail, for example on our supply chain and security risks. Diagram 3 shows the current outcomes of this exercise.

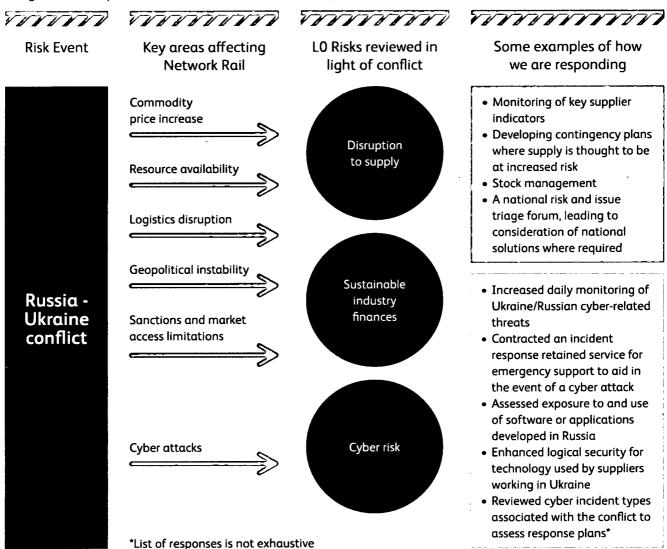


Diagram 3 – Impact of Ukraine conflict on our risk profile

Types of risks

All types of strategic risks are managed in accordance with our enterprise risk management framework, tailored as appropriate for specific risk types.

Safety is at the heart of everything we do, with our Safety Vision of 'Everyone home safe every day.' Risk awareness is part of the foundations of safety culture. All our staff, not just those on the front line, are encouraged to recognise, identify and act to reduce risk.

Workforce fatalities, the publication of the Carmont train accident report, and the accident near Salisbury all demonstrate there is more to do for us to reduce these risks (both with high impact scores and unsatisfactory control ratings) further.

A revised safety framework has been launched to strengthen our management of safety risks, with every region and function developing locally owned plans. These plans have been informed by assessments against the ORR's Risk

Management Maturity Model (RM3). This provides a tool for assessing an organisation's ability to successfully manage health and safety risks, helps identify areas for improvement and provides a benchmark for year-on-year comparison.

This year, for the first time, Network Rail has included a separate section covering climate change risks and how they are managed, taking into account the recommendations from the task force on climate-related financial disclosures (TCFD).

The two strategic threat risks related to climate change – Energy and Emissions, and Weather and Climate Change – are reported quarterly as part of risk oversight, in addition to the Environmental Sustainability and other relevant committees.

You can read more on energy and emissions management in the environmental sustainability and TCFD sections, starting on pages 77 and 83 respectively.

You can read more about safety and climate change related risks in the Principal Risks section starting on page 91.

How do we decide how much risk to take?

We use company-wide risk appetite statements, split into four levels – minimal, cautious, open, and eager – to outline how much risk the Board is willing to take for Network Rail to achieve its strategic goals:

Safety, health and environment

Minimal: We will seek to continually reduce safety, health, and environment risks across the system, reducing the likelihood of serious injury or loss of life to the public, passengers and workforce, or irreversible environmental damage.

Political and stakeholder

Open: We are willing to accept some negative exposure to support high risk strategies, including national media coverage, political or regulatory scrutiny (i.e. our stakeholders).

Financial

Open: Within our core business, we are willing to accept and invest in opportunities with inherent financial risks, where these are understood and proportionate to the expected benefits to passengers and freight users.

Outside of our core business, we are only willing to accept and invest in opportunities with moderate inherent risks, where these are understood, proportionate to the expected benefits and undertaken with necessary external approvals.

We are prepared to accept minimal risk of a breach of our agreed funding limits and will allocate funding to create buffers to mitigate the risk.

Train performance

Open: We are open to new approaches and will work across the industry to build back better following the pandemic.

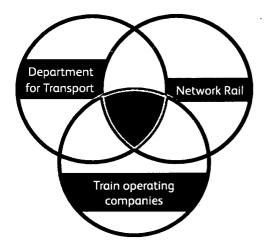
Innovation will be supported where the risks are understood and proportionate to the expected benefits.

Where risks are poorly understood, we will be cautious about making any decision that could negatively impact on train performance for passengers and freight users.

The statements are built into our process and are integral to our rating and reporting of risks. Each risk is assessed against all four of these appetite areas, and we report on whether they're in or out of appetite.

Putting passengers first across the industry

Network Rail can't manage risks to the railway on its own – many risks require cross-industry collaboration. For example, train service delivery is impacted not just by Network Rail's operations, but by the specification of passenger



services by funders, as well as fleet reliability and sufficient train crew within the train operator.

Rail reform recognises the need for a more integrated approach, and in advance of the transition to Great British Railways, we're working with the Department for Transport as well as train operating company colleagues to share our view of risk and improvement actions.

Government engagement

We engaged with the Department for Transport over the year to share risk perspectives, so that together we can better manage shared risks.

This has included the exchanging of risk information and our approach to risk management, with a view to greater collaboration on risks relevant to us both. We will continue to work collaboratively, including with devolved government transport teams in the coming year.

Industry risk management

Network Rail is an active participant in the Rail Safety and Standard Board (RSSB)'s risk industry forum, set up in 2021 and attended by a cross-section of risk leads from train operating companies and other rail-related organisations. This forum meets quarterly, with deep dives on our approaches to risk management. A draft industry risk list has been compiled and the next step is to start exploring specific risks from a cross industry perspective.

Network Rail has also collaborated with risk colleagues from London North Eastern Railway (LNER) to develop an industry view of a safety-related risk. A common definition was agreed, then causes, consequences and controls were identified. We discovered that most of our risk information was applicable to both organisations and identified gaps and areas for improvement and future collaboration.

Network Rail is now working with Northern Trains on the best way to cooperate on shared operational risks.

Continuous improvement

We regularly test our risk framework against approaches in other organisations, through our active participation in industry groups and checking it against best practice risk industry standards, including updates to the Orange Book. Key improvements undertaken in 2021 include simplified risk records and selection of a risk tool (ARM 2020) to reduce bureaucracy and better support the devolved organisation.

Better links are being made between assurance activities and key risks, using the GRAI framework. This approach provides us with a view from each of the three lines of defence (part of our operating model, described on page 09) on how key risks are being managed. To further improve our assurance, we've revamped our risk quality checks and maturity processes. The results from these are used to inform our regular risk bitesize learning sessions, part of our risk professionals' network, also set up this year.

Moving into year two of Network Rail's risk strategy, our focus will be on embedding these changes further once the risk tool is implemented early in the year, to get maximum benefit from them.

Principal risks

The Board confirms that it has assessed and monitored Network Rail's principal and emerging risks throughout the year, in accordance with provision 28 of the UK Corporate Governance Code 2018.

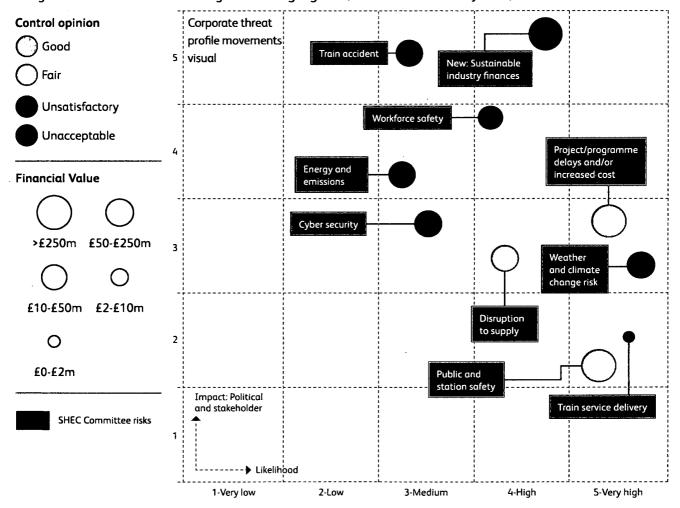
In recent years, the Covid-19 national emergency and industry reform have significantly changed our risk landscape, and in 2021 we completed an exercise to reset our board-level risk register, which informs our principal risks, to reflect the new environment in which we operate. Our previous set of principal risks have been either updated, rationalised or de-escalated to be managed

within our regions and functions. This more targeted list of threats and opportunities, aligned to our strategic priorities, helps us focus on the risks that matter most.

A principal risk (taken from our board 'Level zero') risk register) is defined as one that meets one or more of a set of criteria, including: the level and type of visibility the risk requires, how well controlled the risk is, the impact to our reputation if the risk occurred, or if the risk has a material financial impact.

The risk visuals and accompanying tables below show the risks that meet these criteria, how serious they are and how they changed over the last year. In addition to those risks fully disclosed, the Board also considered risks relating to security matters, and to industrial relations. The Board has placed increasing focus on the latter item as the year has progressed. Disclosure on these items has been limited as a result of heightened security classifications on the relevant content. The risk tables are grouped by Network Rail's strategic priorities (for more information on our strategic priorities, see pages 17 to 18).

Diagram 4 - Threats to achieving our strategic goals (status as at 25 February 2022)



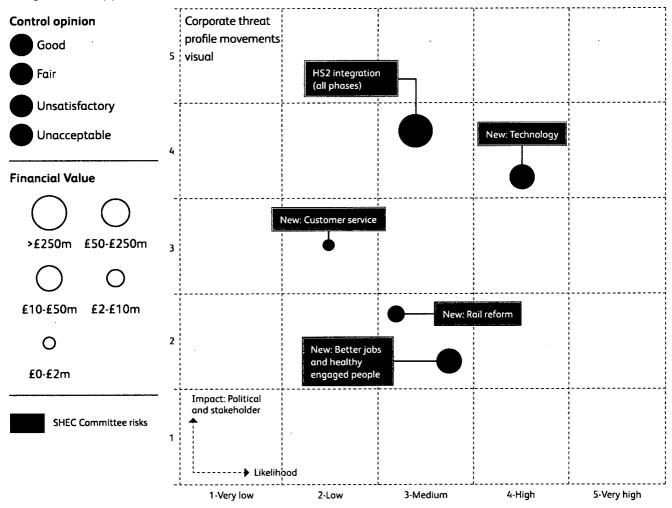
Key changes (including from the risk reset):

- the previous Control Period 6 and Passenger Demand risks are now part of a new Sustainable Industry Finances risk.
- competence and Talent Management risks are now part of a People opportunity
- epidemics such as Covid-19, Information Management, Railway Crime, Business Continuity Management and Unable to

Produce a Compliant Timetable are now being managed as level 1 risks, with components of the latter two included in the Train Service Delivery risk

- the TransPennine Route Upgrade risk now forms part of the Project and Programmes risk
- the Brexit risk was closed in 2021, with any residual elements included in the Disruption to Supply risk which now replaces the Supply Chain Vulnerability risk
- other minor changes to risk titles and definitions are listed in the risk summary tables on pages 94 to 98.

Diagram 5 – Opportunities (status as at 25 February 2022)



Key changes (including from the risk reset):

- the previous New Ways of Working opportunity is now part of a new, broader People opportunity
- the Traffic Management Future Development opportunity has been closed and will be considered as part of the new Technology opportunity
- realising the benefits of the Putting Passengers First Programme opportunity has been replaced by the new Customer Service opportunity, more explicitly directed towards improving the customer experience

Risks by strategic priority

For more information on strategic priorities see page 17.

The arrows denote whether the risk has increased, decreased, or stayed the same. We work towards decreasing threat risks and increasing opportunity risks.





Our safety vision is Everyone Home Safe Every Day. Our aim is to reduce risks to the public and passengers, as well as to the people who work for and with us. You can read more on safety in the Technical Authority section starting on page 69. The principal risks that could impact the achievement of this strategic risk theme are:

Public and **Station Safety**

We fail 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.

What's changed? The title was changed from 'Public Passenger Interface' to make the nature of the risk clearer and we reviewed and revised the potential impact scores.

Some of the actions we're taking

- We're reviewing our current approach to managing risk at level crossings, updating standards and assurance processes
- New level crossing technologies are being developed, such as providing warnings to users at passive

Threat

The Fire Safety Improvement programme will reduce the risk of harm in stations and across the network

Train accident Industry risk

Network Rail fails to manage activities leading to a failure of an asset or operational process causing a catastrophic train accident.



What's changed? There were no changes this year to the risk rating. It remains one of our top risks with the highest possible impact scores.

Some of the actions we're taking

- Activities in the Control Period 6 Delivery Plan aim to reduce train accident risk. These include additional drainage, vegetation, and fencing management
- · Post-Carmont, we aim to address the risks from earthworks and extreme weather, for example through the Weather Action Taskforce and our response to Lord Robert Mair's and Dame Julia Slingo's reports
- The Intelligent Infrastructure and Research and Development programmes are working to provide better information to aid decision making for the front line
- · We're addressing risks associated with signalling following recommendations from the Waterloo derailment

Threat

Workforce safety

We fail to safequard our workforce resulting in injury, single and/or multiple fatalities of Network Rail staff (employees and contractors).

What's changed? There were no changes this year to the risk score. It remains one of our top risks for both impact and likelihood scores.

Some of the actions we're taking

- Our revised Safety Framework focuses on leadership, communications, assurance, safety culture, a refresh of our Lifesaving Rules and further plans to separate people from trains
- The Electrical Safety Delivery programme is reducing the risk of harm while work takes place on the electrified railway

Threat



Strategic theme

Customers and communities

Network Rail's aim is to be easy to work with and to be a good neighbour. The principal risks that could impact the achievement of this strategic risk theme are:

Customer service We have the opportunity to change our culture, putting Safe Service at the heart of all we do and improving the experience we offer to our passengers, customers, stakeholders, and our own people.

NEW

Some of the actions we're taking

A framework for delivering great customer service is being developed with regions and functions

• Our aim is to define safe service for all and instil in everyone the belief and the commitment to deliver

Opportunity

• We plan to support our leaders and colleagues with the skills and guidance to deliver great service



Strategic theme

Train service delivery

Our aim is to deliver a railway that people can rely on, with trains that turn up and arrive at their destination on time. The principal risks that could impact the achievement of this strategic risk theme are:

Cyber security Industry risk



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.

What's changed? There were no changes this year to the risk score.

Some of the actions we're taking

- We are making targeted improvements to our compliance with Network and Information Systems (NIS) regulations, supported by new cyber security governance and assurance activity
- We are developing joint action plans with the regional teams to establish effective monitoring in Rail Operating Centres

Threat

Disruption to supply

Disruption to supply of critical goods, services, materials, plant, or labour, resulting in possible significant disruption to train services, financial loss and/or reputational damage.

Industry risk

What's changed? This risk replaces the previous supply chain vulnerability risk with the scope now also including materials shortages.





Some of the actions we're taking

- We monitor supplier financial health to identify those with a raised likelihood of failing, prompting the development of alternative supply plans
- We are reviewing our exposure to the Ukraine conflict, including energy price increases
- A new assurance process for contract and supplier management has been launched in route services as well as routes and regions
- We launched a post-contract and supplier management training and development solution as part of the Contracts and Procurement competency framework

Threat

Train service delivery Industry risk

Not achieving train or freight operating company performance targets as agreed with stakeholders, resulting in loss of reputation and financial penalties.

What's changed? This risk has increased over the year, with the effectiveness of controls reassessed from 'fair' to 'unsatisfactory.' Following strong performance over the past 18 months, we saw a decrease in performance levels as passengers returned to the railway and Covid-19 continued to impact on cancellations. This risk now includes timetabling (previously a separate principal risk), and we have factored the upcoming changes planned for December 2022 and May 2023 into our assessment.

Some of the actions we're taking

- A Performance Improvement Management System is being embedded by Network Rail and train operating companies to drive continuous improvement
- Performance impact is considered in all decisions about timetable change to increase timetable resilience (Build Back Better), with the Industry Timetable Performance Modelling programme enabling longer-term development of more resilient timetables
- There are also longer-term actions to ensure optimum use of the railway system, as well as links to the actions addressing weather resilience and climate change risk

You can read more on train service delivery and timetable planning in the System Operator section on page 65.

Threat



To help us attract and retain the best people, we must create an environment in which people can bring their whole selves to work, feel safe to be who they are without fear of discrimination and to be offered an environment in which they can fulfil their potential and feel valued. You can read more on train service delivery and timetable planning in the People section on pages 73 to 76. The principal risks that could impact the achievement of this strategic risk theme are:

Better jobs and healthy, engaged people

There is an opportunity to have engaged and healthy people in the right place at the right time with the right skills and behaviours.

NEW

What's changed? This is a new risk which replaces and includes the previous talent management, competence, and future ways of working risks.

Some of the actions we're taking

- Developing a framework for engaged healthy and competent people to deliver high performing railway with regions and functions across Network Rail
- Strategic workforce planning to ensure the right people at the right place at the right time

Opportunity



As a public body, we have a responsibility to spend tax payers' money wisely in improving the railway infrastructure. The principal risks that could impact the achievement of this strategierisk theme are:

Project/programme delays and or increased cost Industry risk



Schedule or cost growth could occur on individual or multiple projects (including TransPennine Route Upgrade) across the rail investment and delivery portfolio due to unforeseen internal or external factors, resulting in delayed benefits and stakeholder dissatisfaction.

What's changed? This risk now also includes TransPennine Route Upgrade. Risk controls improved over the year.

Some of the actions we're taking

- We are continuously improving the Project Acceleration in a Controlled Environment (PACE) framework to reinforce the relationship between engineering, project management and sponsorship
- Cost and programme efficiencies identified and being implemented through Project SPEED (Swift, Pragmatic and Efficient Enhancement Delivery)
- Governance and peer review in place for major projects

Threat

NEW

Early benefits from rail reform

Industry risk

In advance of legislative change, there is an opportunity for Network Rail to provide early benefits for passengers, freight, and taxpayers through the rail reform agenda.

This is a new opportunity in development with the Great British Railways Transition Team.

Opportunity



Strotegistheme

NetworkRails vision is to be a responsible and environmentally sustainable company. We want to be a strategic partner with other rail industry and government stakeholders to ensure the railway develops in a way that is sustainable, efficient, responsive and optimises whole industry costs and revenue. The principal risks that could impact the achievement of this strategieriskthemeare

Energy reduction and decarbonisation Failure to decarbonise and improve air quality performance of Network Rail's activities and the Bristish rail industry, leading to negative environmental impact, non-compliance, and reputational damage for both Network Rail and the wider industry.

Industry risk



What's changed? The risk title changed from 'Energy Reduction and Decarbonisation' to 'Energy and Emissions' as the risk has been broadened to include all Network Rail activity to reduce energy consumption, decarbonise and to address air quality.

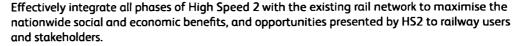
Some of the actions we're taking

• We have published key milestones towards achieving a low-emission railway in our **Environmental Sustainability Strategy**

You can read more on energy and emissions management in the environmental sustainability section on page 77.

Threat

High Speed 2 integration (HS2) Industry risk



What's changed? The potential financial impact of this risk increased after the scope was reviewed to align to the business case for integration with the existing network.

Some of the actions we're taking

- HS2 readiness plans are being included in Control Period 7 funding proposals
- · We're coordinating our decision making for the development of the Euston campus with HS2 Ltd, The Euston Partnership and Department for Transport

Opportunity

Sustainable industry finances Industry risk

There is a risk that passenger revenue does not recover, and efficiency commitments are not met, resulting in industry finance not recovering and unexpected subsidy requirements and loss of government support.

NEW

What's changed? This is a new risk that replaces and includes the Control Period 6 Delivery and Lower Passenger Demand risks.

Some of the actions we're taking

- We're delivering the Control Period 6 efficiency programme
- We are developing our Control Period 7 plans and made initial submissions to the Department for Transport and Transport Scotland
- We're supporting the Great British Railways Transition Team's local strategies for revenue recovery
- We're developing third-party funding opportunities such as for Project Reach which aims to upgrade and install fibre optic cables to improve performance, safety, and passenger telecoms

Threat

Technology

Implement new technologies including research and development, digital and intelligent

NEW

infrastructure to improve the railway for passengers and freight users.

- Some of the actions we're taking We're aligning our research and development portfolio to our business priorities
- We're committed to making investments in data

Opportunity

• We're developing innovation solutions to align to industry outcomes

Weather and climate change

The railway fails to meet normal levels of performance during adverse and extreme weather events, today and in the future because of climate change.

Industry risk

What's changed? There were no changes this year to the risk score.

Some of the actions we're taking

- The Weather Action Taskforce and response to Lord Robert Mair's and Dame Julia Slingo's reports aim to address risk from extreme weather
- As with energy and emissions, we have published our key climate change adaptation milestones in our Environmental Sustainability Strategy and will consider these as part of our Control Period 7 planning

Threat

You can read more on climate change resilience in the environmental sustainability section on page 77, with our response to the tragic incident at Carmont at the forefront of how we improve.

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 2025. This longer-term assessment process supports the Board's statements on both viability, as set out below, and going concern, made on page 156.

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 regarding producing a settlement that is reasonable 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 bottomup forecasts on a quarterly basis to manage outputs within the resources available.

Network Rail will not undertake any further borrowing during this control period through to 31 March 2024. Instead, its activities are largely funded by grants from the Department for Transport (DfT) and revenue from customers. Network Rail has a £31,859m loan facility with DfT, which it intends to draw upon to specifically refinance its existing debt with DfT of £30,709m and legacy commercial borrowing of £1,150m 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 thirdparty capital to finance enhancements to the railway network.

In addition to the loan facility and deeds of grant described above, throughout the pandemic and the recovery period Network Rail's direct customers, such as the passenger operating companies continue to be supported by Government.

On 20 May 2021 the Government announced plans to reform the rail industry. This proposes that a new public body, Great British Railways (GBR), will integrate the railways: owning the infrastructure, collecting fare revenue, running and planning the network, and setting most fares and timetables. It's planned that Network Rail will be absorbed into GBR to bring about single, unified, and accountable leadership for the national network. It is not likely that this reform will involve the winding up of Network Rail Limited but in any event Great British Railways will assume the existing functions of Network Rail Limited as well as have a wider range of powers and functions. The transformation programme is dependent on further activities including legislation and will take time to fully deliver. The Williams-Shapps Plan for Rail notes that 'the government will at least maintain the current infrastructure settlement, which runs until 2024, and will provide subsequent five-year infrastructure funding deals from 2024 onwards'.

Network Rail has business plans and financial models that are used to project cash flows and monitor financial risks and liquidity positions, and to forecast future funding requirements and other key financial ratios, including those relevant to our

network licence. Analysis is carried out 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 87 to 93, is considered.

Modelling has assessed the impact of Covid-19 responses on Network Rail's financial viability and shows that these may be mitigated by the financial risk buffer and the ability to safely defer works as required.

In addition, as Network Rail is an arms-length body classified within central government 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 91 to 98 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 principal 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, plans to improve performance, and the group's insurance arrangements.

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

Scenario Scenario

Coastal erosion leading to a train derailment and disruption to service.

Risks

Business Continuity Management; Train Service Reliability; Weather and Climate Change Adaptation; Train Accident; Timetable Compliance; Asset Management Excellence; Maintenance Strategy; Land Management; and Geotech.

Loss of IT services and business data as a result of a ransomware incident.

Risks

Cyber Security; Business Continuity Management; Train Service Reliability; IT Service Continuity Management; Deliver and Sustain Telecoms Services; Information Security; and Telecoms Cyber Security.

Repeated industrial action affecting maintenance and operations over a two-month period.

Risks

Industrial Relations; Train Service Reliability; Project Programme Delays/ **Increased Costs; Business Continuity** Management; National Efficiency.

Based on 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 2025.

Directors' approval statement - The Strategic Report has been signed on behalf of the board of the company.



HOW WE ENGAGE WITH OUR STAKEHOLDERS

As Network Rail's Board of directors, we have collectively and individually fulfilled our duties as set out in section 172 of the Companies Act 2006 to a high standard throughout this reporting period.

Section 172, Companies Act 2006

Section 172 provides that directors must promote the success of the company, while considering – among other things – the interests of stakeholders, the interests of employees, the environment and the long-term impact of business decisions. We believe that the success of Network Rail depends upon the value we provide to our stakeholders, the sense of safety and wellbeing felt by our staff, our impact on external environments and the legacy we create for future generations.

Acting fairly between stakeholders

We are a publicly owned, not-for-dividend company: our activities and engagement are concentrated on delivering our strategy and the needs of our stakeholders. We refer further to specific stakeholders below; these include rail passengers and freight users. We seek to promote the success of the business while also benefiting our stakeholders.

Our governance and decision-making processes are designed to ensure we manage the business responsibly, effectively and to a high standard of business conduct (see the corporate governance report on pages 112 to 121 for more information).

The Network Rail Story and our Board

Our Story comprises our vision, values, strategy and performance. It outlines the culture we aim to achieve while keeping in mind the long-term success of the rail industry. We appreciate that the interests of stakeholders and employees are an imperative consideration when making decisions. We seek to maintain effective communication with our stakeholders and employees in order to achieve the goals comprised in our Story.

We believe that our Board has the right range and depth of knowledge, skills and experiences to run the business effectively. We recognise the importance of diversity and seek to improve this at Board level and in our executive leadership teams. We have established a committee structure to provide detailed scrutiny of key areas of our responsibilities. We also

have a series of company policies and guidance which set out expected standards of behaviour.

Covid-19 and stakeholder engagement

The industry continued to be affected by the impact of Covid-19 throughout this reporting period. A full recovery has yet to be achieved. We have sought to ensure that our stakeholder engagement and business processes continue. We are working closely with our stakeholders regarding the recovery of the industry and its revenue.

We established measures to support our retail and commercial estate tenants early in the pandemic. We opened our full retail estate at the beginning of quarter two in this reporting period. We gave rent relief, by way of payment reductions, to our retail partners. In order for retailers to benefit from the reduced payments, they must have cleared all bad debt and be up-todate with service charge payments. We anticipate that from the 2023/24 financial year onwards, all rent payments will return to contracted levels.

Please see the corporate governance report on pages 112 to 121 for more on measures taken by us throughout the pandemic.

Modernising management

There has been a significant loss of passenger revenue in this reporting period, however operating costs have slightly increased. We have had to make difficult decisions relating to workforce modernisation in view of this. We have engaged with trade unions and our workforce in this regard and we explain further in the Corporate Governance report, pages 112 to 121 (see the 'Modernising management' subheading on page 113).

Stakeholder engagement:

Our operating model and strategic priorities Operating model

In 2021/22 we continued our journey to become more

customer-focussed and service-driven. Our operating structure is intended to bring us closer to the passengers. customers and communities we serve. This helps us to make the right decisions more quickly in order to deliver a more sustainable, efficient, joined-up railway that is on the side of passengers and freight users.

Strategic priorities - measuring progress

While we are committed to developing a railway for the future, we remain mindful of the need to ensure our impact on local communities and the environment is minimised as much as possible.

Our scorecard is the means by which we measure how well we are doing in delivering our vision. The ways in which we measure progress are closely aligned to our six strategic priorities; these underpin our decision-making. They also represent the kind of business we want to be and the experiences we want our stakeholders to have when they interact with us:

Strategic priority	Scorecard measurements
Safety	 Workforce fatalities and weighted injuries Passenger safety Personal Accountability for Safety
Train service delivery	On timePassenger satisfactionFreight cancellations
Efficiencies	Financial performance measuresEnhancement milestonesEffective volumes
Sustainable growth	Environmental sustainability index
Customers and communities	Complaints handling
People	Employee engagement

Our stakeholders include: our people; railway users and the public; industry partners; communities and the environment; tax payers; the Government; and supply chain partners. Our strategic priorities are a key consideration in relation to the stakeholder actions we take. Examples of such actions in this reporting period, and comments we would like to hear from our stakeholders, include:

OUR PEOPLE

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Key objectives:

To be a company people are proud to work for; to ensure our employees work in a safe and positive environment; to ensure our employees have the opportunity to develop their careers.

Comments we would like to hear:

"My manager cares about me and I am proud to work for Network Rail"

Examples of measures taken:

Your Voice surveys (an opportunity to suggest improvements); listening events; Customer Stakeholder and Relationship core GRAI (Governance, Risk, Assurance and Improvement) process.

RAILWAY USERS AND THE PUBLIC (this includes passengers, who are key stakeholders)
Key objectives:
To assist in the provision of safe, punctual and reliable train services.
To assist in the provision of safe, punctual and reliable train services.

Comments we would like to hear:

"I have a really good journey because my station is nice, safe and if things go wrong, I'm looked after"

Examples of measures taken:

Transport Focus surveys (informing us of the public's priorities); Wavelength measures; Customer Experience Programme; Customer Service Live.

INDUSTRY	PARTNERS	(this includes frei	ight users, also ke	ey stakeholders)
			//////	88818

Key objectives:

To contribute to the efficiency of the railway; to build trusting relationships and improve the network together; to recover from the pandemic.

Comments we would like to hear:



Examples of measures taken:

Regular engagement through industry forums; Level 1 engagement forums with freight operating companies; customer satisfaction surveys and scorecard measures for national passenger operators, freight end users and freight operating companies; Customer Advocacy surveys.

COMMUNITIES AND THE ENVIRONMENT

Key objectives:

Make a positive contribution to local communities and the environment; minimise the disruption caused by our work; ensure value for money and responsible use of resources.

Comments we would like to hear:

"Network Rail is a responsible and environmentally sustainable company"

Examples of measures taken:

Community meetings and response to complaints via our 'being a better neighbour' workstream; BEAP (Built Environment Accessibility Panel), to assist in ensuring our major building works, station designs and other amenities across the country are accessible and as inclusive as possible

THE GOVERNMENT

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Key objectives:

To deliver the Government's strategy for the railway; to ensure an efficient service for the public; to contribute to nationwide economic development; to develop a railway for the future

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Examples of measures taken:

Maintaining strong working relationships with the Department for Transport, Transport Scotland and Transport for Wales throughout the pandemic to keep people and goods moving; developing long-term plans for investment across the Midlands and North, working collaboratively with Ministers and officials

at the Department for Transport, HM Treasury and No. 10; working with officials and Ministers in HM Treasury and the Department for Transport to agree and deliver ambitious plans for efficiencies across the railway; working across industry and with national and regional government to develop a 30-year plan for the railway through the Whole Industry Strategic Plan; implementing robust governance standards which accord with those expected of a publicly listed company.

The 'How we performed' section on pages 20 to 25 gives more detail on our scorecard and how we performed during 2021/22. The Chief Finance Officer's review of 2021/22 on pages 26 to 30 sets out a broader overview of our performance.

In addition, we welcome individuals from outside our organisation at certain Board and committee meetings, for example: representatives from the Rail Accident Investigation Branch; The Tree Council; passenger focus groups; freight companies; train operating companies; and Government, among others. This enables us to take on board the views and requirements of various stakeholders and also links to accountability.

CREATING THE GREAT BRITISH RAILWAYS TRANSITION TEAM

The Williams Rail Review began in September 2018 to look at the structure of the whole rail industry and the way passenger rail services are delivered. The review was led by an independent chair, Keith Williams, the former chief executive of British Airways. He was supported by a panel of experts from across the country with expertise in rail, freight, business and passenger interests. The result of this work was the Williams-Shapps Plan for Rail, which was published by the Government in May 2021.

The Plan for Rail sets out the most ambitious changes to our railways in a generation and was included in the Queen's Speech. It outlines how the Government will make our railway a more environmentally friendly and modern public transport system, supporting the levelling up of our towns, cities and regions.

Central to the Plan for Rail is the establishment of a 'guiding mind'.for the sector: Great British Railways (GBR), which will run and plan the rail network, own the infrastructure, and receive the fare revenue. It will procure passenger services and set most fares and timetables. This will bring the whole system under single, national leadership. When GBR is created, the permanent leadership team, including its chair and chief executive, will be recruited through open competition.

The creation of GBR and broader changes across the sector will take several years to fully implement and the arrangements will continue to evolve thereafter. In the Plan for Rail, the government said that interim arrangements should be developed to bring forward benefits and deliver change in the sector in advance of GBR's creation.

Recognising the urgency for action, the Secretary of State for Transport asked Andrew Haines to develop interim arrangements to start delivery of the benefits of the Plan for Rail, including developing plans for the creation of GBR. He is doing this alongside his existing role as chief executive of Network Rail. The Great British Railways Transition Team (GBRTT) has been established to drive those interim arrangements. It was set up as a separate division within Network Rail in October 2021 with its own leadership team. Alongside this team, GBRTT has an Advisory Panel, led by Keith Williams, to support delivery of a more sustainable railway that better serves the needs of passenger and freight customers.

GBRTT has developed a clear purpose, which is 'creating a simpler, better railway for everyone in Britain'. The purpose expresses why it exists as an organisation and guides everything it does.

Great British Railways Transition Team's purpose



Creating a simpler, better railway for everyone in Britain

We believe the rail network can be run better – for everyone. So, together, we will create a simpler, smarter and more sustainable railway that works for customers and supports Britain's growth.

How will we get there? By placing customers at the heart of our decision-making and building a system that serves their needs – not ours. By making sustainability part of everything we do and offering people better choices. By cutting complexity to remove barriers, improve access and create efficiencies. And finally, by designing a commercially robust organisation that is built to last.

A simpler railway will mean better experiences for our customers, clarity for our people and a commitment to continual improvement.

The Department for Transport (DfT) has commissioned GBRTT to take forward specific activities, including increasing passenger revenue following the Covid pandemic, the development of the Whole Industry Strategic Plan, programme management of fares, ticketing & retail reform and development of a whole industry approach to financial management. GBRTT is doing this by working with people from across the industry and beyond, including train operating companies, freight operating companies, suppliers, Rail Delivery Group, Government and Network Rail.

In October 2021, the Secretary of State for Transport announced a public competition to choose the new headquarters of Great British Railways. The competition launched in February 2022 and there has been much interest from towns and cities across the country. The location of the new headquarters will be announced in Summer 2022.

The Plan for Rail included a commitment to develop a sector-wide, long-term strategy for rail – the Whole Industry Strategic Plan. The Strategic Plan, which is produced for Ministers, will be the first strategy of its kind, a 30-year high-level plan. It is shaped by strategic objectives that have been developed for the benefit of our passengers, freight users, taxpayers and staff. The objectives also support Britain's nations, regions, and communities to achieve their goals, and benefit the economy and the environment for the long term. GBRTT launched a call for evidence in December 2021 to help shape the Whole Industry Strategic Plan. A report on the responses, including the next steps was published in June 2022, with the intention that the Whole Industry Strategic Plan is delivered to Ministers by late 2022.

The cost of running GBRTT since its informal creation in October 2021 has been £12.2m. This has been funded by Network Rail Infrastructure Limited. From 2022/23, its separate funding is being provided by DfT, as reflected in Government's 2021 Spending Review.

CORPORATE GOVERNANCE

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OUR BOARD OF DIRECTORS



Sir Peter Hendy **CBE** Chair

Appointed to the Board: 2015



Andrew Haines **OBE** Chief executive

Appointed to the Board: 2018



Jeremy Westlake

Chief financial officer

Appointed to the Board: 2016



Ismail Amla Non-executive director

Appointed to the Board: 2021



Mark **Bayley CBE**

Non-executive director

Appointed to the Board: 2020



Rob **Brighouse**

Senior independent non-executive director

Appointed to the Board: 2016



Stephen **Duckworth** OBE

Non-executive director

Appointed to the Board: 2021



Michael

Harrison Special

director and non-executive director

Appointed to the Board: 2020



Silla Maizey **OBE**

Non-executive director

Appointed to the Board: 2016



David Noyes Non-executive director

Appointed to the Board: 2018



Mike **Putnam** Non-executive

director

Appointed to the Board: 2018



Fiona Ross

Non-executive director

Appointed to the Board: 2020

Sir Peter Hendy CBE

Chair

Skills and experience

Sir Peter was commissioner of Transport for London (TfL) from 2006 to 2015 and during that time he led the successful operation of London's transport for the 2012 Olympic and Paralympic Games. Sir Peter is a past international and UK president of the Chartered Institute of Logistics and Transport, is a fellow of the Chartered Institute of Highways and Transport, and 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. Sir Peter conducted the 2021 review of the connectivity of the United Kingdom, commissioned by the Prime Minister. The Union Connectivity Review was published in November 2021, including a separate report on the feasibility of a fixed link between Northern Ireland and the mainland. The Government has welcomed the report, and a formal response is awaited.

Current external appointments

Chair of London Legacy Development Corporation; trustee of the Science Museum Group; trustee and director of the London Transport Museum; chair of London Freight Enforcement Partnership; chair of the National Railway Museum Advisory Board, patron of the Independent Transport Commission; chair of the Euston Partnership Board; and honorary president of the London Bus Museum.

Committee membership

Safety, health and environmental compliance committee; nomination and remuneration committee; property supervisory committee; member of the Great British Railways Transition Team Advisory Panel.

Andrew Haines OBE

Chief executive

Skills and experience

Andrew became Chief Executive of Network Rail in August 2018. Following the publication of the Williams-Shapps Plan for Rail in May 2021, Andrew was also tasked with establishing interim arrangements for the creation of Great British Railways, alongside his role in Network Rail. Prior to joining Network Rail, Andrew was the chief executive officer of the Civil Aviation Authority from 2009-2018. Before that he had a wide-ranging career within the rail industry with British Rail, Railtrack, South West Trains and FirstGroup plc where he led the rail division in England, Scotland and Wales. In addition, he was a non-executive director at a rolling stock leasing company. Andrew was awarded an OBE in the 2016 New Year Honour's 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.

Current external appointments

Director of the Rail Delivery Group Limited.

Committee membership

Member of the Great British Railways Transition Team Advisory Panel.

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 degree in manufacturing from University of Cambridge.

Current external appointments

Non-executive director of Elevate Services Inc., providing technology and services to law firms and law departments; a member of the policy committee of the British Property Federation.

Committee membership

Property supervisory committee; member of the Great British Railways Transition Team Advisory Panel

Ismail Amla

Non-executive director

Skills and experience

Ismail is the executive vice president responsible for NCR's Global Professional Services. His team is made up of a global network of NCR technologists who deliver Technology Strategy Consulting for the Banking, Retail and Hospitality sectors. Prior to his role at NCR, Ismail was chief growth officer at Capita. Ismail has also served as managing partner for IBM's Global Business Services in North America; chief executive officer for the consulting firm Capco in North America; and a senior partner for Accenture where he was a member of the leadership team in the UK.

Current external appointments

A board member at UK Sport; a member of the board of governors at University of East London; a fellow at University of Salford Business School; executive vice president at NCR Corporation.

Committee membership

Nomination and remuneration committee; member of the Great British Railways Transition Team Advisory Panel.

Mark Bayley CBE

Non-executive director

Skills and experience

Mark has spent much of his career in the rail sector. He was chief executive of London and Continental Railways Limited, and chief executive of the Green Deal Finance Company (GDFC). His interim work includes commercial director of High Speed 2 Ltd, and chief financial officer and board director of the Submarine Delivery Agency at the Ministry of Defence. Mark was awarded a CBE in 2012 for services to the rail industry.

Current external appointments

Non-executive director of Ofwat; non-executive director of UK Atomic Energy Authority; a member of the DfT's Group Audit and Risk Assurance Committee; chair of the board of trustees of Shadwell Opera.

Committee membership

Chair of the audit and risk committee; chair of the treasury committee; chair of the property supervisory committee.

Rob Brighouse

Senior independent non-executive director

Skills and experience

Rob has 40-years of experience in the rail industry, across three continents, and was previously the managing director of Chiltern Railways. He first joined the rail operator in 2000 as projects director, where he led the Evergreen 1 and 2 infrastructure projects and other works associated with the Chiltern 20-year franchise. He was also founding chair of the East West Railway Company, a government arm's length body, which is responsible for the introduction of direct rail services between Oxford and Cambridge. 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

Chair of the New Homes Quality Board (a government arm's-length body), a member of the Advisory Board at Aston Business School and advisor to the Programme Board of Dublin Area Rapid Transit (DART).

Committee membership

Safety, health and environmental compliance committee; audit and risk committee; environmental sustainability committee.

Stephen Duckworth OBE

Non-executive director

Skills and experience

Stephen founded and ran Disability Matters Limited, a research and consultancy business with an emphasis on inclusive design. He initially qualified as a medical doctor and followed this with an MSc in rehabilitation studies and a PhD in disability equality. Stephen currently sits on the boards of several organisations, has held numerous advisory roles to government, and carried out consultancy work with Southwest Trains and Eurostar. He was awarded an OBE in 1994 for services to disabled people.

Current external appointments

Non-executive director of the Hampshire Hospitals NHS Foundation Trust Board; trustee of Hampshire Hospitals Charity; board member of Palace of Westminster Restoration and Renewal Delivery Authority; trustee of Leonard Cheshire; trustee of the Rugby Football Union Injured Players Foundation.

Committee membership

Audit and risk committee; standing invitation to the safety, health and environmental compliance committee.

Michael Harrison

Special director and non-executive director

Skills and experience

Michael is a director in UK Government Investments (UKGI) an arm's length body of HM Treasury. As part of this role Michael has been a non-executive director of a number of companies in which the UK Government has a shareholding including Porton Biopharma, Ordnance Survey, the Met Office, and Working Links. Prior to working in UKGI Michael had a broad international corporate finance advisory career working for Credit Suisse First Boston, Barclays de Zoete Wedd, and as independent corporate finance advisor at Caliburn in Australia.

Current external appointments

Employee of UK Government Investments (UKGI); board member of Urenco.

Committee membership

Nomination and remuneration committee; audit and risk committee; treasury committee; member of the Great British Railways Transition Team Advisory Panel.

Silla Maizey OBE

Non-executive director

Skills and experience

Silla has significant experience in the aviation sector, and most recently was British Airways' (BA) managing director of Gatwick. She was part of BA's executive leadership

team and 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. She was awarded an OBE in 2022 for services to the NHS.

Current external appointments

Non-executive director of John Menzies plc.

Committee membership

Audit and risk committee; treasury committee; member of the Great British Railways Transition Team Advisory Panel.

David Noyes

Non-executive director

Skills and experience

David has spent his career working in the leisure and transport sectors. In a 20-year career at British Airways he held various directorships, and subsequently until December 2017 David was chief executive officer of Cunard and P&O Cruises, and a director of Carnival plc. David is experienced in leading devolved businesses in safety critical industries with a focus on delivering customer service excellence and driving cost efficiency.

Current external appointments

Non-executive chair of Grays of Cambridge (International) Limited; non-executive director London Luton Airport Operations Ltd; corporate advisory board member for The Teenage Cancer Trust; non-executive chair of Celestyal Cruises.

Committee membership

Chair of the nomination and remuneration committee; chair of the environmental sustainability committee; safety, health and environmental compliance committee; member of the Great British Railways Transition Team Advisory Panel.

Mike Putnam

Non-executive director

Skills and experience

Mike has over 25 years' executive experience across the development, construction and services sectors, and participated in successfully delivering high profile projects. Mike was president and chief executive officer of Skanska UK plc until May 2017, having been executive vice president and a director, responsible for the infrastructure and then the building and construction businesses. Mike is a Chartered Engineer and a fellow of both the Institution of Civil Engineers and Royal Institution of Chartered Surveyors.

Current external appointments

Non-executive director of Southern Water Services Limited and Bazalgette Tunnel Limited; member of the DfT's Acceleration Unit Expert Panel; a member of the Supervisory Board of Arcadis NV.

Committee membership

Chair of the safety, health and environmental compliance committee; environmental sustainability committee.

Fiona Ross

Non-executive director

Skills and experience

Fiona is an experienced chair and non-executive director having served on boards in Ireland and the UK. Fiona chairs the Córas Iompair Éireann (CIÉ), Ireland's public transport provider and is a non-executive director at The Scottish Government. Fiona began her career as a stockbroker in London. In 2012 she was awarded a fellowship in Governance at George Washington University in the United States.

Current external appointments

Chair of Córas Iompair Éireann; non-executive director of The Scottish Government; non-executive director JK Funds; non-executive director of SphereInvest (a UCITs fund listed in Dublin; chair of the audit and risk committee of Smith and Williamson; chair of the National Paediatric Hospital Development Board.

Committee membership

Nomination and remuneration committee; environmental sustainability committee.



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.

CORPORATE GOVERNANCE REPORT

At Network Rail we recognise the value of good corporate governance. We believe it's essential to the success of the company and to delivering our strategy for passengers and stakeholders. Throughout 2021/22 we've continued to ensure that our governance arrangements are suitable for the challenges we have faced. We continue to act on external feedback and corporate governance reviews in order to maintain a high standard of governance.

Rail industry reform

The Government published the "Great British Railways: Williams-Shapps Plan for Rail" white paper in May 2021. The Plan seeks to ensure the railway forms the backbone of a cleaner, more environmentally friendly and modern public transport system across the country. Among other things it's envisaged that Great British Railways will result in modern customer experience through a better integrated rail system, with franchising being replaced by passenger service contracts.

Work is now underway to deliver the objectives of the Williams-Shapps Plan for Rail. In September 2021 the Nomination and Remuneration committee proposed that the Great British Railways Transition Team (GBRTT) Advisory Panel (Panel) be created as a committee of the Network Rail Limited Board. The Panel is overseeing GBRTT's operations, allowing the main Network Rail Board to remain focussed on delivering Network Rail's core strategy, operations and activity. The Nomination and Remuneration committee agreed that the creation of the Panel, its membership and terms of reference would be recommended to the Network Rail Board and that the future of Network Rail as a corporate body would be discussed further. More information on the Panel is set out in the Nomination and Remuneration committee report (pages 140 to 141). GBRTT is discussed further on page 138.

Periodic Review 23 (PR23) committees

Control Period 7 (CP7) will cover the period April 2024 to March 2029.

A periodic review is the process by which access charges are set by the Office of Rail and Road (ORR) and Network Rail's expected outputs and funding for the next control period are agreed. Periodic reviews are one of the principal mechanisms by which our economic regulator, the ORR, holds Network Rail to account and secures value for money for users and funders of the railway.

The 2023 Periodic Review (PR23) will lead to our funding and agreed set of outputs for CP7. There are a number of factors that will shape the overall approach to PR23, including industry reform and therefore the need for flexibility in PR23 decisions to accommodate the delivery of reforms during CP7.

We established the PR23 Board sub-committee, and the Executive Leadership Team (ELT) PR23 sub-committee, in this reporting period. The ELT sub-committee is intended to facilitate discussions regarding the development of CP7 plans and funding, in addition to wider regulatory framework issues. One of its purposes is to consider and agree the overall approach to developing the CP7 plan so that it's consistent with overall corporate strategy and Government's strategic objectives for rail. Another purpose is to consider and agree the overall strategy for engaging on CP7 with key stakeholders.

Among other things the PR23 Board sub-committee is responsible for assuring the Board that emerging CP7 plans and framework policy positions are credible and supportive of the delivery of Network Rail's strategic ambition for CP7 and beyond. Linked to CP7 plans and the PR23 sub-committees is the fact that each of our regions has created, or is in the process of creating, a regional challenge panel. Their purpose is to provide external scrutiny of our CP7 plans and they comprise a range of stakeholders, including rail beneficiaries and external experts (for example, representatives from local transport bodies, local councils and industry associations). It is intended that the challenge panels will carry out stakeholder engagement regarding their plans, forming part of their overall and ongoing engagement with customers and stakeholders.

The PR23 Board sub-committee membership is comprised of the Chief Financial Officer (Chair), the Chief Executive Officer and five non-executive directors. A small number of other directors and managers within the business attend these meetings too, for example the Director of Planning and Regulation and the Planning and Regulation Programme Manager. All Network Rail directors have an open invitation to attend these meetings.

Modernising management

This reporting period has seen the implementation of measures relating to workforce modernisation. This accords with an industry-wide approach to pandemic related challenges. There's been a significant loss of passenger revenue but with largely unchanged operating costs. Employers in the industry, and trade unions, set up the Rail Industry Recovery Group (RIRG) in 2021 to work collaboratively on reducing operating costs while maintaining a safe and sustainable rail industry. The Enabling Framework Agreement was consequently produced. This established the principles for a programme of cross-industry reforms.

The focus at Network Rail has been to produce a leaner management structure and to improve efficiency. We believe that this will benefit customers and passengers.

Two phases of a voluntary severance scheme have now been completed; we liaised with trade unions and the workforce throughout. We are continuing with these workforce reforms as part of the drive to achieve greater efficiency. The People section of this report is set out at pages 73 to 76.

Devolution – update

The devolution of Network Rail remains an important part of our strategy. We reported last year that in 2019 we commenced the Putting Passengers First programme. The vision was to be more responsive to the needs of passengers and freight users. This involved devolving accountabilities and establishing platforms for us to deliver value for money to those we serve. We've continued to make good progress.

It is our understanding that GBR will build on the model of devolution that has been central to the Network Rail approach over the last few years.

Covid-19 governance

Last year we activated our Strategic Crisis Management Team (SCMT) in response to the pandemic. It's responsible for strategic direction in the context of the pandemic and managing the impact of coronavirus on Network Rail, our passengers and our people. The SCMT has remained applicable in this reporting period, as has the National Alert Co-ordination Group (NACG) which supports the SCMT. The NACG manages the logistical response to the pandemic within Network Rail. It includes representatives from across the industry and it met twice a week at the height of the pandemic, although the frequency of meetings has varied throughout the pandemic. It ensured measures such as personal protective equipment, a co-ordinated testing programme and regular office deep cleaning were put in place. Command structures within our regions and directorates implemented necessary policy changes and managed day-to-day issues.

In addition to the above, periodic briefings to the Board regarding the latest Government guidance, our workplace measures and working arrangements were issued regularly in early to mid-2021. As with NACG meetings, the frequency of these briefings has varied throughout the pandemic.

Our Board, its committees and the executive leadership team have regularly met virtually throughout the pandemic to ensure the needs of the railway continue to be served. Most meetings are now taking place either in person or in a hybrid format.

Engaging with our stakeholders

Our stakeholders are an essential component of our strategy. The interests of key stakeholders and the matters set out in section 172 of the Companies Act 2006 (directors' duties) are routinely considered in Board discussions and in decision-making.

Our Putting Passengers First programme was built on a comprehensive consultation exercise. In 2021/22 we continued our journey to become more customer-focussed and service driven. This accords with our intention to deliver a more sustainable, efficient, joined-up railway which is on the side of passengers and freight users.

Railway supervisory boards comprising Network Rail, train operating companies, Transport Focus, and other key stakeholders provide forums for discussions to identify opportunities to improve the experience of all passengers and freight users. These boards are intended to bring track and train closer together. We continue to take measures to ensure successful engagement with stakeholders while also keeping in mind our strategic priorities. More information on the measures taken in this reporting period can be found in the "How we engage with stakeholders" section, pages 101 to 104.

Engaging with our workforce

We acknowledge the importance of ensuring that our employees feel valued; that their work is meaningful; and that their work makes a positive difference to railway users. We want to ensure employees feel engaged with the company, including its culture, purpose, strategy and vision and that our employees feel proud to work for us.

The Network Rail Story (see page 08) is at the heart of our workforce engagement. We have a wide range of initiatives through which we engage with our people, including:

- · systems thinking interventions
- listening programmes
- Your Voice surveys
- business briefings
- employee networks
- reverse mentoring
- · trades union engagement
- employee newsletters (The Network and Front Line Focus).

We use regular employee engagement surveys to understand what our people are thinking and feeling at a given time. The surveys show changes compared with previous years and confirm whether further action is needed. In 2021/22 one full survey and one pulse survey, focusing on progress and direction, were carried out. In 2022/23 it's expected that two Your Voice pulse surveys will be done. These will provide us with information as to how people feel about their experience at work and will allow us to track our engagement score.

See "How we engage with our stakeholders" on pages 101 to 104 for more information on how and why we engage with our workforce.

The Network Rail Board

The Chief Executive presents a Board report at each Board meeting, which focuses in part on the operation and performance of the railway. In addition, the Chief Executive's Board reports include updates relating to our strategic priorities (these are described in the "How we engage with stakeholders" section, pages 101 to 104).

During 2021/22, the Board focussed on the following in particular:

- workforce safety/Safety Taskforce
- earthworks/weather resilience/environmental sustainibility strategy
- the industry response to the pandemic
- rail reform and Great British Railways
- workforce modernisation
- CP7 strategy

During 2022/23, it's anticipated that the Board's focus will be on:

- workforce safety/Safety Task Force
- earthworks/weather resilience/environmental sustainability strategy
- industry recovery from the pandemic
- rail reform and Great British Railways
- · our devolution strategy
- CP7 strategy

Compliance with the UK corporate governance code

The Board believes that in 2021/22 the company fulfilled the principles and provisions of the UK Corporate Governance Code 2018 (Code), except for the following provisions that it's unable to comply with, mainly due to our

status as an arm's length body of Government:

- · provision 5: relating to the prescribed methods of engagement with employees. The three options suggested by the Code were considered by the Board. However, each was discounted because our workforce engagement activities go beyond the requirements of the Code
- provision 9: in respect of appointment of the chair. The Secretary of State appoints the chair in accordance with the Governance Code on Public Appointments
- provisions 25 and 26: in respect of the appointment, reappointment and removal of the external auditor. Under the terms of the Framework Agreement between the company and the Department for Transport (DfT), the Comptroller and Auditor General assisted by the National Audit Office acts as Network Rail's external independent auditor
- provision 34: in respect of the remuneration for the chair. Under the terms of the Framework Agreement, 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-governanceand-stewardship/uk-corporate-governance-code

The Board believes that the company complied with the Corporate Governance in Central Government Departments: Code of Good Practice. The code can be found on the Government's website: Corporate governance code for central government departments 2017 - GOV.UK (www. gov.uk)

Board leadership and company purpose

Network Rail owns, operates and develops Britain's railway infrastructure. We operate within regulatory and control frameworks and are an arm's length government body. Our financial management and corporate governance ways of working with the DfT are described in the Framework Agreement. A copy of the agreement is available on our website: www.networkrail.co.uk

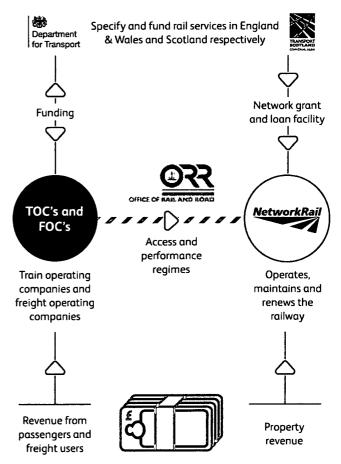
The Board ensures there is effective engagement with stakeholders and encourages participation from them. Michael Harrison, director of UK Investments at UKGI, was appointed as the special director in May 2020. On behalf of the Secretary of State, he is responsible for

communicating the views of the Secretary of State and the DfTs wider strategic, statutory and fiduciary interests to the Board, while acting in accordance with his duties as a nonexecutive director.

Network Rail is regulated by the Office of Rail and Road (ORR) under its Network Licence for our management of the rail infrastructure. The ORR decides how much money it believes we need to run our business efficiently and to deliver what the UK and Scottish governments have asked for in each five-year control period. Our Board is accountable to the Secretary of State for Transport for the leadership and management of the business.

The Board oversees workforce policies and practices, ensuring these are consistent with our values and support our long-term sustainable success. More information on our whistleblowing policy and code of business ethics can be found on our website: www.networkrail.co.uk

The Board is also responsible for running Network Rail to the standards required of a company with shares listed on the London Stock Exchange.



The Board's role and responsibilities

The Secretary of State is the sole member of the company, and as the Special Member has special rights:

Rights of the Special Member (the Secretary of State for Transport)	How these rights were exercised in 2021/22
To appoint and remove the chair of Network Rail.	The chair's term was extended in March 2021 to run for two more years, from 16 July 2021 to 15 July 2023.
To approve the Board's suggested candidate for chief executive of Network Rail.	N/A
To appoint a special director of Network Rail.	Michael Harrison was appointed as the special director on 11 May 2020.
To be consulted on non-executive director appointments.	Network Rail consulted with the DfT in relation to reappointing Rob Brighouse for a further term of two years.
To hold regular meetings with the chair, to discuss corporate strategy and raise concerns.	The chair regularly meets with the Secretary of State and the Permanent Secretary of the DfT.
To approve the three-yearly remuneration policy for executive directors of the company.	The three-yearly remuneration policy was approved at the 2020 annual general meeting (AGM). Network Rail consulted with the DfT and HMT on the content of the policy.
To set the pay for the chair and non- executive directors.	The remuneration of the chair and his contractual time commitment were reviewed and agreed by the DfT.
	Upon his reappointment, the fee paid to Rob Brighouse was reduced to £40,000 per annum to bring it into line with other non-executive directors.

The chair leads the Board as it develops Network Rail's strategy to deliver the outputs required in each of the five-year control periods. The Board is responsible for ensuring that appropriate resources are in place to deliver the strategy.

The responsibilities of the Board are described in the list of matters reserved for the Board which is available on our website: www.networkrail.co.uk

The Board understands the importance of delivering value for money in the company's management of the railway and considers the principles set out in the Code of Conduct for Board Members of Public Bodies, the seven Nolan Principles of Public Life, and the Civil Service Code, as part of its decision making process. The seven Nolan Principles of Public Life can be found on the Government website: gov.uk/government/publications/the-7-principles-of-public-life

Board committees

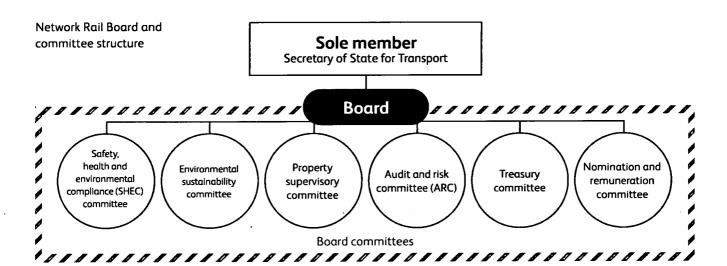
The Board has delegated several of its responsibilities to its seven committees. A summary of their activity in 2021/22 is included in each committee's report on pages 122 to 141. Audit and risk committee, pages 130 to 135.

Nomination and remuneration committee, pages 140 to 141.

Safety, health and environmental compliance committee, pages 122 to 125.

Treasury committee, pages 136 to 137.

Environmental sustainability committee, pages 126 to 127. Property supervisory committee, pages 128 to 129. Great British Railways Transition Team advisory panel, pages 138 to 139.



Board and committee terms of reference

The terms of reference govern the structure, remit and operations of our board and committees, including their delegated responsibilities and authorities. Terms of reference are reviewed annually to ensure the activities reflect current regulatory and governance requirements and best practice. The terms of reference can be found at www.networkrail.co.uk

The executive leadership team

The executive leadership team is responsible for the dayto-day management of the company. It meets regularly to consider strategic and operational matters. The team includes the chief executive, chief financial officer, five regional managing directors and six other senior executives.

Board composition and division of responsibilities

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

Photographs and biographies of directors, including details of their skills and experience can be found on pages 108 to 111.

Chair - Sir Peter Hendy CBE

The chair is responsible for leading the Board, its effective functioning and promoting the highest standards of corporate governance. He encourages all directors to actively contribute to Board meetings and promotes constructive relations between the executive and nonexecutive directors. The chair represents Network Rail and works with the chief executive to develop strategic relationships with the non-executive directors, the customers of Network Rail, DfT, HM Treasury, Parliament, the Cabinet Office, Transport Scotland, Welsh Assembly Government and other stakeholders. The chair reviews the performance of the non-executive directors.

Senior Independent director (SID) - Rob Brighouse

The SID acts as a sounding board for the chair and serves as an intermediary for the other directors when necessary. The SID is responsible for the chair's performance review. He is available to the Secretary of State if the Secretary of State has concerns or where contact through the chair is inappropriate or has failed to resolve an issue.

The special director – Michael Harrison

The special director is appointed by the Secretary of State. He is responsible for communicating the views of the Secretary of State and the DfT's wider strategic statutory and fiduciary interests to the Board, while acting in accordance with his duties as a non-executive director.

Chief executive - Andrew Haines OBE

The chief executive is 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 significantly affect, or are capable of significantly affecting, the achievements

of Network Rail. The chief executive provides clear and visible leadership in business conduct and promotes the requirement that all executive leadership team members and employees demonstrate the company's values. He is accountable to the Board for all elements of Network Rail's business, and specifically for safety performance. He is also the accounting officer.

The chief executive is personally accountable to Parliament for safeguarding the public funds available to Network Rail; for ensuring appropriateness, 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. He is required to ensure that Network Rail is run following the principles, rules, guidance and advice set out in Managing Public Money, which can be found on the Government's website: www.gov.uk/government/publications/managing-public-money

As the accounting officer, he is supported by the Board for the responsibilities set out in Managing Public Money, and for the proper conduct of business and maintenance of ethical standards. The internal audit function also supports the accounting officer. The Director of Risk and Internal Audit reports to the Audit and Risk committee quarterly and, in accordance with the Group Assurance Letter process, reports annually to both the Audit and Risk Committee and the Accounting Officer. This process requires consideration of 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 130 to 135.

Chief financial officer – Jeremy Westlake

The chief financial officer is responsible for leading Network Rail's finance function which includes the teams working on matters related to (i) planning, finance and efficiencies; (ii) financing, funding and commercial matters; and (iii) governance, risk, assurance and improvement (GRAI).

In addition, the Rail Investment Centre of Excellence sits within the finance function. Its purpose is to continuously improve the way Network Rail plans and delivers projects and to provide confidence that benefits will be realised for passengers and freight users.

Chief executive and Chief financial officer - objectives Earlier in the financial year the Nomination and Remuneration committee noted the objectives set by the Department for Transport for the chief executive and the chief financial officer. It is acknowledged that a balance is required in terms of time spent by the chief executive on his Network Rail role and time spent on rail reform. The objectives align closely with our six strategic priorities. Certain objectives will likely continue for some time, for example developing the Whole Industry Strategic Plan requiring a 30-year strategy. Also, the need to unify the industry to identify and deliver cost efficiencies in response to the post-pandemic revenue gap and the opportunities created by industry reform.

Independent non-executive directors

Ismail Amla, Mark Bayley, Rob Brighouse, Stephen Duckworth, Silla Maizey, David Noyes, Mike Putman and Fiona Ross are considered by the Board to be independent of the company. Ismail Amla and Stephen Duckworth were appointed as non-executive directors on 1 April 2021.

The non-executive directors provide independence and challenge to the Board through broad business and commercial experience from the rail and other industries. They provide assurance that the executive directors are exercising good judgement in the 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 takes into account the other demands on the proposed director's time. The Board requires that significant commitments and an indication of the time commitment are disclosed to the Board prior to appointment.

The Board notes that the UK corporate governance code includes guidelines on the meaning of "independence". We must disclose that Rob Brighouse and Mark Bayley are beneficiaries of the Railway Pension Scheme (RPS). Over 150 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 both directors are independent as Network Rail is only one of the contributing companies to RPS.

The statements of responsibility for the chair, chief executive, senior independent director 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

The group general counsel and company secretary provides advice and support to the Board, the chair and the directors on legal and governance matters. He ensures that a high standard of governance is maintained so that the Board functions 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 eight times during 2021/22 and also held two strategy meetings.

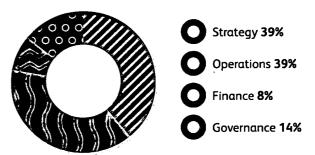
Directors' attendance at Board meetings for the year ending 31 March 2022 is shown in the table below. Nonexecutive directors are also required to attend various committee meetings and their attendance is shown in the respective committee reports on pages 122 to 141.

With regard to Board membership changes, Ismail Amla and Stephen Duckworth were appointed as non-executive directors on 1 April 2021.

	Total
Ismail Amla	8/8
Mark Bayley CBE	8/8
Rob Brighouse	8/8
Stephen Duckworth OBE	8/8
Andrew Haines OBE	8/8
Michael Harrison	8/8
Sir Peter Hendy CBE	8/8
Silla Maizey OBE	6/8
David Noyes	8/8
Mike Putnam	8/8
Fiona Ross	8/8
Jeremy Westlake	8/8

Board activities during the year

The chart below shows the key activities of the Board during 2021/22 and how the Board allocated its time. The Board's activities are shaped around our six strategic themes: safety; train service delivery; efficiency; sustainable growth; customers and communities; people.



Strategy

For example, the PR23 Board and ELT sub-committees and also rail reform and Great British Railways.

Operations

This relates to matters including the industry response to the pandemic; workforce safety and the Safety Taskforce; and the modernising management programme.

Finance

For example, our business plans (including CP7 strategy) and the annual report and accounts.

Governance

Matters including the Board effectiveness review; implementation of the Board effectiveness review; and nonexecutive director induction.

Composition, succession and evaluation

Board recruitment and induction

As confirmed, Ismail Amla and Stephen Duckworth were appointed as non-executive directors on 1 April 2021.

The nomination and remuneration committee plays a significant role in the appointment of new directors: the report for that committee is on pages 140 to 141.

A comprehensive induction programme is in place for newly appointed directors: this is tailored to each director in consideration of their background knowledge, skills and experience. New directors are provided with key corporate, strategic and financial documents to familiarise them with the company's business. The induction programme includes individual meetings with Board members, the group general counsel and company secretary, senior executives and other key stakeholders. As noted in the nomination and remuneration committee report, changes to the induction programme have been necessary in the last couple of years due to the pandemic.

Succession planning

The Board and the nomination and remuneration committee considers whether the appointment process and the approach to succession planning supports 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 is aware that diversity extends beyond gender and ethnicity, and includes amongst other things age, social, educational and professional backgrounds. Further details about Network Rail's organisational diversity and inclusion policies and how these have been implemented in the year can be found in the People section, pages 73 to 76.

We know that to truly put passengers first, empower our people and make them proud to work here, our senior leadership needs to be reflective of our passengers, our people and the communities we serve. We recognise the importance of building and maintaining an increasingly open, diverse and inclusive organisation. We reported last year that the Board approved Network Rail's first Board diversity and inclusion policy in February 2021. This notes the company's long-term ambitions in relation to board diversity and specific objectives to progress towards them. One of these has been met: that by the end of the 2021/22 financial year, at least one of the directors will be from a black, Asian and minority ethnic background. The Board continues to work towards its gender diversity target (see the nomination and remuneration committee report on

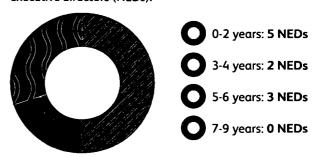
pages 140 to 141 for more information). We are also mindful of other areas relating to diversity and inclusion, for example disability; neurodiversity; and LGBT+ employees.

One of our non-executive directors, Stephen Duckworth OBE, is a wheelchair user. Stephen has met with the staff disability network, 'CanDo,' and has supported the chair of that network. Its vision is to ensure we have a disability inclusive culture in the business founded on awareness, confidence and respect. Stephen has also taken part in events relating to disability, for example a mental health and wellbeing event on International Wheelchair User Day and he supported the business on the International Day of Disabled People.

The policy is supplementary to the organisational equality, diversity and inclusion policy and the Everyone Matters diversity strategy, and implements their aspirations in the context of our senior leaders. The full policy can be found on the Network Rail website: www.networkrail.co.uk

The Board is comprised of nine non-executive directors, one non-executive chair and two executive directors. These individuals come from a variety of backgrounds and experience. The Board is 83 per cent male and 17 per cent female. When considering non-executive directors only, the split is 80 per cent male and 20 per cent female.

The following chart shows the length of service of the non-executive directors (NEDs):



Board effectiveness

The Board is committed to maintaining the highest standards of corporate governance. We reported last year that in line with best practice, Manchester Square Partners (MSP) undertook a review of the effectiveness of the Network Rail Board in early 2021.

The Summary Observations noted in MSP's review confirm that the Board functions well and that overall performance

is deemed strong. The review also noted that the observed dynamics between Board members seem excellent.

A report on the review, including recommendations, was provided to the Board in July 2021. As a result of that, an action plan was developed to address MSP's findings. The action plan was agreed by the nomination and remuneration committee this financial year. It sets out recommendations from MSP and suggested actions on our part. Among other things, the recommendations in the action plan refer to the contribution towards rail reform implementation; integrating risk management into the regions; and maintaining focus on succession development. Progress against delivering the action plan continues to be monitored by the nomination and remuneration committee.

Professional development, training and support for directors

Board members are offered a range of training and development opportunities each year to support their continuing professional development. Directors often receive corporate governance and legal updates, as appropriate. We refer to strategy away days and associated training in the nomination and remuneration report (pages 140 to 141).

Regional 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 2022 AGM.

SIR PETER HENDY CBE

Directors' conflict of interest

The Board identifies and manages potential conflicts of interest 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 identified:

- Michael Harrison is director of UK Investments at UKGI
- Mike Putnam is a member of Arcadis NVs supervisory
- Fiona Ross is a non-executive director at The Scottish Government
- Ismail Amla has been invited to be a member of the Rail Transformation Advisory Group (RTAG). This is intended to support the Secretary of State for Transport in ensuring that the reforms set out in the Williams-Shapps Plan for Rail white paper are implemented across the sector. It is likely that the RTAG will meet quarterly.

Directors' and officers' (D and O) liability insurance

Network Rail maintains D and O liability insurance. The company Articles of Association provide that Network Rail shall indemnify its directors and officers against liabilities relating to company matters. It was not necessary to exercise the indemnity provisions during 2021/22.

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 the law does not class a withheld vote to be a vote). Final voting figures are announced at the London Stock Exchange.

ANDREW HAINES OBE

chief executive and accounting officer, 12 July 2022

SAFETY, HEALTH AND ENVIRONMENTAL COMPLIANCE COMMITTEE REPORT

I am pleased to report to you on the work of the committee during 2021/22. Running a safe railway will always be our priority. We want everyone to feel safe whether they're working on, living near, or traveling on the railway. Over the last 12 months, the business has worked tirelessly to keep our passengers and workforce safe during the Covid-19 pandemic, while operating a railway to help key workers, much needed freight goods, and the rest of the country.

Tragically, one of our colleagues, Michael Smith, was fatally injured in a road traffic accident on 19 January 2022 (investigations into the accident are continuing). Our thoughts are with Michael's family, friends and colleagues.

On 31 October 2021, a South Western Railway train collided with a Great Western Railway train at Salisbury after slipping on the tracks. Fourteen people required hospital treatment. An interim report by the Rail Accident Investigation Branch (RAIB) has identified wheel adhesion as a probable factor. Southern region are planning additional measures for dealing with rail adhesion in the future. We're also reviewing our train accident risk indicators to ensure train accident risk is fully understood and better communicated to senior leadership in future.

In March 2022, the RAIB published its findings on tragic derailment of a ScotRail intercity service near Carmont on 12 August 2020, which claimed the lives of Brett McCullough, Donald Dinnie and Christopher Stuchbury, and injured other passengers and crew members on board. The report made it clear that there are lessons to be learnt by Network Rail and the wider industry. Along with inspecting similar locations and drainage systems across the network, we commissioned two independent taskforces led by world class experts to help us better understand

extreme rainfall events and how to better manage our cuttings, embankments and their drainage systems. The comprehensive action plans, which are regularly reviewed by the committee, identified 20 findings - of which 13 relate to Network Rail.

The committee has overseen the delivery of the Safety Task Force, which continues to work hard to keep our people safe on our tracks through better planning and use of safety equipment. The Safety Task Force has completed 5,389 out of 8,327 milestones due to be delivered by 31 July 2022, and we've seen unassisted lookout working decrease by over 98 per cent since July 2019. Near misses with our workforce have decreased by 70 per cent in the same period. The Office of Rail and Road (ORR) is now reviewing progress ahead of the notices' end date of 31 July 2022, and the committee will continue to oversee the remaining technology roll out, sustaining the significant gains that have been made.

Although we're seeing an improving trend in terms of injury volumes and severity, we didn't hit our Fatalities and Weighted Index (a metric used to measure injury severities) year-end target. The target is intentionally challenging and greater improvement is required to achieve the goal of everyone home safe every day, but it is good to see the decreasing volume of accidents and injuries experienced by our colleagues.

The business has developed a new suite of leading indicators, reviewed by senior leaders, that links to the new safety framework across the regions. The safety framework is a national core set of principles, and its purpose is to engage staff in improving safety. The indicators are giving us a much better understanding of beneficial tasks such as attendance of safety briefs, the volume of

safety conversations held by senior leaders, and planned assurance and inspections undertaken.

The volume of Lifesaving Rule breaches, a major component of the Personal Accountability for Safety metric, are now reducing after a dramatic increase last year. The highest category of Lifesaving Rule breach is our workforce speeding in road vehicles, driven by greater use of vehicles during the pandemic. With the roll out of a new in-cab safety system to our road fleet, we expect, and are already seeing, a big reduction in speeding offences in the future, along with greater understanding of driving patterns.

Train accident risk as measured by the Precursor Indicator Model has also reduced throughout the year and is now at a level last seen in Autumn 2019. The improvement is mainly attributed to the dramatic decrease in the number of signals passed at danger, and a reduction in earthwork-related incidents such as landslips.

Since April 2019, the start of Control Period 6, we've closed 142 level crossings, with another 16 temporarily closed through Traffic Regulation Orders. That's a total of 1,319 closed since April 2014. While we have made good progress with level crossing closures and some additional measures, we have sadly experienced an increase in the number of fatalities involving members of the public.

The number of suicides and trespass incidents that took place on the railway was slightly higher than that of the previous year. April 2021 saw the highest number of trespass incidents ever recorded in one period, likely due to good weather and the easing of lockdown restrictions after winter. Our route crime and trespass groups are working closer together and this is identifying many good practice ideas and encouraging the sharing of strategic and tactical intelligence.

Within health and wellbeing, we implemented a target to reduce work-related mental health absences by 25 per cent for the duration of Control Period 6. Data in Period 1 2022/23 indicates 85 instances of work-related mental wellbeing absence across the business. This is a reduction of 17 absences from Period 13 2021-2022. We are achieving this by work delivered through the mental wellbeing and resilience strategic project, such as the new mental wellbeing discussion tool, an updated stress management standard, and a target to annually train 10 per cent of line managers in supporting mental wellbeing. Thus far we have trained 28.2 per cent of all line managers.

Safety critical medicals have been overhauled with a change in frequency and depth of assessment which is now inclusive of a wellbeing review. Thus far we have completed 9,581 enhanced medicals compared to 5,494 in the previous years and have significantly reduced the number of colleagues deemed unfit for role. The increase in frequency allows proactive identification of health concerns and robust planning of initiatives to aid reduction. One such area of focus will pertain to diabetes, as this has been identified as an area of concern in our workforce. In addition to stand alone initiatives, we aim to review the current competence specific medical fitness standard to ensure it remains fit for purpose.

Health surveillance is now delivered via a telephone method that merges a range of single appointments into one enhanced appointment, capturing the major hazards of concern such as noise, hand arm vibration and so forth. This has made a notable reduction in the administrative and travel requirement and therefore eases accessibility and engagement. We are pleased that the 2021/22 programme delivered a compliance rate of 96.6 per cent which is a significant achievement given the constraints of Covid-19 throughout 2021.

Within environmental management we have updated our guidance on environmental incidents and close calls, to support the business to both identify and categorise these events. This year we have had a total of 620 environmental incidents with an environmental incident frequency rate of 0.420 incidents per 100,000 hours. This has remained relatively stable from 2020-2021, when we had 632 incidents and a frequency rate of 0.392. Just under 78 per cent of these incidents continue to be the lowest impact category (category 4) with just over 4 per cent classified as significant or serious (category 1 or 2). Spillages and fly tipping events continue to be the most common event, making up 90 per cent of all our incidents. We are also continuing to improve the way we manage our waste and materials and achieved our target of diverting waste from landfill with 99.86 per cent diverted in 2021/22. Further information on our successes in waste management can be found in the Environmental Sustainability section of the Strategic Report on pages 77 to 82.

We are currently using 8 per cent less energy and emitting 18 per cent less carbon than we were at the end of Control Period 5. This fell short of achieving this year's targets, so we recognise that we still have more to do to support the UKs net zero target for 2050 (2045 in Scotland). Further information on the work we are doing to lower our energy

use and emissions can also be found in the Environmental Sustainability section of the Strategic Report on pages 77 to 82.

The committee reviewed the safety performance element of the performance-related pay award for senior executives and made a recommendation to the remuneration committee (see page 147).

Mike Putnam Chair, safety, health and environmental compliance committee 12 July 2022

	•	·
Committee members	Formal appointment to the committee	Number of meetings attended during the year
Mike Putnam	Feb 2018	4/4
Rob Brighouse	Jan 2016	4/4
Sir Peter Hendy CBE	Oct 2015	4/4
David Noyes	Dec 2018	4/4

Committee attendees

The executive directors of the company, chief health and safety officer and group director for the Technical Authority normally attend meetings by invitation of the committee. Other members of the Board and other senior executives of the group also attend as and when requested to report on specific areas that lie within the committee's areas of responsibility.

The general secretary of the National Union of Rail, Maritime and Transport Workers (the RMT) is invited to attend all meetings. This adds scrutiny and challenge to the committee's business and is consistent with our commitment to remain transparent to the wider rail industry and its important stakeholders.

Ian Prosser CBE, chief inspector of railways and director of railway safety at the ORR, attends two meetings each year to present the regulator's view on our safety performance.

Role and responsibilities of the committee

The environmental aspect of the committee's role has been redefined since the creation of the environmental sustainability committee in 2019. The SHEC committee oversees environmental legal and regulatory compliance while the environmental sustainability committee has broader responsibility for environmental strategy and related matters.

The committee's role is to monitor how the company implements its responsibilities on safety and health through its everyday business activities, and how it complies with its environmental obligations. The committee must satisfy itself as to the adequacy and effectiveness of the safety and health policies and strategies, and the effectiveness of environmental compliance within the Network Rail group.

The committee's activities include:

- reviewing the group's strategies, systems, policies and practices for safety, health and environmental compliance (SHEC). It also makes sure that the governance and management structures support these being implemented effectively
- considering significant risks to individuals and the company's strategies for SHEC and whether the executive is managing them effectively
- reviewing internal audits, within its SHEC remit, that are carried out across the company on the effectiveness of strategies, systems, policies and practices. It makes sure that the audits have the correct scope and it follows up to confirm that any recommendations have been properly addressed and implemented
- considering findings from internal and external

investigations and how the executive has responded to them

- making recommendations to the Nomination and Remuneration Committee on the company's SHEC performance to inform decisions about performancerelated pay.
- · considering regular Duty Holder reviews from Regions and Route Services.

After each committee meeting, the chair reports to the Network Rail Board and answers its questions on the committee's work.

Principal activities during the year

Matters considered by the committee in 2021/22:

- quarterly SHEC reports from the group Technical Authority. These included scorecard data, information on workforce safety, workforce and contractor accidents, track accident risks, level crossings, health and wellbeing, public safety, and contractor performance
- quarterly updates on safety risks and internal audits on **SHEC** matters
- the approach taken by the company following recommendations from the Lord Robert Mair and Dame Julia Slingo reviews
- progress of the Safety Task Force since its formation in July 2019, including which areas required the most focus in order to achieve compliance with the ORR Improvement Notices for planning and technology
- presentations from duty holders and route managing directors to demonstrate the adequacy and effectiveness of their safety and health systems and environmental systems. The following routes and regions attended the committee:
 - » Route Services
 - » Southern
 - » Wales & Western
 - » Scotland's Railway.
- traction power electrical safety and the strategy to reduce workforce electrical safety risks
- the actions taken by the company following the signalling system fault that resulted in the accident at Dalwhinnie on 10 April 2021 and what further actions would be taken to mitigate against the wider risks identified at Dalwhinnie
- the key areas of Security Risk that could have a significant impact on safety including Terrorism Threats, Cyber threats, Railway Crime and Work-related violence
- · progress on the Fire Safety Programme

- the actions taken to improve safety culture following several railway accidents
- progress on the implementation of the company's mental wellbeing and resilience strategy.

Internal audit

Internal audit plays a key role in providing independent assurance in managing safety, health and environmental compliance risks. The director of risk and internal audit updated the committee at each meeting on any changes to the SHEC audit plan, notable audits, overdue actions, themes and key issues arising from Internal Audit's work.

Audits included our management of manual handling and spoken safety critical communications, and activities are now underway to address the risks. This includes updating both route operational controls as well as organisationwide standards and policies. The progress of the safety task force, providing confidence that it is appropriately set-up to deliver, had been reviewed by Internal Audit, which will continue to provide independent assurance during 2022.

Annual site visit

The committee was unable to conduct its annual site visit due to Covid-19, however it is planning to conduct two site visits in the 2022/23 financial year, in South Wales and Basingstoke.

Planned activities for 2022/23

In the 2022/23 financial year, the committee will:

- review progress of the weather action taskforce and any gaps between this and the RAIB report on Carmont
- receive deep dives on high potential risks within Technical Authority remit and engineering and operations competence
- review the development and improvement of the company's safety culture.
- review the plans in place to evacuate disabled passengers from trains affected by fire
- monitor the Track Worker Safety Taskforce
- · conduct railway station site visits

ENVIRONMENTAL SUSTAINABILITY COMMITTEE REPORT

I'm pleased to present the committee's report into the key activities undertaken during 2021/22 alongside its anticipated activities for 2022/23.

Following publication of the strategy in September 2020, the Board set up this committee to provide support and oversight into its implementation of the strategy. The committee has since examined a number of short-, medium- and long-term plans and continues to assess these against the strategic goals. The committee also offers a level of scrutiny to ensure that ambition is matched with adequate funding to be able to deliver the planned initiatives and the strategy within a financially constrained environment.

David Noyes chair, environmental sustainability committe 12 July 2022

Committee members	Formal appoint- ment to the committee	Number of meetings attended during the year
David Noyes	September 2020	4/4
Rob Brighouse	September 2020	4/4
Mike Putnam	September 2020	4/4
Fiona Ross	September 2020	4/4

Committee attendees

Internal: The chair of the Board, group safety and engineering director – Technical Authority, chief environment and sustainability officer, and head of strategic communications.

External: Representative from the Department for Transport, chair of the Sustainable Rail Executive (SRE) of the Rail Safety and Standards Board (RSSB) and expert advisers including Julian Glover OBE and John Varley OBE periodically.

Role and Responsibilities of the Committee

The current role of the committee involves overseeing, supporting and where appropriate, providing guidance

to the executive in the implementation of the strategy, ensuring that Network Rail is keeping abreast of wider environmental issues as well as co-ordinating its programmes with wider industry environmental initiatives.

Principal activities and challenges during the year

On a quarterly basis, the committee reviews with the executive progress on the implementation of the company's Environmental Sustainability Strategy. The committee also reviews on an annual basis each region's sustainability delivery plan and their progress towards achieving the goals as set out in the strategy. The strength of the regional approach is that regions can pilot and trial different approaches. The committee provides oversight to ensure that best practice is being adopted across the

network, while also encouraging a longer term and wider industry outlook.

Key areas of activities considered by the committee are listed below.

Biodiversity

Monitoring progress on the sustainable land use programme launched in response to the Varley review. The committee also reviewed lessons learnt from the biodiversity pilots conducted in some of the regions.

Energy

Monitoring consumption of non-traction energy, reviewing steps taken towards cleansing of energy data, assessing the impact on the railways from the rising energy costs and reviewing initiatives to source non-traction energy from renewables (CoPPA).

Carbon emissions

Supporting the development of a carbon pricing toolkit to enable the business to make more accurate assessments of carbon impacts.

Reviewing initiatives being rolled out to reduce the frequency of environmental incidents.

Supply Chain

Monitoring the engagement activities being undertaken with Network Rail's supply chain to reduce their carbon footprint in the supply of product and services to the railway.

COP26

The successful running of events at COP26, in particular showcasing both hydrogen and battery-powered trains by coordinating three successful climate resilience events onboard the trains.

Sustainable Rail Strategy (SRS)

Network Rail has been contributing to the RSSB-led initiative on developing a whole industry sustainability plan. The Committee has received regular updates at each meeting and is ensuring that this industry strategy and Network Rail's environmental sustainability strategy are aligned and complimentary.

Climate change

The committee approved the third Climate Change Adaptation Report for submission to the Department for Environment, Food and Rural Affairs. The report outlined Network Rail's planned actions to prepare for future climate impacts and details of progress over the past five years.

Road to Zero strategy

Reviewing progress towards achieving conversion to an allelectric Network Rail road vehicle fleet by 2030.

Social value

The committee received presentations during the year from various external stakeholders and partners including Tree Council, Community Rail Partnership and Shelter. The committee was also encouraged that the Rail Social Value Tool (RSVT) went live on 3 May 2022.

Circular economy

Reviewing the work underway to understand current circular economy maturity and to map and prioritise materials, with the aim of developing strategies to improve the reuse, recycling or reduction in use of key materials, including steel, concrete, and ballast. Guidance on how to "design out waste" would support the business in efficient use of materials.

Planned activities for 2022/23

In the next year, the committee will continue to monitor the delivery of the Environmental Sustainability Strategy, including all the key programmes listed above. The committee will consider if there have been significant developments that would call for a review of the strategy itself to ensure it remains fit for purpose.

There are new scorecard metrics being developed to measure carbon and other key elements; the committee will continue to track performance to ensure all key areas have the right tools to measure their carbon footprint.

Other planned activities include:

- monitoring compliance with the expanded environmental regulations
- progress towards implementation of the government 'Road to Zero' strategy
- progress towards embedding sustainability within the supply chain
- exploring alternative traction fuels
- contributing towards and supporting the Sustainable Rail Strategy led by the RSSB and ensuring that the delivery of a sustainable and resilient railway feeds into the Whole Industry Strategic Plan.
- receiving updates on the weather resilience and climate change adaptation strategic framework and how it is progressing in partnership with the Mair/Slingo programme
- monitoring how the business could better use technology in the delivery of the strategy and in the measurement of the key environmental performance targets.

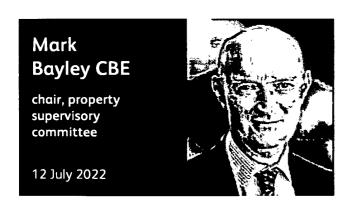
PROPERTY SUPERVISORY COMMITTEE REPORT

I'm pleased to present the committee's report into the key activities undertaken during 2021/22, alongside its anticipated activities for 2022/23. This is my first report as chair of the committee, and I would like to thank Sir Peter Hendy for expertly chairing the committee for some years.

It's been a challenging year for Property as our tenants have been impacted by the ongoing effects of the pandemic and the different lockdown and other restrictions with which they've had to cope. Passenger volumes have fluctuated significantly across the year with consequential impacts on our retail tenants in managed stations. The impacts have not been uniform across the country and we've seen wide differences in station footfall, driven in large measure by the proportion of commuters using the station.

The Retail Property team deserves recognition for managing the enforced closure and subsequent reopening of units as a result of Covid-19 restrictions and ensuring that the relevant safety checks are completed before serving passengers. The devolution of Property into the new regional structure, which took place formally in September 2020, has matured and the committee took particular interest in the evolving regional strategies. Each meeting focussed in detail on the performance and future development proposals for an individual region or the central Group Property team. In line with the aspirations of rail reform, the regions are also now looking closely at rationalising office space and opportunities for train operators to co-locate on Network Rail premises. The committee also approved the sale of Cannon Place, which was surplus to Southern region's requirements, for £52.5m.

Finally, I would like to express on behalf of the committee particular thanks and appreciation to Stuart Kirkwood who retired as Group Property Director on 31 March 2022. Over 11 years he has made a very significant contribution to Network Rail's property development activities, which included the highly successful sale of Network Rail's railway arches for £1.46bn in 2019.



Committee members	Formal appointment to the committee	Number of meetings attended during the year
Mark Bayley CBE	October 2020	6/6
John Halsall	December 2019	3/6
Sir Peter Hendy CBE	December 2019	6/6
Neil Sachdev MBE	July 2016	4/6
Stephen Smith	July 2016	6/6
Jeremy Westlake	April 2016	6/6

Committee attendees

The Group General Counsel and general counsel - Property normally attend meetings of the committee by invitation, as well as representatives from the Department for Transport, HM Treasury and The Infrastructure and Projects Authority. Regional property directors have a standing invitation to attend committee meetings. The committee is supported by the company secretariat.

Role and responsibilities of the committee

The terms of reference (ToR) govern the structure and operation of the 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 committee's role is to consider and provide advice upon:

- the long-term vision and strategies for Network Rail property
- regional property-related strategies and the management of them, including reviewing the respective regional property directors' business plans
- key risks and opportunities
- the performance of the regional property directors and Group Property team

- Subject to the delegated authority to the committee, making decisions or recommendations
- any other matter specifically referred to the committee by the Board or the executive leadership team.

Principal activities during the year

The committee normally conducts a site visit prior to each meeting, although some had to be cancelled or postponed due to lockdown restrictions. Sites visited included Bristol Temple Meads, Victoria and Waterloo stations and the developments neighbouring Manchester Piccadilly station.

The committee receives detailed property updates for discussion at each meeting. The chair provides a written summary of the committee's activities, the main discussion points, findings and any recommendations to the Board for their next meeting.

Key areas of focus during 2021/22:

As well as focusing on the station commercial recovery plan, other areas of focus during the year have included:

London & Continental Railways (LCR)

In early 2019 a formal collaboration with LCR was established to explore the potential to redevelop land at and around stations, to deliver land for residential and commercial development and to generate passenger benefits and money to be reinvested in the operational railway. Updates on the collaboration are reviewed at each committee meeting. The chair of LCR attended the January 2022 committee meeting.

Redevelopment of Euston Station

The committee has reviewed and provided feedback on the key developments underway at Euston station.

Regional Property directors' reports

All regional property directors have presented to the committee, giving them an overview of regional property strategies, targets and efficiencies.

Expected focus areas in the year ahead

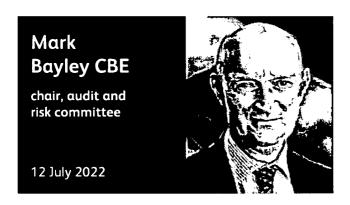
In the year ahead, the committee will continue to monitor progress on:

- property's Control Period 6 strategy and planning for Control Period 7
- the regional Property model
- workplace optimisation, including co-location opportunities with train operators and the effective use of our office estate with new working patterns
- Covid-19/Omicron recovery, particularly the stations commercial recovery strategy
- the LCR collaboration and delivering land for housing
- the potential merger of LCR with the Network Rail Group Property team
- initiatives that put passengers first
- · safety and sustainability

AUDIT AND RISK COMMITTEE REPORT

I'm pleased to present the committee's report into the key activities undertaken during 2021/22, alongside its anticipated activities for 2022/23. I would like to thank my fellow committee members for their contributions, insight and support in this period. I also welcome Stephen Duckworth, who joined the Board and committee in April 2021.

During 2021/22, the committee continued to focus on the audit, assurance and risk management processes within the business in addition to its oversight of financial and other regulatory requirements. The committee's work focussed on the risks facing the business, to understand better the nature of the risks and provide assurance to the Board on the effectiveness of the associated internal controls. The board and executive leadership team also held a risk horizon scanning workshop in January 2022, which included a briefing on physical and cyber security from the Centre for Protection of National Infrastructure and the National Cyber Security Centre.



The committee met five times during 2021/22. Members collectively have a broad range of finance, 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
Mark Bayley CBE	May 2020	5/5
Rob Brighouse	Jan 2016	5/5
Stephen Duckworth OBE (1)	April 2021	5/5
Michael Harrison	Sept 2020	4/5
Silla Maizey OBE	Nov 2016	5/5

 Stephen Duckworth was appointed to the Board and committee on 1 April 2021

Committee attendees

The chair of the Board, the chief executive, chief financial officer, director of risk and internal audit, group controller (Finance), and the group general counsel and company secretary attend meetings of the committee by invitation. Representatives from the National Audit Office (NAO) also attend each meeting. At each meeting, time is set aside for the representatives from the NAO and the director of risk and internal audit to meet with committee members without executive management present.

Role and responsibilities of the committee

The committee monitors the integrity of the financial reporting and the audit process and Network Rail's system of internal control. The committee also oversees risk management, regulatory reporting and compliance. The committee makes recommendations to the Board on the level of risk appetite acceptable to the company.

Following each meeting, the chair provides a summary of the committee's activities, main discussion points and findings to the next Board meeting along with a written report provided by the committee secretary and makes recommendations as appropriate.

Principal activities during the year

The committee had presentations from four regional managing directors on the key risks affecting their business plans. There were also updates on competency management, passenger demand, business continuity,

climate change and the Task Force on Climate-related Financial Disclosures, the counter-fraud programme, the whistleblowing procedure and the Code of Business Ethics.

At each meeting the committee receives business updates from Group Finance, Internal Audit, Group Risk and the independent external auditor. In addition to regular updates, the committee considers the emerging and principal risks facing the business and elevates these to the Board where necessary. Further information on principal risks is on pages 91 to 98. The committee conducts an annual evaluation of its effectiveness, details of which are provided below.

Fair, balanced and understandable

Following a review, the audit and risk committee confirmed that the annual report and financial statements for 2021/22 present a fair, balanced and understandable overview and provided 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 judgments	How the committee addressed those 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 by the Office of Rail and Road (for example anticipated financial and operational outperformance in the Control Period (CP6). The committee reviewed reports from management on the key estimates and the methodology applied to the revaluation model. The committee also reviewed the work of management and findings of the external auditors in respect of the reasonableness of key judgements and estimates in respect of the forecast for CP6, and the appropriateness of the associated disclosures in the financial statements. After this review, the committee confirmed the valuation derived from the estimates, key judgments and valuation methodology.
Deferred tax (It was considered whether it was still appropriate for Network Rail not to recognise a deferred tax asset in relation to its brought forward tax losses.)	It was considered whether it was still appropriate for Network Rail not to recognise a deferred tax asset in relation to its brought forward tax losses. The committee agreed not to recognise a deferred tax asset until it was satisfied when it could be exchanged for economic benefits. With the high levels of investment expected for the foreseeable future, the committee saw little prospect that taxable profits would exceed capital allowances, therefore requiring use of tax assets (including losses brought forward) to reduce tax liabilities.

Risk of management override of internal controls	The independent auditor has focussed attention on this area and provided satisfactory reporting to the committee.
Pension assumptions	The group operates defined benefit and defined contribution pension schemes. Valuation of the defined benefit schemes is dependent on certain key assumptions and complex actuarial calculations. External actuaries are therefore engaged to assist in advising on key assumptions and determining the value of the pension obligations. The committee noted the conclusion of the triennial valuation in the year. The committee discussed the key assumptions, including the degree to which these were supported by professional advice from the actuaries. The independent auditor also focussed attention on this area and provided reporting to the committee on this matter. Finally, the committee considered the valuation of the scheme assets, noting the estimation uncertainty associated with Level 3 assets such as private equity holdings. This included a consideration of the work of management and the auditor to take account of movements to the year end, and the focussed work of the auditor in respect of higher risk assets.
Capital accruals	The estimate of cost of work done is 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 2022. 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 COWD on capital projects appropriately, commercial managers with the appropriate level of experience 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. Reports on management's approach to measuring cost of work done were reviewed alongside details of internal validation and the external auditor's report on sample testing.
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.

The committee is required to review any correspondence received from regulators in respect of financial reporting. There has been no correspondence from the Financial Reporting Council (FRC) or the ORR in relation to Network Rail's financial reporting during the 2021/22 financial year.

Committee effectiveness

The committee continued to monitor and implement the action plan developed from the self-evaluation effectiveness review completed in early 2021. The review identified that the committee was functioning effectively and recommended an increased focus on cyber security and climate change.

In addition, as part of the Board effectiveness evaluation undertaken in early 2021, feedback was provided on the effectiveness of the committee. No areas of concern related to the committee were raised during this review.

The approach taken to the appointment of the external auditor

The Comptroller and Auditor General (C and AG), 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 and AG also audits the individual accounts of Network Rail Infrastructure Finance PLC, Network Rail Infrastructure Limited, Network Rail (High Speed) Limited and Great British Railways Transition Team Limited.

The obligation to appoint the C and 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, not in a position 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.

PricewaterhouseCoopers (PwC) acted as the independent auditors for the remaining subsidiaries in 2021/22.

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, the senior statutory auditor of the independent auditor is regularly rotated, along with other key audit principals within that firm.

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 2021/22 the fee for audit services was £0.615m (£0.596m in 2020/21). This includes the NAO's cost of auditing Network Rail Infrastructure Limited, Network Rail Infrastructure Finance plc, Network Rail (High Speed) Ltd, Great British Railways Transition Team Limited, 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 paid to PwC for auditing the smaller subsidiaries was circa £190k in 2021/22 (£155k in 2020/21).

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 2021/22 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. Following two years of fully remote working due to Covid-19, the external audit has continued to be delivered with a significant remote element, with good communication retained between teams.

Internal audit

The committee approved the annual internal audit plan and reviewed it through the year to ensure alignment with the group's strategic priorities and key risks. At each committee meeting the director of risk and internal audit updated the committee on changes to the plan including notable audits, overdue actions, themes, and key issues arising from internal audit activity. The audit programme was periodically reviewed to assess the impact of changes in Network Rail's risk profile and updated to maintain an appropriate level of assurance.

In addition to delivering formal risk-based audits, independent advisory reviews have been undertaken to support key programmes and respond to emerging issues. These reviews have included drainage asset data, the Safety Task Force programme and the implementation of the Governance, Risk, Assurance and Improvement (GRAI) framework.

Internal audit continues to use a root cause framework to identify, analyse and highlight common themes arising from audit activity for consideration by the committee. Over the last year, these included:

• governance: audits identified cases of less mature governance, risk, and control frameworks both in design and

operating effectiveness. Examples include audits of fire risk management, driving safety and freight accident risk

- processes and procedures: audits found evidence of gaps that meant the operation of controls could not be demonstrated. Improvements were identified in processes such as performance management, management of investigation recommendations and procurement
- assurance and monitoring: audits found control
 weaknesses in assurance and monitoring arrangements
 relating to, for example, deferrals to the asset workbank,
 the decarbonisation strategy and the TransPennine route
 Upgrade.

Where areas for improvement have been identified through audit activity, these are being actively managed, and the improvements closely monitored by the committee.

Quality assurance

An external quality assessment (EQA) of the internal audit function was carried out in the year. Overall, the function was found to be operating effectively across all the attributes considered, with only minor areas highlighted for improvement. The EQA did not identify any major non-conformities with applicable internal audit standards (IIA and PSIAS).

Additionally, we undertook a self-assessment to check compliance against the government internal audit functional standard, GovS 009, with no major non-conformities identified.

Action plans, with agreed accountabilities and completion timeframes have been developed to remediate the minor areas for improvement identified. These are actively being monitored and tracked in the Network Rail internal audit action plan.

The committee approved the internal audit charter, which defines internal audit's purpose, authority, responsibility, and position within the company.

Risk management and internal controls

The Board has ultimate responsibility for Network Rail's risk management and internal control systems, but delegates provide 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 frameworks. 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 131.

The Board and executive leadership team collectively held a risk horizon scanning workshop in January 2022, which included a briefing on physical and cyber security. The workshop considered future threats and opportunities for Network Rail, and how they would impact current operations.

The committee reviews progress against agreed action plans to manage identified risks. Detailed oversight of Safety Related risks, including physical security, is delegated from the Board to the safety, health and environmental compliance 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 87 to 98.

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 hostile or malicious acts exploiting vulnerabilities in Network Rail's cyber systems
- the risk of being unable to produce a robust timetable that is both high quality and high performance
- the risk of failing to manage the competence of Network Rail's employees
- the risk of the railway not meeting normal levels of performance during adverse and extreme weather events, today and in the future as a result of climate change
- Supply chain shortages and the impact of energy price increases.

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.

During the year the committee also reviewed Network Rail's risk appetite statements and the remit of Risk Management

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 have been identified, appropriate actions are 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 in support of the viability statement. Further details of the analysis/scenario testing for the viability statement can be found on page 100.

Business ethics

The committee reviews and makes recommendations to the Board on the company's whistleblowing procedures and arrangements for the independent investigation and follow-up of such matters. It also discusses major findings of internal investigations and management's response to them.

In February 2022 the committee assured the Board that the whistleblowing policy and procedures were adequate and effective. The committee was updated on action taken to further enhance the existing framework in the year. This included:

- distributing posters and wallet cards to promote Network Rail's confidential reporting service (known as 'Speak Out')
- testing staff confidence in the whistleblowing arrangements in the biennial employee engagement survey. The results indicate that a large majority of respondents to the survey have confidence in the arrangements (23,224 of our staff responded to the survey – over half of our total workforce)
- an independent review of the whistleblowing policy and procedures, leading to the policy being updated to reflect the review's recommendations
- including Speak Out as a company-wide process within the information management system programme
- The launch of the 'EthicsApp', a desktop and mobile app available on all Network Rail devices that allows easy access to advice and assistance in making ethical choices.

Network Rail's confidential reporting service and Speak Out 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 Counter

Fraud and Investigation Services team.

In 2021/22, 562 confidential reports were made to the Speak Out service, which is broadly consistent with the number of reports made in 2020/21.

Training modules are in place, designed to enhance our people's knowledge and understanding of business ethics, including information about our whistleblowing policy and how to report concerns. To date, the training has been completed by 96 per cent of our workforce.

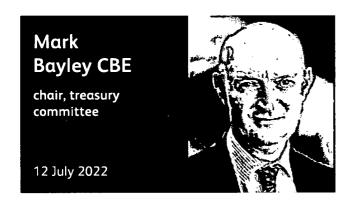
Planned activities for 2022/23

In the 2022/23 financial year, the committee will continue its oversight of the risk management and internal control systems and internal audit, monitoring the integrity of the financial statements including the interim statements, and reviewing the external audit process.

The committee will focus on ensuring that the structure and focus of meetings adapt to the devolved nature of the organisation; the establishment of the Great British Railways Transition Team company as a subsidiary and its acquisition of the Rail Delivery Group group of companies; and take in to account the key challenges facing the organisation and wider industry. This will include: oversight of the risks specific to each region; continued monitoring of the governance, risk, assurance and improvement programme; assurance of the capital delivery programme as Project SPEED is embedded; and the company's response to changing passenger demand following the pandemic. There will be an increased focus on cyber security and climate change.

TREASURY COMMITTEE REPORT

I am pleased to present the committee's report into the key activities undertaken during 2021/22 alongside the work it expects to be doing in 2022/23.



Committee members	Formal appointment to the committee	Number of meetings attended during the year
Mark Bayley CBE May 2020		3/3
Silla Maizey	November 2016	3/3
Michael Harrison September 2020		3/3

Committee attendees

The chair of the Board, chief financial officer, group controller, head of treasury, corporate finance and business development director, the group general counsel and company secretary attend meetings by invitation.

Role and responsibilities of the committee

The role and responsibilities of the committee are reviewed regularly to ensure the activities of the committee align with the needs of the organisation.

The committee's role is to:

- approve or recommend strategies and policies in relation to areas of treasury management including financing, cash and liquidity management and forecasting, regulatory requirements, investor relations, bank relationships, and treasury control and governance policies
- review proposed treasury and corporate finance activities including banking, cash and liquidity management and forecasting, debt management, investment

- management, and treasury risk management
- review the treasury function's financial reporting and internal control procedures
- approve specific transactions within treasury responsibility
- review Network Rail's corporate finance activities and major corporate transactions.

Principal activities during the year

During the year, the committee received detailed updates on Network Rail's cash and liquidity position, its debt and derivative portfolio, its intercompany financing arrangements, and major corporate transactions.

The committee continued to monitor the impact on funding caused by the pandemic and the reduction in

Network Rail's enhancement budget by £1bn in the control period following the Chancellor's Spending Review. The committee also reviewed opportunities for third-party investment in Network Rail Infrastructure.

The chair provided a summary of the committee's activities and its main discussion points and findings from each meeting to the next Board meeting and made appropriate recommendations.

Some of the specific topics discussed during 2021/22 were:

Cash and liquidity

The committee discussed the continued operation of the existing loan facility from the Department for Transport and grant agreements between Network Rail and governments, as well as the effectiveness of Network Rail's banking arrangements.

There was particular focus on the steps taken to mitigate the impact of Covid-19 on Network Rail's cash position, including the early submission of funding requests to reduce potential operational complications, and the acceleration of grant receipts to cover an expected fall in income. The committee also endorsed the move to support the rail industry supply chain through Covid-19 by agreeing to more favourable supplier payment terms, and the subsequent impact on working capital. Network Rail has since reverted to pre-pandemic corporate standard payment terms.

Policy, risk and reform

The committee reviewed the policy document that governs Network Rail's treasury-related activities. The committee also considered the status of funding and liquidity risk as part of Network Rail's enterprise risk process. The committee discussed various areas of ongoing financial market, regulatory and rates reform which may have implications for how Network Rail manages its treasury activities.

Open for business update

The committee considered various potential opportunities for third-party investment into Network Rail's telecommunications infrastructure and the potential for purchasing Network Rail's non-traction electricity requirements from renewable generators. This included private sector investment in trackside fibre optic cables, to improve train performance and safety, and connectivity across the network (Project Reach).

Treasury

Further matters considered by the committee during the year included:

- 2021/22 actual and forecast cash position
- potential capital restructure of Network Rail subsidiaries
- regular summaries of treasury activities, including:
 - » actual and forecast movements in debt, derivatives and investments
 - » financing costs
 - » intercompany financing arrangements within the Network Rail group.

Planned activities for 2022/23

The committee will continue to monitor the progress of the initiatives underway.

Particular focus will include:

- the potential for future structural changes to the rail industry and their likely impact on Network Rail's financing and treasury activities and capital structure
- exploring alternative approaches to raising capital to fund rail infrastructure and enhancements
- assessing strategic or corporate finance opportunities that may be proposed to the Board
- monitoring cash flow and funding limits

GREAT BRITISH RAILWAYS TRANSITION TEAM ADVISORY PANEL REPORT

We've created an advisory panel, led by Keith Williams, as a formal sub-committee of the Board. The panel has been appointed to oversee, steer and advise Great British Railways Transition Team (GBRTT), which is responsible for creating Great British Railways (GBR), the new public body that will deliver a simpler, better railway for everyone in Britain. Its members bring together a wealth of knowledge, skills and leadership experience from across rail and the wider transport sector, as well as the infrastructure, business, digital, technology and retail sectors. The panel works collaboratively with the leadership of the transition team to help them deliver a more sustainable railway that better serves the needs of passenger and freight customers.

Sir Peter Hendy CBE

Deputy chair, GBRTT advisory panel

12 July 2022



Advisory panel members	Formal appointment to the advisory panel	Number of meetings attended during the year
Keith Williams, chair	19 January 2022	3/3
Sir Peter Hendy CBE, deputy chair	19 January 2022	3/3
Andrew Haines, transition team lead	19 January 2022	3/3
Jeremy Westlake, chief financial officer	19 January 2022	2/3
Tony Poulter, non-executive director (DfT)	19 January 2022	3/3
Dyan Crowther, HS1 chief executive	19 January 2022	2/3
Heidi Mottram, Northumbrian Water chief executive	19 January 2022	3/3
Jane Mee, Hitachi Rail Europe general counsel	19 January 2022	3/3
Ismail Amla	19 January 2022	3/3
Silla Maizey	19 January 2022	1/3
Michael Harrison	19 January 2022	3/3
David Noyes	19 January 2022	1/3

Advisory Panel attendees

Internal: Anit Chandarana (lead director), Michael Clark (policy and transformation director), Suzanne Donnelly (passenger revenue director), Stewart Fox-Mills (fares, ticketing and retail programme director), Elaine Seagriff (strategic planning director), Rufus Boyd (passenger and freight services director), John Gerrad (business planning and financial management director)

External: Conrad Bailey, director general, rail services and strategy, Department for Transport, Annelies Look/Chris White-Horne - programme director, rail transformation programme, Department for Transport.

Role and responsibilities of the advisory panel

GBRTT has been set up to start delivery of the Williams-Shapps Plan for Rail, working with Government and across the rail sector. This will lead to the creation of GBR, a new public body that will bring the whole system under single, national leadership.

The advisory panel's role is to oversee and provide advice to GBRTT as it delivers the reforms in the Plan for Rail and develops plans for the creation of GBR. This includes providing advice on:

- the strategy, values and standards for GBRTT as it establishes its vision, mission and policies
- the culture and the approach to diversity and inclusion, together with the development of necessary whole industry capabilities
- · opportunities, threats and risks, and the mitigation of emerging risks and opportunities
- business plans and delivery plans
- GBRTT's corporate and organisational structure with a view to the future state of GBR.

After each meeting, the deputy chair of the advisory panel reports to the next Network Rail Board meeting.

Principal activities during the year

The advisory panel's first meeting was held in January 2022. At that meeting, the panel was provided with a recap of reform from both GBRTT and Department for Transport (DfT), including the division of responsibilities and the work

that had already been carried out on the setup of GBR and development of legislation. It was also provided with an overview of the key areas of work, covering passenger revenue and fares, ticketing and retail modernisation, and the Whole Industry Strategic Plan, workforce reform and passenger service contracts.

At subsequent meetings, the panel received an overall update from GBRTT on its programme and from DfT on the wider reform programme. It has also reviewed proposals for the fares, ticketing and retail programme, preparations for formal creation of GBRTT as a separate company, the proposed acquisition of the Rail Delivery Group and findings from the Whole Industry Strategic Plan call for evidence.

Planned activities for 2022/23

For the first part of the year, the panel continued to monitor progress on GBRTT's key activities. During 2022/23, GBRTT is expected to become a separate subsidiary, with the panel members being appointed to the board of GBRTT.

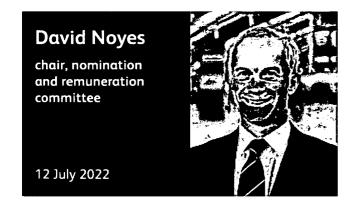
NOMINATION AND REMUNERATION COMMITTEE REPORT

This financial year has again been challenging due to the pandemic. The challenges have affected not just Network Rail but the entire rail industry, our stakeholders and the UK economy.

Bearing this in mind, I present my report on behalf of the nomination and remuneration committee.

Network Rail's revenue remains affected by the pandemic. As with the previous financial year, we have had to continue making difficult decisions related to the pay of our people.

The nomination and remuneration committee is a single committee however we report on its work in two parts. The first section of the report examines the 'nomination' aspects of the committee's work, and the second section reports the prescribed elements of the directors' remuneration report. Areas subject to overlap will be highlighted where appropriate.



Committee members	Formal appointment to the committee	Number of meet- ings attended during the year
David Noyes	October 2018	4/4
Michael Harrison	May 2020	4/4
Sir Peter Hendy CBE	October 2015	4/4
Fiona Ross	September 2020	4/4
Ismail Amla	April 2021	4/4

Committee attendees

The committee customarily invites the chief executive, the group general counsel and company secretary, the group Human Resources director and the head of reward and benefits to attend meetings. Others may attend for specific items. Meetings are routinely attended by a representative from the Department for Transport.

Role and responsibilities of the committee

The committee's role is to consider and comment on:

- board appointments and the induction of new directors
- board culture and diversity
- board effectiveness

- · board and senior executive remuneration
- · any other matter within its remit that it may consider necessary or appropriate

After each meeting the committee chair briefs the full Board on the committee's work and makes recommendations as appropriate.

The committee's terms of reference are available on our website: www.networkrail.co.uk

Principal nomination activities during the year

Diversity and inclusion targets

In February 2021 the Board adopted a Board diversity and inclusion policy. It continues to supplement our equality, diversity and inclusion policy and our Everyone Matters diversity and inclusion strategy.

The target in the diversity and inclusion policy to ensure that at least one Board director would be from a black, Asian or minority ethnic background by the end of March 2022 has been met.

The target to ensure that as a minimum, one third of the Board would be female by the end of the 2021/22 financial year has not been met. Two of the Board's 12 directors are female. The Board continues to work towards meeting this target.

Non-executive director induction

Ismail Amla and Stephen Duckworth OBE were appointed to the Board as non-executive directors on 1 April 2021. They were provided with reading material as part of the induction and they met the other directors, the executive leadership team and key senior executives virtually, due to the pandemic.

As part of his induction, Stephen Duckworth attended site visits at Clapham Junction and London Waterloo stations. Ismail Amla's induction included visits to the control centres at Romford and London Liverpool Street stations. He has also experienced the train cab simulator at King's Cross station. In addition, both Ismail and Stephen attended an induction meeting in Manchester and observed works relating to part of the TransPennine Route Upgrade.

Board effectiveness evaluation

We comment in the Corporate Governance report (pages 112 to 121) on the independent board effectiveness evaluation completed by Manchester Square Partners (MSP) in 2021. The report confirmed that overall Board performance is deemed strong. The action plan prepared internally following the evaluation – which sets out recommendations from MSP and suggested actions on our part – remains applicable and progress against delivering the plan continues to be monitored by this committee.

Great British Railways (GBR) -**Transition Team Advisory Panel**

In September 2021 the committee proposed that the Great British Railways Transition Team (GBRTT) Advisory Panel be created as a committee of the Network Rail Limited Board. The Panel oversees GBRTT's delivery, allowing the main Board to remain focussed on Network Rail's core strategy, operations and activity. It was proposed that Panel members include seven Network Rail Limited directors, four of whom are non-executive directors. It was agreed that Panel members would initially be appointed by nomination, and as such those roles would not be remunerated. The committee recommended to the Network Rail Board the creation of the Panel, its membership and terms of reference.

Planned activities for 2022/23

In the year ahead, the committee will continue to:

- implement the board effectiveness evaluation action plan
- · strive to ensure all Board diversity and inclusion targets are met
- continue to consider the future of Network Rail as a corporate body
- manage any relevant matters relating to rail reform and/ or workforce modernisation
- continue to review talent development strategies to ensure the organisation has the appropriate skills and capabilities in place to execute its accountabilities effectively.

DIRECTORS' REMUNERATION REPORT

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ANNUAL STATEMENT FROM THE REMUNERATION **COMMITTEE CHAIR**

I'm pleased to present the 2021/22 directors' remuneration report for Network Rail. The nomination and remuneration committee, which has been combined since 2018, is dedicated to the highest standards of disclosure on remuneration and recognises that executive pay is an important issue for a public body. We operate in line with the remuneration requirements which apply to all UK listed companies and the provisions of the UK Corporate Governance Code. The committee follows good governance practice by reviewing the terms of reference every year.

The 2021 report was approved at the Annual General Meeting by our member, the Secretary of State for Transport (SoS). The current three-year remuneration policy for executive directors (Policy) was approved at the 2020 AGM and sets out framework and limits for how executive directors are paid. This Policy was included in the 2020 directors' remuneration report and can also be found on our website www.networkrail.co.uk

Key agenda items for the year

Our annual remuneration report outlines the outcomes for the 2021/22 financial year in terms of executive remuneration. The key points to note for 2021/22 outcomes are:

· A decision on the 2021/22 performance related pay scheme had not been agreed at time of this report. However, in light of the continued financial pressures facing Network Rail, the whole railway, and the public sector generally, as a result of the Covid-19 pandemic, the chief executive and chief financial officer declined to accept a performance related payment this year.

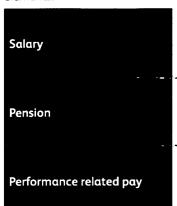
The rest of this statement explains how executive remuneration is determined at Network Rail and gives more details on the outcomes of this year.

Implementation of Policy in 2022

All decisions made by the committee during the year were in compliance with the Policy. The Policy is based on four key principles:

- 1. Simple: the framework should be transparent and simple for all stakeholders to understand.
- 2. Competitive and fair: attracting and retaining leaders of the necessary ability requires remuneration arrangements that are reasonable in the markets that we compete in for talent, and which fairly reflect the appropriate market rates for the skills and experience of the individual. At the same time, we 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 shouldn't be a 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 across Network Rail: 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, although it is not a contractual entitlement.

The remuneration framework for executive directors agreed in 2020 is based on these principles and includes the following elements:



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.

Participation in pension schemes is on the same basis as other managerial positions at Network Rail.

Our plan is based on the achievement of stretching annual performance targets, which is aligned to the business scorecard.

2021/22 outcomes for executive directors

Business performance is measured through the scorecards. These evaluate performance against key measures and targets that have been agreed with customers and stakeholders. Since 2019/20, the reference for performance-related pay (PRP) was changed to a dashboard with simpler, more outcome-focussed set of measures that Network Rail's stakeholders, especially passengers, would see as a success. The measures on the dashboard and the business scorecards are aligned. PRP for senior employees uses the national dashboard outturn and one quarter (25 per cent) of PRP is also determined by an individual's performance rating. This gives a direct line of sight between the achievement of individual objectives and PRP.

Overall National scorecard performance was below target at 46 per cent. The PRP dashboard outturn was slightly lower at 42.2 per cent.

The chief executive and chief financial officer declined to accept a performance related payment this year.

Further details of the PRP scheme can be found on page 146.

National dashboard

There is a distinct set of performance measures set specifically for PRP, and while these are different from the

measures on business scorecards, they have been chosen to closely mirror overall business performance. The measures on the dashboard represent the key strategic themes of train service delivery, safety, efficiencies and people.

David Noyes chair, nomination

chair, nomination and remuneration committee

12 July 2022



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 2021/22 (audited)

The table below summarises all remuneration for the executive directors in respect of 2021/22 (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	
	2021/22	2020/21	2021/22	2020/21	2021/22	2020/21	2021/22	2020/21	2021/22	2020/21
Jeremy Westlake	373	373	12	12	374	33	0	0	422	417
Andrew Haines OBE	590	554 ⁵	3	3	0	0	0	0	593	557

^{1.} Benefits include car allowance, private medical cover, any annual travel subsidy, life assurance and relocation.

Pay ratios (audited)

The Government announced new legislation for employers to publish their pay ratios from 2020. The pay ratio is the gap between the chief executive and the 25th, 50th and 75th percentile of employees – using the single figure disclosed in remuneration reporting in the table above. A historical record will be published incrementally to a 10-year period moving forward.

For transparency and good governance, the nomination and remuneration committee decided to publish the pay ratio information a year early in the 2018/19 report and to also publish the information from 2017/18 so that it could be compared.

There are three calculation methodologies to choose from:

^{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 page 147.

^{3.} In the light of the financial pressures arising from the Covid-19 pandemic, the executive directors declined to receive a payment under the PRP 2020/21 and 2021/22 scheme years.

^{4.} Increase in 2021/22 allowance in line with increase in pensions earning cap and increase in contributions. Jeremy received a pensions allowance overpayment of £843 in the 2021/22 year, which has been recovered in 2022/23. This overpayment has therefore not been included in this year's disclosure.

^{5.} In light of the financial pressures facing Network Rail, the whole railway, and the public sector generally as a result of the Covid-19 pandemic, Andrew Haines took a voluntary reduction in remuneration of 20 per cent for four months during the peak of the pandemic from December 2020 to March 2021.

- A. Calculate total remuneration for all employees and take the percentiles to calculate the pay ratio against the chief executive single figure total remuneration.
- 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 making it more familiar and easier to obtain.

	Method	25th percentile pay ratio	Median pay ratio	75th percentile pay ratio
2017/18	Option B	25.1:1	20.0:1	16.2:1
2018/19 ²	Option B	20.9:1	16.1:1	13.3:1
2019/20³	Option B	18.0:1	14.3:1	11.9:1
2020/21	Option B	17.5:1	14.3:1	12.8:1
2021/22	Option B	17.1:1	13.8:1	11.2:1

- 1. PRP has been removed from the calculations for all years for consistency, as a decision on PRP for employees for 2021/22 was not made at the time of this report.
- 2. 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
- 3. Andrew Haines OBE's single figure total was used for 2019/20 onwards.

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. The latest 2021 pay gap data used to identify employees at each percentile was taken at 31 March 2021 with the total remuneration data covering the same period as that in the single figure total remuneration table. The total pay and benefits along with the salary component for each of the employees at each percentile are shown in the table below.

Percentile	Total pay & benefits	Salary component
25th Percentile	£34,608	£34,608
50th Percentile	£43,043	£40,663
75th Percentile	£53,182	£52,702

The employees selected in these percentiles were a mix of technical and clerical and management roles who were not given a pay award during 2021/22. Despite an increase in the total remuneration of the chief executive in 2021/22 as a result of temporary reduction in pay in 2020/21 due to financial pressures arising from Covid-19 pandemic, the pay ratios decreased across all percentile comparators. The decrease in pay ratios can be attributed to higher remunerated employees at the 25th, 50th and 75th percentiles in the latest 2021 gender pay gap data for pay ratio calculations.

Executive director changes

There have been no changes this year.

Incentive plan 2021/22 – annual PRP (audited)

During the year, two directors were eligible to participate in this scheme; Jeremy Westlake and Andrew Haines OBE. The maximum potential annual PRP award for Jeremy Westlake in 2021/22 was 20 per cent of salary. Andrew Haines OBE's maximum potential annual PRP award was nine per cent. Stretching performance targets were set at the start of the year in the context of the PRP dashboard, which can be found on pages 152 to 153. The approach for PRP is aligned across the business, including executive directors. The PRP dashboard outturn, which is closely related to the business scorecard, determines the percentage pay-out against the maximum award. For 2021/22, one quarter (25 per cent) of PRP was based on an individual's performance rating, and each rating carried a different percentage weighting. For example, a 'good' performance rating will have an 11.25 per cent contribution to the overall PRP.

Performance against the national scorecard is summarised on pages 20 to 25. Our National scorecard performance was

below target at 46 per cent. This year saw a busier timetable and an increase in passenger numbers which affected train punctuality, however passenger satisfaction improved throughout the year. Overall performance was impacted by the safety measures which all fell below lower taper, coupled with the increase in freight cancellations as a result of the severe weather earlier in the year. We also missed our target for employee engagement. The PRP dashboard outturn is slightly lower than our National scorecard at 42.2 per cent. This is partly due to our performance against two index measures not captured in the PRP dashboard; to measure our environmental sustainability and how we handle complaints, offset by the additional weight we have given to the financial performance in the PRP dashboard.

In addition, each year the safety, health and environment committee (SHEC) considers the overall outturn from a safety perspective and decides whether to recommend any further adjustments to reflect safety performance. Having reviewed the outturns of the safety measures and overall safety performance, the committee concluded that no further adjustments were necessary this 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, minus an adjustment for the cost of providing continued life assurance and the employer National Insurance Contributions payable. Andrew Haines OBE was not eligible for 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 (£172,800 for 2021/22 tax year and previously £170,400 for 2020/21). This policy no longer applies to new appointments.

The table below sets out details for executive directors for 2022 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 145.

	Defined benefit schemes			Other pension arrangements ⁴			
	Normal retirement age²	Accrued pension at 31 March 2022 £000	Increase in accrued pension (net of inflation) during 2021/22)	Tansfer value of accrued pension at 31 March 2022 £000³	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	-	-	-	-	_	_	-
Jeremy Westlake	_	_	_	_	_	37	37

- 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 2022 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 in the year. The value shown in the single figure table is the sum of A and B.

Non-executive directors' fees (audited)

Under the framework agreement the SoS sets the pay for the chair and non-executive directors of Network Rail. The fees for the non-executive directors were last reviewed in 2016 for new appointments and were decreased at the time.

The table below summarises the remuneration for the non-executive directors for 2021/22.

	2021/22		2020/21	
	Gees£000	ලිපාණ් <u>ජි</u> 000	Fees£000	Benefits £000
Rob Brighouse ¹	57	-	59	_
Sir Peter Hendy CBE ²	316	-	296	_
Silla Maizey OBE	40	-	40	-
David Noyes³	50	-	50	-
Mike Putnam ⁴	50	-	50	
Michael Harrison ⁵	_	-	_	-
Mark Bayley ⁶	65		46	_
Fiona Ross ⁷	40	_	36	-
Ismail Amla ⁸	40	_	_	, _
Stephen Duckworth ⁹	40	_	_	-

Payments to former directors (audited)

There were no payments made to former directors in 2021/22.

Payments for loss of office (audited)

There were no payments for loss of office to executive directors in 2021/22.

Outside appointments

Executive directors need to seek approval from the committee to retain any fees for external non-executive directorships.

Andrew Haines OBE is a director of the Rail Delivery Group and does not receive fees for this appointment, although he does have a travel pass that comes with the directorship, which allows him free rail travel for personal and business use.

Jeremy Westlake is a non-executive director of Elevate Services Inc. Whilst there are no fees taken for this, share options are available. Jeremy was also a member of the British Property Federation's policy committee but transferred his involvement to Robin Dobson when he joined as group property director.

- Rob Brighouse reappointed from 1 January 2022 to 31 December 2023. Base fees reduced from 1 January 2022 but continues to receive additional fee for role as senior independent director.
- In the light of the financial pressures facing Network Rail, the whole railway, and the public sector generally, as a result of the Covid-19 pandemic, Sir Peter Hendy took a voluntary reduction in remuneration of 20 per cent for four months from December 2020 to March 2021.
- David Noyes' receives additional fee as chair of the Nominations and Remuneration Committee however has waived his fee as chair of Environmental Sustainability Committee.
- Mike Putnam receives additional fee as chair of the Safety, Health and Environmental Compliance Committee
- Michael Harrison was appointed on 11 May 2020 as the Secretary of State's designated non-executive special director. It is an unpaid appointment for three years.
- Mark Bayley received additional fees in 2021/22 for chairing the Audit and Risk Committee and the Property Supervisory Committee.
- Fiona Ross received less in 2020/21 as she joined part-way through the year on 11 May 2020.
- 8. Ismail Amla joined on 1 April 2021.
- 9. Stephen Duckworth joined on 1 April 2021.

Additional disclosures

The following disclosures are required by the regulations to provide additional background for considering executive remuneration.

Percentage change in remuneration

The table below shows the percentage change in the salary, benefits and PRP of the chief executive and all Network Rail employees from 2020/21 to 2021/22.

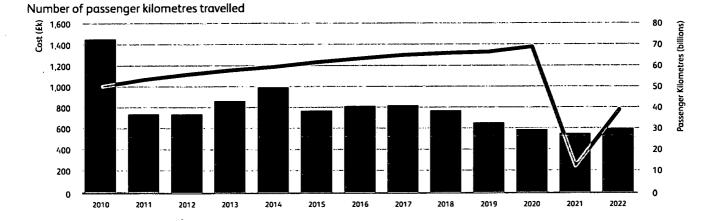
For the table below, the change in the value of each of the components for the chief executive has been calculated using the data disclosed in the relevant columns of the single total figure of remuneration table shown on page 145.

	Chief executive	All employees	
Salary ¹	6.5 % ²	0 % 3	
Benefits	0%	0%	
Performance related pay ⁴	0%	0 %	

^{1.} Based on salary reviews effective on either 1 January or 1 July 2021.

Performance graph and table

Under the regulations, companies need 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, we have used the metric of 'passenger kilometres travelled' instead.



Chief executive cost

Passenger growth

^{2.} Andrew Haines took a temporary 20 per cent pay cut for four months during 2020/21 due to the economical and financial challenges resulting from the coronavirus pandemic.

^{3.} At the date of this report no agreement has been reached on the pay award for general grades effective 1 January 2022 or management grades effective 1 July 2022.

^{4.} PRP is based on any changes to maximum opportunity.

	Chief executive	Single total figure of remuneration	PRP (% of vesting)
2021/2022	Andrew Haines OBE	£593k	0%
2020/2021	Andrew Haines OBE	£557k	0%
2019/2020	Andrew Haines OBE	£595k	0%
2018/2019	Andrew Haines OBE	£371k	0%
2010/2019	Mark Carne CBE	£285k	N/A
2017/2018	Mark Carne CBE	£769k	54.6 %
2016/2017	Mark Carne CBE	£820k	37 %
2015/2016	Mark Carne CBE	£811k	34,7 %
2014/2015	Mark Carne CBE	£771k	0%
2012/201/	Mark Carne CBE	£200k	20.9 %
2013/2014	Sir David Higgins	€790k	N/A
2012/2013	Sir David Higgins	£836k	28.6 %
2011/2012	Sir David Higgins	£736k	0%
2010/2011	Sir David Higgins	£161k	N/A
	Iain Coucher	£528k	N/A
2009/2010	Iain Coucher	£1,447k	56.8%

- 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 PRP in 2018.
- Andrew Haines OBE was appointed chief executive on 14 August 2018. He declined any PRP 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 for 2018/19 was £656k

Relative importance of spend on pay

Under the regulations, companies need 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 so cannot provide data on returns to shareholders. Therefore, other key Network Rail metrics have been used in the table below to show employee remuneration in the context of overall business activities.

	2021/22	2020/21	Change (%)
Total employee remuneration	£2,975 m	£2,802m	6.2
Total expenditure	£10,785m	£10,722m	0.6

Consideration of directors' remuneration – remuneration committee and advisers

The committee during the year was made up of the following independent non-executive directors: David Noyes, Sir Peter Hendy CBE, Fiona Ross and Michael Harrison.

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 when invited by the committee. No individual is present when their own remuneration is being discussed.

In line with best practice, the committee seeks independent external advice when needed. During the year, the committee retained Deloitte LLP to provide

independent advice on executive remuneration. Deloitte was chosen by the committee in 2012 following $\boldsymbol{\alpha}$ selection process undertaken by the committee. The committee is satisfied that the Deloitte engagement partner and team provide fair and independent remuneration advice to the committee and do not have any connections with Network Rail that may affect this. 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 2021/22, and as such no fees were payable in this respect.

Key remuneration committee agenda items during the year

May 2021	 PRP outturn 2020/21 and strategic considerations Senior pay strategy Executive director's objectives 	
September 2021	Board effectiveness annual review	
November 2021	PRP 2021/22 updateModernisation	
March 2022	 Update on pay award discussions and modernisation Indicative PRP outturn for 2021/22 PRP review and targets for 2022/23 Executive director's objectives 	

Committee members

Member	Formal appointment to committee	Number of meetings attended during the year	
David Noyes (chair)	October 2018	4/4	
Fiona Ross	May 2020	4/4	

Member	Formal appointment to committee	Number of meetings attended during the year	
Sir Peter Hendy	July 2015	4/4	
Michael Harrison	May 2020	4/4	
Ismail Amla	April 2021	4/4	

Role of the remuneration committee

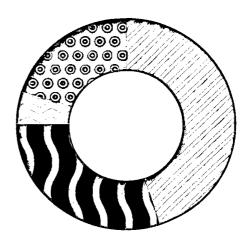
In 2018, the nomination and remuneration committees were combined to form one committee. The committee continues to cover policy, governance and decision-making in relation to all senior employees with salaries above the Government's senior pay threshold (£150,000).

The full terms of reference of the committee can be found on the website: www.networkrail.co.uk

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 and based on the national dashboard outturn.

Since 2019/20, Network Rail moved from route/region/ function scorecards to a dashboard with a set of output-focussed measures that better reward delivery. Reducing the number of measures from previous years enables sufficient weightings to each measure so that it is significant enough to reward success. The national dashboard has been designed to ensure our customers and, through them, that our passengers are at the heart of how we operate.



Train service delivery 45%

People 5%

Efficiencies 30%



National Dashboard for 2021/22

The dashboards align to four strategic themes. There are nine measures, carefully weighted to incentivise and reward success, whilst giving an appropriate weighting to important areas such as train service delivery and safety (which is measured through Train Accident Risk Reduction for passengers and Fatalities and Weighted Injuries for Workforce Safety).

The dashboard is shown in the table on the next page.

Strategic themes	Measure	Weighting	Target
	On Time The percentage of Recorded Station Stops called at on time (early or <1min late).	12.5%	79.7%
	Passenger Satisfaction Reported as a mean score of passenger journey satisfaction on a scale of 1-10 (1 poor – 10 excellent).	20.0 %	7.74%
Treinservicedelivery	Freight Delivery Metric (FDM) The percentage of commercial freight trains that arrive at planned destination within 15 minutes of scheduled time. Freight trains are only considered to have failed FDM where a delay is caused by Network Rail.	7.5%	95.2%
	Composite Reliability Index (CRI) A measure of the short-term condition and performance of our assets including track, signalling, points, electrification, telecoms, buildings, structures and earthworks. The index shows the total percentage improvement in asset reliability compared to the end of the previous Control Period.	5.0%	13.6%
Efficiencies	Financial Performance Measure (FPM) An assessment of how Network Rail has performed compared to the financial targets set out in the CP6 Business Plan. The measure is an aggregation of the three individual FPM measures from prior years (P&L, Renewals and Enhancements).	20.0%	£0m
	Enhancement Milestones The number of milestones completed ahead of time or on time, as a percentage of all milestones planned for delivery in the year.	10.0%	90.0%
<u>Reople</u>	Employee Engagement An index representing the proportion of employees surveyed who responded favourably to key questions on engagement.	5.0 %	61.0%
Sofety	Workforce Fatalities and Weighted Injuries (FWI) An index representing workforce safety, using fatalities and non-fatal injuries per hour worked. A lower FWI represents better performance.	10.0%	0.056
	Passenger Safety (TARR) Measures achievement of the key milestones and metrics to reduce train accident risk. TARR is made up of milestone targets and volume targets, both of which have different achievement weightings.	10.0%	95.0%

Regional dashboards include measures which match each region's responsibilities along with universal measures such as safety and financial performance. Local scorecards are still used to manage business performance at a local level, but they are not linked to PRP.

In addition, no payment will be made in respect of any performance measure which fails to exceed the minimum level of performance (worse than target threshold) and evidence of under reporting against safety would result in the outcome of the safety measures being reviewed and reducing performance accordingly, including potentially to zero.

One quarter (25 per cent) of PRP will be determined by an individual's performance rating. This provides a direct line of sight between the achievement of individual objectives and PRP. For executive directors and employees aligned to the national dashboard, the figure below demonstrates how individual PRP is calculated:



DIRECTORS' REPORT

The directors present their annual report and the audited accounts for the year ending 31 March 2022.

Disclosures regarding business performance and activities, future business developments and risk management are contained in the strategic report (pages 06 to 106) and corporate governance report (pages 107 to 156).

The company is limited by guarantee, having no share capital. There are no share disclosures in this 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 108 to 111.

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, the authority can only be exercised if a 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 of interest. Further details about directors' conflicts of interest can be found on page 121.

Branches

The company's subsidiary, Network Rail Consulting Limited, has established branches in Dubai and Saudi Arabia; and subsidiaries in Australia, Canada and the United States of America (USA).

Contracts of significance

There were no contracts of significance existing during 2021/22 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 (2021/22: £nil).

Investment in research and development

Technology and innovation is fundamental to Network Rail's success in Control Period 6 and beyond. During the year the group charged £38m to the income statement (2021/22: £50m) on research and development.

Further information on the cost of research and development can be found in note 5 on page 183.

Engagement with our people, passengers and stakeholders

Further information can be found in the "How we engage with our stakeholders" section on pages 101 to 104. That section refers to our operating model; our strategic priorities; and sets out examples of the actions we have taken during the financial year to develop arrangements aimed at key priorities. Our stakeholder objectives and priorities have related to the following:

- building the views of our people into decision-making processes and encouraging their active involvement in the company's performance
- understanding railway users' priorities and providing the service they expect;
- working with industry partners to operate a world-class railway
- making a positive contribution to local communities and the environment

• supporting UK governments and our supply chain partners to promote economic growth and develop a railway fit for the future

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, pages 203 to 208.

Particulars of important events affecting the group since the financial year end and an indication of likely future developments can be found in the Chief Financial Officer's (CFO) statement, pages 26 to 30.

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). 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 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. This enables 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 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 distribution 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 page 108 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 profit of the group and the undertakings included in the consolidation taken as a whole
- the management report is incorporated into the strategic report and directors' report for the purposes of the Disclosure and Transparency Rules (DTR 4.1.8R). It 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, which 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 the 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, pages 06 to 106. The financial position of the group, its cash flows, liquidity position and borrowing facilities are described in the CFO's review, pages 26 to 30.

Note 25 to the accounts on pages 203 to 208 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 exposure to credit, liquidity and foreign exchange risk. The viability statement on pages 99 to 100 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 87 to 98, 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

Since the year-end there have been a series of strikes by our employees. This has not materially affected our financial position. Aside from the above, as at the date of signing these financial statements there have not been any significant post balance sheet events, whether adjusting or non-adjusting.

J. M. Kung

STUART KELLY

group general counsel and company secretary, 12 July 2022

FINANCIAL STATEMENTS

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INDEPENDENT AUDITOR'S REPORT

TO THE SOLE MEMBER OF NETWORK RAIL LIMITED

Opinion on financial statements

I have audited the financial statements of Network Rail Limited and its Group for the year ended 31 March 2022 which comprise:

- the Group and parent company Balance Sheets as at 31 March 2022;
- the Group's Income Statement, Statement of Comprehensive Income, and Statement of Changes in Equity for the year then ended;
- the Group and parent company Statement of Cash Flows for the year then ended; and
- the related notes including the significant accounting policies.

The financial reporting framework that has been applied in the preparation of the Group financial statements is applicable law and the UK adopted International Accounting Standards. The parent company financial statements are prepared in accordance with the provisions of the Companies Act 2006.

In my opinion the financial statements:

- give a true and fair view of the state of Network Rail Limited's and its Group's affairs as at 31 March 2022, and of the Group's loss for the year then ended;
- have been properly prepared in accordance with UK adopted International Accounting Standards; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

Opinion on regularity

In my opinion, in all material respects the income and expenditure 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.

Basis of opinions

I conducted my audit in accordance with International Standards on Auditing (ISAs) (UK), applicable law and Practice Note 10 'Audit of Financial Statements and Regularity 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 2019. I have also elected to apply the ethical standards relevant to listed entities. I am independent of Network Rail Limited and its Group in accordance with the ethical requirements that are relevant to my audit of 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 framework of authorities described in the table below has been considered in the context of my opinion on regularity.

Framework of Authorities	
Authorising legislation	Companies Act 2006
Operating requirements	Network Licence
HM Treasury and related authorities	Managing Public Money

Conclusions relating to going concern

In auditing the financial statements, I have concluded that Network Rail Limited and its Group's use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

My evaluation of the director's assessment of the entity's ability to continue to adopt the going concern basis of accounting included evaluation of management's assessment of:

- future cash requirements;
- · future income streams:
- debt funding arrangements;
- · potential legislative changes; and
- the impact of the government's publication of the Williams-Shapps Plan for Rail.

The Williams-Shapps Plan for Rail was published on 20 May 2021 and makes recommendations for reform of the rail industry. These recommendations include the establishment of a new public sector body (Great British Railways) into which Network Rail will be absorbed. Legislation will be required to bring about these changes and Great British Railways is not expected to be created until 2023. I have reviewed the recommendations and made enquiries with Network Rail Limited; the Department for Transport; and the Office of Rail and Road. Decisions on how these proposals will be implemented and precisely how this will impact on Network Rail Limited are still to be taken. The Department for Transport launched a public consultation on the changes to primary legislation required to deliver structural reform of the railways, which remains open at the point of publication.

While Network Rail Limited is standing ready for these possible changes, based on the work I have performed, I have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on Network Rail Limited's and its group's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

In relation to the Group's requirements under the UK Corporate Governance Code, I have nothing material to add or draw attention to in relation to the directors' statement in the financial statements about whether the directors considered it appropriate to adopt the going concern basis of accounting.

My responsibilities and the responsibilities of the directors with respect to going concern are described in the relevant sections of this report.

Overview of my audit approach

Key audit matters

Key audit matters are those matters that, in my professional judgment, were of most significance in the audit of the financial statements of the current period and include the most significant assessed risks of material misstatement

Financial statements

(whether or not due to fraud) identified by the auditor, including those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team.

These matters were addressed in the context of the audit of the financial statements as a whole, and in forming my opinion thereon. I do not provide a separate opinion on these matters.

I consider the following areas to be 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 though the course of 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 around the presumed risk of management override of controls, an area where my work has not identified any matters to report.

The areas of focus were discussed with the Audit and Risk Committee; its report on matters that it considered to be significant to the financial statements is set out on pages 130 to 135.

The key audit matters I report on for this year are consistent with those identified in the prior year.

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 rail network. This is on the basis that a private owner of the rail network asset would have its revenue requirement determined using the building block model of regulation, which includes both a link between revenue and the future amortisation of the RAB and a mechanism to offset the owner's cost of capital. Since fair value involves the determination of an exit price, management uses the hypothetical situation of a private sector buyer – rather than Network Rail's own situation – to guide its valuation assumptions.

The key adjustment in terms of estimation uncertainty which management applies to the RAB to reflect the network's fair value is the Performance Adjustment. This reflects the discount that an investor would apply to reflect headwinds to the deliverability of the current regulatory determination. For 2022, this adjustment was a discount of £200 million (2021: discount of £475 million). As in previous years, management have calculated the adjustment based on their own performance forecasts for the remainder of the current Control Period (CP6). The risk this estimate of future performance poses to the valuation has decreased as the impacts of COVID-19 have been become better understood and as the time until the end of CP6 has diminished. Management maintain an assumption that the regulator will set fair determinations in the future, taking into account emerging pressures and opportunities. As per management's disclosures in Note 2 under 'Critical accounting judgements and sources of uncertainty' and in Note 12, this is a key source of estimation uncertainty in light of the forecasting element. Management have continued to assess the ongoing impact of COVID-19 as part of this consideration.

In evaluating the value of the RAB, I focussed my audit effort on the continuing validity of key valuation assumptions, and on the estimation of the Performance Adjustment.

How the scope of my audit responded to the risk

Key observations

Evaluating underlying valuation assumptions

Having read the regulator's determination for CP6, I considered whether a market participant could reasonably expect their revenue requirement to be determined using the traditional regulatory funding model. I assessed as reasonable management's judgement that a market participant would value the rail network asset by reference to the RAB. I confirmed with the regulator that, in their view, the sale of all (or part) of the rail network could take place without a regulatory 'reopener' (a new regulatory determination with revised outputs and a revised assessment of efficient costs). Accordingly, I assessed as reasonable management's judgement that in valuing the rail network asset a market participant would make an adjustment to deliverability of the current regulatory determination (see below). I also reviewed the reasonableness of the other underpinning assumptions noted in Note 12.

I also considered the continuing impact of the Williams-Shapps Plan for Rall. Having reviewed management's position, I evaluated as reasonable its view that, whilst the White Paper indicates that government intends to maintain ownership of the rail network in the future, the use of RAB as the basis for the valuation included in the accounts remains appropriate. As part of my evaluation I considered, amongst other things, the recent use of the RAB as a basis for pricing the recent transfer of railway assets from Network Rail to the Welsh government.

Addressing measurement uncertainty – the performance adjustment

The company has measured the Performance Adjustment as the difference between its revised CP6 Delivery Plan, updated at 31 March 2022 to reflect its latest forecast, and the CP6 regulatory baseline.

I evaluated the appropriateness of the method of measurement, and the inherent assumptions, by assessing management's performance forecast against relevant metrics which might be considered by a buyer at the year-end. I evaluated management's assumptions by comparing forecasts against historic and emerging performance trends, as well as considering publicly available metrics (e.g. on train performance) and my wider understanding of the business. This included a consideration of assumptions in respect of the impact of COVID-19, for example in respect of the future prospects of commercial income, and the impact of growing inflation on both Network Rail's income and expenditure.

I also reviewed the adequacy of management's disclosures on significant judgments and assumptions.

In the course of completing this work, I did not identify any material misstatements.

Defined Benefit Pensions Scheme – valuation of deficit

Description of risk

The Group is party to two defined benefit pension schemes. Based on risk and value, I focussed my work primarily on the defined benefit Network Rail section of the Railway Pensions Scheme ('RPS'). The balances related to this section reflect, respectively, 95.7 per cent and 92.6 per cent of the group's total pension scheme assets and liabilities, 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 estimation uncertainty, in the valuation of the position of both the assets and liabilities contributing to the net RPS scheme position, as described in Note 26 to the financial statements. Scheme movements are presented in that note on an aggregated basis for the RPS and CARE schemes, inclusive of members' share, with the impact on the Balance Sheet being 60 per cent of this figure (the employer's share). While my description of my work below is restricted to the RPS scheme, I use the same convention of referring to figures inclusive of the members' share.

Scheme liabilities

As with all defined benefit pension schemes, an actuarial estimate of the liability reflecting amounts to be paid out to members of the RPS scheme in the future (£11,981 million as at 31 March 2022 including members' share) involves significant estimation in respect of key financial assumptions and other assumptions including demographic assumptions.

Scheme assets

In respect of RPS scheme assets, an accurate and timely valuation is needed of the various asset classes held in the pension fund administered by Railpen (formerly RPMI) on Network Rail's behalf (£8,782 million as at 31 March 2022 including members' share).

I placed particular emphasis on assurance over unquoted equity instrument valuations, particularly in respect of timing risk. The standard practice of the scheme assets manager is to value investments using the most recent evidence available, and to adjust for subsequent cash flows where necessary. This leads to a risk of unrecognised fair value differences where the valuations are for a period before the year end (typically, the end of the previous quarter). I worked with Network Rail and the asset manager to determine enhancements which would allow better account to be taken of year end market conditions.

The valuation of the property held by the scheme is valued by Railpen's professional valuers. No material uncertainty in respect of property has been included, given the increasing evidence of fair values from transactions which have picked up since the peak of the pandemic.

How the scope of my audit responded to the risk

Key observations

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 an actuarially qualified auditor's expert to examine the assumptions, methodology and source data used to value the obligations, including both financial assumptions and the roll-forward procedures used to update membership data. I note that financial assumptions were overall within reasonable ranges, and that changes in financial assumptions — particularly on discount rate and price inflation — have been the primary cause of the in-year decrease for pension obligations.

Scheme assets

My work on scheme assets is informed by the results of the statutory audit of the RPS financial statements, which is independently performed by another firm based on a year end of 31 December 2021, but my primary assurance comes from substantive procedures I perform directly to evaluate asset values at 31 March 2022. These included sample testing on distinct asset classes within the Funds in which Network Rail is invested.

- For quoted and actively traded assets, I independently agreed valuations to observable market prices.
- For pooled investment assets, I agreed valuations to the investment manager valuation report and reviewed relevant observable active market data to evaluate its reliability, as well as considering potential indicators of impairment.
- For directly held property investments, I have reviewed the independent third-party property valuation performed for the scheme asset manager and reviewed the valuation movements against those in similar property sectors to confirm that the movements are in line with the wider market.

I completed additional procedures over private equity and non-exchange-traded pooled investment vehicles (unquoted equities). These included an evaluation of the reliability of the fund manager's valuation through procedures including:

- a review of the most recent audited accounts;
- work to understand the nature of the investment; and
- an informed consideration of impairment indicators.

These additional procedures also included, in respect of the timing risk described above, a review (including sample test) of 31 March 2022 asset valuations received post year-end to judge the effect of time lags in the valuation presented for audit, both in respect of known movements, and projections of likely movement in the minority of funds which had not received March valuations. I also undertook procedures to understand the nature of the investment as well as consideration for indicators of impairment.

In the course of completing this work, I did not identify any material misstatements in the valuation of defined benefit obligations in the financial statements. My work projected a most likely error well below my performance materiality threshold. I did not identify any material misstatements.

In the course of completing this work, I did not identify any material misstatements.

Accruals for capital work - valuation

Description of risk

The Group's accounting for its capital investment involves a level of estimation at the year-end about the value of work delivered but not yet paid for. This may differ from plan, for example because of unexpected under- or over-delivery by Network Rail's contractors. Both controllable factors (e.g., contractor project management, the potential for delivery optimism bias) and uncontrollable factors (e.g., ground conditions and weather) contribute to inherent estimation uncertainty. The Group addresses these risks through a post-Balance Sheet review exercise which includes the Regions 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 significant majority of the £968 million 'other accruals' in Note 18 of the financial statements (2021: £934 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.

For the 2021-22 audit I have not assessed this to be a significant risk, since while there is a reasonable level of estimation uncertainty, this is mitigated by the extent of contractor information available to management. Nevertheless, I consider that this remains a key audit matter due to the level of audit resource that is required to perform the testing responsive to this risk.

How the scope of my audit responded to the risk

Key observations

I took a sample of capital accruals after management had applied adjustments to revise accruals estimates based on actual delivery. To address any latent risk of delivery optimism, I ensured my sample selection was sufficient to allow a robust evaluation of the potential effect on the accounts. I furthered my coverage by testing capital accruals at the level of projects, rather than task lines; and by using a risk-based stratified approach. This approach involved picking separate samples for accruals valued above and below the threshold used by management to guide whether they performed additional checks, since I expected this to have an effect on residual levels of valuation risk.

In the course of completing this work, I detected some misstatements caused mostly by clerical issues, and extrapolated the results, projecting a most likely error well below my performance materiality threshold. I did not identify any material misstatements.

Application of materiality

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.

Based on my professional judgement, I determined overall materiality for Network Rail Limited's Group financial statements as a whole as follows.

	Overall threshold	Additional threshold
Materiality	£702m	£122m
Basis for determining materiality	Approximately 0.95 per cent of the carrying value of Property, Plant and Equipment of £76 billion (2020-21: £602 million, based on 0.8 per cent).	Approximately 1 per cent of total expenditure, calculated as gross expenditure less depreciation, plus capital additions (2020-21: £107 million, based on 1 per cent).
Rationale for the benchmark applied	We have based materiality on the value of the rail network asset carried in the Balance Sheet as the maintenance and operation of that asset under the network licence issued by the Office of Rail and Road is the main function of the Network Rail Group and likely to be a key focus of users of the financial statements.	We assess that due to the funding of Network Rail's in-year expenditure by operating companies and the Westminster and Scottish governments, an additional threshold applying to all work not purely connected with the valuation of the network asset is appropriate, reflecting the decision-making sensitivity of users of the account and key stakeholders on financial statement elements related to the use of public funding.

Performance Materiality

I set performance materiality at a level lower than materiality to reduce the probability that, in aggregate, uncorrected and undetected misstatements exceed the materiality for the financial statements as a whole. Against both my overall materiality and my additional threshold, I set Group performance materiality at 75 per cent (2020-21: 75 per cent).

Other Materiality Considerations

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 in respect of senior staff remuneration disclosures. 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.

Error Reporting Threshold

I agreed with the Audit and Risk Committee that I would report to it all uncorrected misstatements identified through my audit in excess of £1 million, as well as differences below this threshold that in my view warranted reporting on qualitative

grounds. I also report to the Audit & Risk Committee on any disclosure matters that I identify when assessing the overall presentation of the financial statements.

Total unadjusted audit differences reported to the Audit and Risk Committee would increase net assets by £14.1 million.

Audit scope

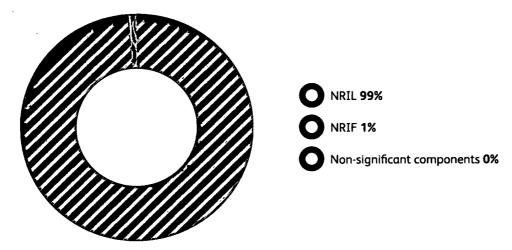
The scope of my Group audit was determined by obtaining an understanding of the Group and its environment, including the Group wide controls, and assessing the risks of material misstatement at the Group level.

Network Rail Limited does not hold any assets or liabilities. All balances are consolidated into the group accounts from other components. Over 98 per cent of these balances are held by either Network Rail Infrastructure Limited (the main operating company) or Network Rail Infrastructure Finance Plc (which holds the legacy debt and derivative portfolio). I place reliance on my audits of those accounts to support my opinion on Network Rail Limited and confirm that the amounts included in the Network Rail Limited Group financial statements are reported correctly.

I have assessed the other components of the group as being non-significant. For these entities I required component auditors to provide a return confirming receipt of group instructions, adherence to ethical standards and, on an exception basis, to report any errors or issues that might be significant to the group position. I have not received any reports of significant errors or issues arising on component entity audits.

This work covered substantially all of the Group's assets and profit before tax and, together with the procedures performed at Group level, gave me the evidence I needed for my opinion on the Group financial statements.

Gross assets of individual components of the Network Rail Limited group (as at 31 March 2022)



Other information

The other information comprises information included in the Annual Report but does not include the financial statements and my auditor's report thereon. The directors are responsible for the other information.

My opinion on the financial statements does not cover the other information and except to the extent otherwise explicitly stated in my report, 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 I identify such material inconsistencies or apparent material misstatements, I am required to determine whether this gives rise to a material misstatement in the financial statements themselves. 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.

Opinion on other matters prescribed by the Companies Act 2006

In my opinion the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006.

In my opinion, based on the work undertaken in the course of the audit:

- the Strategic Report and the Directors' Report been prepared in accordance with applicable legal requirements;
- the information given in the Strategic Report and the Directors' Report for the financial year for which the financial statements are prepared is consistent with the financial statements;
- the information about internal control and risk management systems in relation to financial reporting processes, and about share capital structures, 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), is consistent with the financial statements and has been prepared in accordance with applicable legal requirements; and
- information about Network Rail Limited's corporate governance code and practices and about its administrative, management and supervisory bodies and their committees complies with rules 7.2.2, 7.2.3 and 7.2.7 of the FCA Rules.

Matters on which I report by exception

In the light of the knowledge and understanding of Network Rail Limited and its environment obtained in the course of the audit, I have not identified material misstatements in:

- the Strategic Report or Directors' Report; or
- the information about internal control and risk management systems in relation to financial reporting processes and about share capital structures, given in compliance with rules 7.2.5 and 7.2.6 of the FCA Rules.

I have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires me to 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; or
- the financial statements and the parts of the Directors' remuneration report to be audited are not in agreement with the accounting records and returns; or
- certain disclosures of director's remuneration specified by law are not made; or
- a corporate governance statement has not been prepared by the parent company; or
- I have not received all of the information and explanations I require for my audit.

Corporate governance statement

The Listing Rules require me to review the Directors' statement in relation to going concern, longer-term viability and that part of the Corporate Governance Statement relating to Network Rail Limited's compliance with the provisions of the UK Corporate Governance Statement specified for my review.

Based on the work undertaken as part of my audit, I have concluded that each of the following elements of the Corporate Governance Statement is materially consistent with the financial statements or my knowledge obtained during the audit:

Directors' statement with regards the appropriateness of adopting the going concern basis of accounting and any
material uncertainties identified set out on page 156;

- · Directors' explanation as to its assessment of the entity's prospects, the period this assessment covers and why they period is appropriate is set out in the Viability Statement on pages 99 to 100;
- Directors' statement on fair, balanced and understandable set out on page 155;
- Board's confirmation that it has carried out a robust assessment of the emerging and principal risks set out on page 91;
- The section of the annual report that describes the review of effectiveness of risk management and internal control systems set out on pages 134 to 135; and
- The section describing the work of the Audit & Risk Committee set out on pages 130 to 135.

Responsibilities of the Directors for the financial statements

As explained more fully in the Directors' Responsibilities Statement, the directors are responsible for:

- the preparation of the financial statements in accordance with the applicable financial reporting framework and for being satisfied that they give a true and fair view;
- internal controls as directors determine is necessary to enable the preparation of financial statement to be free from material misstatement, whether due to fraud or error.
- assessing Network Rail Limited's, and its Group's, ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intends to liquidate the entity or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue a report that includes my opinion. 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.

Extent to which the audit was considered capable of detecting non-compliance with laws and regulations including fraud I design procedures in line with my responsibilities, outlined above, to detect material misstatements in respect of noncompliance with laws and regulations, including fraud. The extent to which my procedures are capable of detecting noncompliance with laws and regulations, including fraud is detailed below.

Identifying and assessing potential risks related to non-compliance with laws and regulations, including fraud In identifying and assessing risks of material misstatement in respect of non-compliance with laws and regulations, including fraud, we considered the following:

- the nature of the sector, control environment and operational performance including the design of the Network Rail Limited Group's accounting policies, key performance indicators and performance incentives.
- Inquiring of management, Network Rail Limited's head of internal audit and those charged with governance, including obtaining and reviewing supporting documentation relating to the Network Rail Limited Group's policies and procedures relating to:
 - » identifying, evaluating and complying with laws and regulations and whether they were aware of any instances of noncompliance;
 - » detecting and responding to the risks of fraud and whether they have knowledge of any actual, suspected or alleged fraud; and
 - » the internal controls established to mitigate risks related to fraud or non-compliance with laws and regulations including Network Rail Limited, and its Group's, controls relating to Network Rail Limited's compliance with the Companies Act 2006, Managing Public Money and the Railways Act 2005.
- · discussing among the engagement team including significant component audit teams and involving relevant internal and external specialists, including external pension specialist and internal IT auditors regarding how and where fraud might occur in the financial statements and any potential indicators of fraud.

Following these procedures, I considered the opportunities and incentives that may exist within Network Rail Limited and its Group for fraud and identified the greatest potential for fraud in the following areas: revenue recognition, posting of unusual journals, complex transactions, and bias in management estimates. In common with all audits under ISAs (UK), I am also required to perform specific procedures to respond to the risk of management override of controls.

I also obtained an understanding of Network Rail Limited and its Group's framework of authority as well as other legal and regulatory frameworks in which Network Rail Limited and the Group operate, focusing on those laws and regulations that had a direct effect on material amounts and disclosures in the financial statements or that had a fundamental effect on the operations of Network Rail Limited and its Group. The key laws and regulations I considered in this context included the Network Licence, Companies Act 2006, Managing Public Money, tax law, employment law, pensions regulations, health & safety law, the Railways Act 1993 and the Railways Act 2005.

Audit response to identified risk

As a result of performing the above, the procedures I implemented to respond to identified risks included the following:

- reviewing the financial statement disclosures and testing to supporting documentation to assess compliance with provisions of relevant laws and regulations described above as having direct effect on the financial statements;
- inquiring of management, the Audit and Risk Committee and in-house legal counsel concerning actual and potential litigation and claims;
- reading and reviewing minutes of meetings of those charged with governance and the Board and internal audit reports;
- in addressing the risk of fraud through management override of controls, testing the appropriateness of journal entries
 and other adjustments; assessing whether the judgements made in making accounting estimates are indicative of a
 potential bias; and evaluating the business rationale of any significant transactions that are unusual or outside the
 normal course of business; and
- reviewing Office of Rail and Road notifications in case of any regulatory action.

I also communicated relevant identified laws and regulations and potential fraud risks to all engagement team members including internal specialists and significant component audit teams and remained alert to any indications of fraud or non-compliance with laws and regulations throughout the audit

A further description of my responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of my report.

Other auditor's responsibilities

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.

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.

4045

MATTHEW KAY

Senior Statutory Auditor, 18 July 2022

For and on behalf of the Comptroller and Auditor General (Statutory Auditor) National Audit Office 157-197 Buckingham Palace Road, Victoria London, SW1W 9SP

INCOME STATEMENT

FOR THE YEAR ENDED 31 MARCH 2022

·	Note	2022 Group £m	2021 Group £m
Revenue	3	9,553	9,618
Net operating costs	4	(6,594)	(6,436)
Operating profit	5	2,959	3,182
Property revaluation movements and profits on disposal		51	(5)
Profit from operations		3,010	3,177
Finance income	7	1	1
Other gains and losses	8	157	176
Finance costs	9	(2,844)	(1,741)
Profit before tax		324	1,613
Tax	10	(925)	(277)
(Loss) / Profit for the year attributable to the owner of the company		(601)	1,336

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 (2021: £nil).

STATEMENT OF COMPREHENSIVE INCOME

FOR THE YEAR ENDED 31 MARCH 2022

	Note	2022 Group £m	2021 Group £m
(Loss)/Profit for the year		(601)	1,336
Other comprehensive (expense)/income:			,
Items that will not be reclassified to profit or loss:			
Gain/(Loss) on revaluation of the railway network	12	1,844	(1,812)
Actuarial gain/(loss) on defined benefit pension schemes	26	966	(621)
Deferred tax relating to components of other comprehensive income	22	(856)	462
Total items that will not be reclassified to profit or loss		1,954	(1,971)
Items that may be reclassified to profit or loss:			
Reclassification of balances in the hedging reserve to the income statement		95	153
Total items that may be reclassified to profit or loss		95	153
Other comprehensive income for the year		2,049	(1,818)
Total comprehensive income for the year		1,448	(482)

STATEMENT OF **CHANGES IN EQUITY**

FOR THE YEAR ENDED 31 MARCH 2022

Group	Revaluation reserve £m	Other reserves*	Hedging reserve £m	Retained earnings £m	Total equity £m
Balance at 31 March 2021	1,074	249	(279)	7,863	8,907
Loss for the year	-	-	•	(601)	(601)
Other comprehensive income					
Impact of change in tax rate	-	-	-	(153)	(153)
Revaluation of the railway network	1,844	-	-	-	1,844
Transfer of deemed cost depreciation from revaluation reserve	(33)	•	-	33	-
Increase in deferred tax liability on the railway network	(461)	•	-	-	(461)
Actuarial gain on defined benefit pension schemes	-	-	-	966	966
Deferred tax on actuarial gain	•	-	-	(242)	(242)
Transfer of deferred tax	8	-	-	(8)	-
Increase in fair value of hedging derivatives	-	-	-	-	•
Reclassification of balances in hedging reserve to the income statement	-	-	95	-	95
Total comprehensive income	1,358	-	95	(5)	1,448
Balance at 31 March 2022	2,432	249	(184)	7,858	10,355
Balance at 31 March 2020	2,570	249	(432)	7,002	9,389
Profit for the year	-	-	-	1,336	1,336
Other comprehensive income					
Impact of change in tax rate	-	-	-	<u>-</u>	-
Revaluation of the railway network	(1,812)	-	-		(1,812)
Transfer of deemed cost depreciation from revaluation reserve	(34)	•	-	34	-
Decrease in deferred tax liability on the railway network	344	_	-	-	344
Actuarial loss on defined benefit pension schemes	-	•	_	(621)	(621)
Deferred tax on actuarial loss	-	-	•	118	118
Transfer of deferred tax	6	•	-	(6)	
Increase in fair value of hedging derivatives	-		-	-	
Reclassification of balances in hedging reserve to the income statement	•	-	153	•	153
Total comprehensive income	(1,496)	•	153	861	(482)
Balance at 31 March 2021	1,074	249	(279)	7,863	8,907

There has been no movement in the current or prior year affecting the statement of changes in equity for the company.

Other reserves of £249m (2021: £249m) include the vesting reserve on privatisation.

BALANCE SHEETS

FOR THE YEAR ENDED 31 MARCH 2022

	2022 G ı Note			2022 Company £m	2021 Company £rr
Assets	Note	£m	£m	E;;;	Σ.(
Non-current assets	- · · · · · · · · · · · · · · · · · · ·				
Intangible assets	11	60	61	-	-
Right of use assets	24	424	381	-	_
Property, plant and equipment – the rail network	12	75,890	71,998	*	•
Investment property	13	212	212	• -	
Derivative financial instruments	20	9	191	•	-
Interest in joint ventures	14	27	38	-	-
		76,622	72,881	-	-
Current assets					
Assets held for sale	15	36	28	-	-
Inventories	16	299	286	-	-
Trade and other receivables	17	1,597	1,543	-	-
Derivative financial instruments	20	4	196	-	•
Cash and cash equivalents		477	522	-	•
		2,413	2,575	-	•
Total assets		79,035	75,456	•	•
Liabilities					
Current liabilities					
Trade and other payables	18	(3,666)	(3,601)	-	-
Current tax liabilities		(1)	(5)	-	-
Borrowings	19	(2,801)	(8,157)	-	-
Derivative financial instruments	20	(55)	(83)	-	-
Short-term provisions	21	(78)	(95)	-	-
		(6,601)	(11,941)	•	-
Net current liabilities		(4,188)	(9,366)	•	•
Non-current liabilities					
Borrowings	19	(53,982)	(47,308)	•	-
Derivative financial instruments	20	(206)	(565)	-	-
Other payables	18	(511)	(486)	-	-
Retirement benefit obligation	26	(2,259)	(2,899)	•	•
Deferred tax liabilities	22	(5,121)	(3,350)	•	-
		(62,079)	(54,608)	•	-
Total liabilities		(68,680)	(66,549)	-	-
Net assets		10,355	8,907	•	-
Equity					
Revaluation reserve		2,432	1,074	•	-
Other reserve		249	249	-	-
Hedging reserve		(184)	(279)	•	•
Retained earnings		7,858	7,863	-	-
Total shareholder's funds and equity attributable to equity		10,355	8,907	•	_
holders of the parent company		. 0,555	0,507		

The financial statements and accompanying disclosure notes on pages 157 to 214 were approved by the board of directors on 12 July 2022 and authorised for issue on 18 July 2022.

They were signed on its behalf by: Andrew Haines

Chief executive

Arran Kan Jeremy Westlake Chief financial officer

Company registration number: 4402220

STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 MARCH 2022

	Note	2022 Group £m	2021 Group £m	2022 Company £m	2021 Company £m
Cash flows from operating activities					
Cash generated from operations	23	5,278	5,460	-	
Interest paid*		(1,232)	(1,351)	-	
Income tax paid			(40)	•	
Net cash flows generated from operating activities		4,046	4,069	-	•
Investing activities					
Interest received		1	1	•	-
Purchases of property, plant and equipment		(6,182)	(5,894)	-	
Proceeds on disposal of property		82	41	-	
Capital grants received		2,131	1,979	-	
Net cash inflows from joint ventures		11	3	-	
Net cash used in investing activities		(3,957)	(3,870)	•	-
Financing activities					
Repayments of borrowings		(8,060)	(10,991)	•	•
New loans raised		7,888	10,841	•	•
Decrease in collateral posted	19	114	165		
Decrease in collateral held	19	(105)	(15)	•	•
Cash flow on settled derivatives		162	-	•	•
Repayment of lease liabilities	24	(133)	(107)	•	-
Net cash used in financing activities		(134)	(107)	-	•
Net (decrease)/increase in cash and cash equivalents		(45)	92	-	-
Cash and cash equivalents at beginning of the year		522	430	-	-
Cash and cash equivalents at end of the year		477	522	•	•

^{*} Balance includes the net interest on derivative financial instruments

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 31 MARCH 2022

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 15 to 19.

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

On 31 December 2020, IFRS as adopted by the European Union at that date was brought into UK law and became UK-adopted International Accounting Standards, with future changes being subject to endorsement by the UK Endorsement Board. Network Rail Limited transitioned to UK-adopted International Accounting Standards in its company financial statements on 1 April 2021. This change constitutes a change in accounting framework. However, there is no impact on recognition, measurement or disclosure in the period reported as a result of the change in framework.

The financial statements of Network Rail Limited have been prepared in accordance with UK-adopted International Accounting Standards and with the requirements of the Companies Act 2006 as applicable to companies reporting under those standards.

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.

Functional and presentation currency

The financial statements are presented in Pound Sterling (£) which is the functional and presentation currency of Network Rail Limited. All values are rounded to the nearest million pounds (£m) unless otherwise stated.

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 2021.

The company has applied the following standards and amendments for the first time for its annual reporting period commencing 1 April 2021:

- Definition of Material Amendments to IAS 1 and IAS 8
- Revised Conceptual Framework for Financial Reporting.

The amendments listed above did not have any impact on the amounts recognised in prior periods and are not expected to significantly affect the current or future periods.

The following accounting standards have not been early adopted by the company but will become effective in future years:

IFRS 17 Insurance Contracts

IFRS 17 issued in May 2018, establishes the principles for the recognition, measurement, presentation and disclosure of insurance contracts within the scope of the Standard. It introduces a new comprehensive model (general model) for the recognition and measurement of liabilities arising from insurance contracts. In addition, it includes a simplified approach and modifications to the general measurement model that can be applied in certain circumstances and to specific contracts such as reinsurance contracts, direct participating contract and investment contracts with discretionary participation features.

IFRS 17 Insurance Contracts is effective for years beginning on or after 1 January 2023 with restated comparatives. Management have entered into a process of assessing the impact on the financial statements of the Group; initial work has not identified any indications that the impact will be material. The assessment is not finalised and therefore the overall and financial impact is not yet known. More knowledge of the impact of implementing the standard on the Group will be known at the next financial reporting date.

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 15 to 19, and 'Business unit summaries' on pages 31 to 72. 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 26 to 30.

The directors took into account the publication of the Williams-Shapps Plan for Rail Review and its plans to reform the rail industry. This proposes that a new public body, Great British Railways, will integrate the railways, owning the infrastructure, collecting fare revenue, running, and planning the network, and setting most fares and timetables. It is planned that Network Rail will be absorbed into the public body to bring about single, unified, and accountable leadership for the national network. At this stage it is not likely that this reform will involve the winding up of Network Rail Limited but in any event Great British Railways will assume the existing functions of Network Rail Limited as well as have a wider range of powers and functions. The transformation programme is dependent on further activities including legislation and will take time to fully deliver.

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, its activities will be largely funded by grants from the Department for Transport (DfT) and revenue from customers. Network Rail has secured a £31.9bn loan facility with the DfT, which it intends to draw upon to specifically refinance its existing debt. 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 99 and 100. 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 / to direct the activities of 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 IFRS 16 (See "Leases" accounting policy)
- 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.

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.

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 four-week period based on that period's performance and reflect management's best estimate of the amounts due.

Revenue measurement 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.

The disaggregation of revenue by source has been disclosed under note 3.

Grants

Network Rail receives grant funding as a contribution towards both its revenue and capital expenditure.

Revenue grants are received as a contribution towards Network Rail's running costs and are accounted for in accordance with IAS 20 Government grants. These grants are drawn down by Network Rail against grant agreements based on forecast cash flows of relevant expenditure and are deferred until that expenditure is incurred. Deferred grant income is then credited to revenue on a systematic basis during the period in which Network Rail recognises the related costs as expenses for which the grants are intended to compensate.

Grants related to operations, maintenance and renewals are recognised in-year. Grant income has been agreed across the five-year funding settlement and is drawn down to augment the other sources of revenue in meeting the in-year operations, maintenance and renewals expenses. Operations and maintenance expenditure passes directly through the Income Statement. Expenditure on renewals is instead treated as an addition to PPE since replacing elements of the network is within the scope of IAS 16; however, because the network is carried on a fair value basis with reference to the Regulatory Asset Base, and the Regulator allows for the amortisation of renewals in-year, any such PPE additions are also expensed in year. This expense is taken through Other Comprehensive Income as part of the revaluation of PPE in line with IAS 16 requirements. In line with this, the renewals-related element of the network grant is (like operations and maintenance) credited to the Income Statement in the year of the relevant additions and revaluation; no expense remains to be recognised following the revaluation entry, since the additions-related asset element has been eliminated through that revaluation. Until the revaluation reserve in relation to the railway network asset is fully utilised, this difference in in-year income and expense will result in the difference between in-year capitalised renewals and the depreciation charge (which is also subject to the same revaluation effect since it is out of scope for the RAB) representing an impact on profit or loss. In 2021-22 the net effect of this was of a £1.8bn credit (2020-21: £1.9bn credit) to the Income Statement.

Capital grants are received as contributions towards the cost of property, plant and equipment from DfT, TS and third parties. Network Rail draws down capital grants from DfT and TS based on historical costs incurred in order to meet future forecasts cash flows. Third Parties are invoiced for capital grants either in advance or arrears based on individual grant agreements. Capital grants are recognised in the same period as the additions they are intended to fund and are deducted from the fair value of those assets. Capital grants are then credited to the income statement over the economic useful life of the rail network as the related costs are recognised.

Leases

The group as lessor

The group assesses leases where it is lessor in order to determine whether the lease is an operating lease or a finance lease. This assessment is made where the group owns the asset being leased or the group itself is also leasing the asset and hence the lease being assessed is a sub-lease. The assessment considers whether the lease transfers substantially all of the risks and rewards incidental to ownership of the asset being leased. Where the lease is a sub-lease, this assessment is made by reference to the Right of Use asset the group has for the head-lease. If the lease transfers substantially all of the risks and rewards incidental to ownership, then the lease is classified as a finance lease. If it does not, then the lease is classified as an operating lease.

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

For those leases of not less than 12 months or low value, the Right Of Use (ROU) asset and lease liability are initially measured on a present value basis.

The present value of the following lease payments is used to determine the value of the lease liability:

- fixed payments less any lease incentive receivable
- variable lease payments that depend on an index or a rate
- amounts expected to be payable by the Group under residual value guarantees
- the exercise price of a purchase option if the Group is reasonably certain to exercise that option
- payments of penalties for terminating the lease, if the lease term reflects the Group exercising that option.

The lease liability is subsequently measured at amortised cost using the effective interest rate method. Remeasurement of the lease liability occurs if there is a change in the lease payments (when a corresponding adjustment is made to the ROU asset), the lease term or in the assessment of an option to purchase the underlying asset.

The discount rate used to discount the lease payments is the Group's incremental borrowing rate. This is the rate that the group would have to pay to borrow similar funds to fund a similar asset. ROU assets are initially measured at the same amount as the lease liability plus any initial direct costs.

Each ROU asset is depreciated over the shorter of its useful life and the lease term on a straight-line basis.

Payments associated with short-term leases and low value leases are recognised on a straight-line basis as an expense in profit or loss.

The company is responsible for infrastructure works from the supply chain, rather than the right to use specific assets. As a result of this, most supply chain assets are generally not 'identified' within the meaning of IFRS 16. As a result, the company does not generally retain the rights to direct the how and for what purpose specific assets are used.

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 transaction 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.

Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined. Translation differences on assets and liabilities carried at fair value are reported as part of the fair value gain or loss.

Borrowing costs

All 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 deficit 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 out performance against the current five-year regulatory determination.

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 (2021: 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.

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 Fair Value Through Profit and Loss (FVTPL)

Financial assets are classified as at FVTPL where the asset does not meet the amortised cost criteria or 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 the income statement.

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 and commercial paper 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 Fair Value Through Profit and Loss (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 has previously issued 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. All the hedged events have now occurred and there will be no new hedging programme.

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.

The group designates certain derivatives as hedging instruments - 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 classified 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.

Cash flow hedge accounting is discontinued when the hedging instrument expires, is sold, terminated, exercised or no longer meets the criteria for hedge accounting. The latter case occurs most often in practice, principally when the hedged event has occurred, terminating the economic relationship between the derivative and the hedged item. In such cases the cumulative gain or loss on the hedging instrument that remains in equity from the period where the hedge was effective (i.e. the hedging reserve balance) is amortised from to profit and loss in line with the periods in which the hedged cash flows – predominantly finance costs in respect of hedged debt issuances – affect profit and loss. In cases where the forecast transaction is no longer expected to occur, or an irrecoverable loss is assessed to have occurred, the hedging reserve balance is immediately recognised in the income statement. Cumulative losses in the hedging reserve following the passage of a hedged event, such as hedging the rate at which debt is issued using interest rate swaps, are offset by a favourable financial effect from correspondingly lower cash flows arising on interest from the issued debt.

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.

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.

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 has ceased 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.

In addition, disposals from railway network in the last two years have been in line with the carrying value of the railway network. This emphasises that the valuation approach undertaken in these accounts remains appropriate.

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 the requirements of the Regulatory Accounting Guidelines (issued by ORR) 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.

Financial statements

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.

While 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 and is also an area of estimation uncertainty. IAS 16 requires that management regularly review asset lives on at least an annual basis and 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 18) 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. 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.

3. Revenue

	2022 Group £m	2021 Group £m
Grant income	6,513	6,642
Franchised network access	2,768	2,815
Freight revenue	53	45
Property rental income	177	81
Other income	42	35
Revenue	9,553	9,618

Qualitative disclosure

The effect of the performance regimes was a net profit of £182m (2021: £329m) which led to an increase in revenue of the respective amount. The performance regime provides a basis for compensation to train operators for the impact of lateness and cancellations on their income. It also provides incentives for Network Rail and train operators to continuously improve performance where it makes economic sense to do so. This is achieved by Network Rail and train operators making bonus payments/paying financial compensation where performance is better than/worse than the benchmark.

The group has assessed its revenue recognition in accordance with IFRS 15 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 table on the previous page.

4. Net operating costs

	2022 Group £m	2021 Group £m
Employee costs (see note 6)	2,975	2,802
Own costs capitalised	(1,061)	(1,102)
Other external charges (including infrastructure maintenance costs)	3,057	3,083
Other operating income and recoveries	(326)	(304)
Net operating costs before depreciation and amortisation	4,645	4,479
Depreciation (see notes 12 and 24)	2,197	2,094
Amortisation of grants	(248)	(137)
Net operating costs	6,594	6,436

5. Profit from operations

Total profit from operations is stated after charging/(crediting):

	2022 Group £m	2021 Group £m
Research and development costs expensed	38	50
Amortisation of intangible assets	1	1
Profit on sale of properties	(19)	-
Decrease/(Increase) in the fair value of investment properties	(32)	5
Cost of inventories recognised as an expense	169	179
Write down of inventories recognised as an expense	5	9
Amounts payable to auditors		
Fees payable to the company's auditors for the audit of the company and consolidated financial statements	0.49	0.47
Fees payable to the company's auditors for audit-related services:		
- The audit of the company's subsidiaries	0.06	0.06
- Regulatory accounts audit and interim review	0.07	0.06
Total amounts payable to group auditors	0.62	0.59

The 2021 Cost of inventories recognised as an expense has been restated due to refined analysis. For financial years ended 31 March 2022 and 2021 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 £0.2m for the audit of subsidiaries that are not performed by the group auditor.

6. Employee costs

The monthly average number of employee's (including executive directors) was:

	2022 Group	2021 Group
	Number	Number
Management and operation of the railway	44,255	44,356
	2022 Group £m	2021 Group £m
Their aggregate remuneration comprised:		
Wages and salaries	2,311	2,269
Social security costs	261	243
Defined contribution pension costs (see note 26)	24	24
Defined benefit pension costs – current service costs (see note 26)	379	266
Total employee costs	2,975	2,802

In the years ended 31 March 2022 and 31 March 2021 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 142 to 153.

7. Finance income

	2022 Group £m	2021 Group £m
Interest receivable on investments and deposits	1	1
	1	1
Finance income earned on financial assets analysed by category of asset is as follows:		
, , , ,	2022	2021
	Group	Group
	£m	£m
Financial assets at amortised cost (including cash and bank balances)	1	1
,	1	1

8. Other gains and losses

	2022 Group £m	2021 Group £m
Net ineffectiveness arising from cash flow hedge accounting	-	20
Fair value loss on fair value hedges	•	(4)
Fair value gain on carrying value of fair value hedged debt	•	-
Gain arising from fair value hedge accounting	-	(4)
Net increase/(decrease) in fair value of non-hedge accounted debt	-	30
Gain on derivatives not hedge accounted	157	130
Gain arising from non-hedge accounting	157	160
Total other gains	157	176

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 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

	2022 Group £m	2021 Group £m
Interest on bank loans and overdrafts	26	14
Interest on loan issued by Department for Transport	611	637
Interest on bonds issued under the Debt Issuance Programme	1,987	851
Interest on derivative instruments	149	184
Defined benefit pension interest cost (see note 26)	60	44
Lease interest payable (note 24)	11	11
Total finance costs	2,844	1,741

10. Tax

Total tax charge for the year

10. lax		
The tax charge is made up as follows:		
	2022	2021
	Group £m	Group £m
Current tax:	EIII	EIII
		//.5\
Corporation tax charge	- (4.0)	(45)
Adjustment in respect of prior years	(10)	· · · · · ·
Total current tax charge	(10)	(45)
Deferred tax:		
Current year charge	(97)	(173)
Effect of rate change	(883)	-
Adjustment in respect of prior years	65	(59)
Total deferred tax charge	(915)	(232)
Total tax charge	(925)	(277)
The tax charge for the year can be reconciled to the profit per the income statement as follows:		
The tax charge for the year can be reconciled to the profit per the income statement as follows.	2022	2021
	Group	Group
	£m	£m
Profit before tax	324	1,613
Tax at the UK corporation tax rate of 19 per cent (2021: 19 per cent)	(62)	(306)
Adjustments in respect of prior years	55	(59)
Rate changes	(883)	-
(Expenses)/Income not subject to tax	(35)	51
De-recognition of deferred tax assets recognised in the year	-	-
Utilisation of tax losses previously derecognised	-	-
Advance corporation tax previously written off	-	37

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. As in 2021, 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. Network Rail uses all its profits to fund capital expenditure. Following the Budget in March 2021, Network Rail will be able to claim the "super allowance" deduction on certain capital expenditure. Management's current assessment is that it is likely that these capital allowances will mean there is no significant taxable income for the year to 31 March 2023. In that year then, capital allowances will cover the taxable profit and mean that there is no expected need for use of losses. Beyond the current funding regime, there is no certainty over the funding mechanism of Network Rail and hence the use of any losses. The Group did not utilise any ACT asset in the financial year (2021: utilised surplus of ACT asset of £36.9m).

Deferred tax at 31 March 2022 is calculated at a rate of 25 per cent (2021: 19 per cent) based on the tax rate expected to prevail based on legislative enactments at the point temporary differences resolve. The change in tax rate from 19 per cent to 25 per cent was a result of the Finance Act 2021. The Finance Act 2021 was not substantively enacted at 31 March 2021 and only became substantively enacted during the year ended 31 March 2022. The amount at which temporary differences crystallise is sensitive to the decisions on future tax laws to be taken by Parliament.

UK corporation tax is calculated at 19 per cent (2021: 19 per cent). From the statutes of the Finance Act 2021 the corporation tax rate will increase to 25 per cent with effect from 1 April 2023.

11. Intangible assets

Group	Concession £m
Cost	
At 1 April 2020, 31 March 2021 and 31 March 2022	78
Accumulated amortisation	
At 31 March 2020	(16)
Charge for the year	(1)
At 31 March 2021	(17)
Charge for the year	(1)
At 31 March 2022	(18)
Carrying amount	
At 31 March 2022	60
At 31 March 2021	61

The intangible asset relates to the St Pancras Concession Agreement which expires on 29 July 2086 is held by the wholly owned company Network Rail (High Speed) Limited. The initial cost of the intangible was the purchase price of the concession agreement, which covers the right to run station operations including the retention of revenues from station retail.

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.

12. Property, plant and equipment – the rail network

	Group assets	Group capital grants	Group carrying value
Valuation	£m	£m	£m
At 31 March 2020	78,690	(6,881)	71,809
Additions – Enhancements	2,029	(2,029)	-
Additions – Renewals	3,899	-	3,899
Total Additions	5,928	(2,029)	3,899
Disposals	(30)	•	(30)
Transfers to held for sale	_	-	•
Transfer to investment property	(5)	•	(5)
(Depreciation charge)/grant amortisation for the year	(1,992)	129	(1,863)
Revaluation in the year	(1,812)	•	(1,812)
At 31 March 2021	80,779	(8,781)	71,998
Additions – Enhancements	2,200	(2,200)	-
Additions – Renewals	3,939	-	3,939
Total Additions	6,139	(2,200)	3,939
Disposals	(27)	-	(27)
Transfers to held for sale	•	-	-
Transfer to investment property	(11)	-	(11)
(Depreciation charge)/grant amortisation for the year	(2,093)	240	(1,853)
Revaluation in the year	1,844	-	1,844
At 31 March 2022	86,631	(10,741)	75,890

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 31 October 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 based on 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, while 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.

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.

Revaluation

The valuation includes a £1,844m upward movement in the value of the railway. There are 2 key drivers for the valuation, being the difference between:

- The impact of indexation inflation (£3.7bn increase in the valuation)
- The rate at which assets are amortised in the RAB and assets are depreciated under IAS 16 (£1.8bn decrease in the valuation.)

Indexation inflation was based on the November CPI, of 5.1 per cent.

Grant income has been agreed across the five-year funding settlement and is drawn down to augment the other sources of revenue in meeting the in-year operations, maintenance and renewals expenses. Operations and maintenance expenditure passes directly through the Income Statement. Expenditure on renewals is instead treated as an addition to PPE since replacing elements of the network is within the scope of IAS 16; however, because the network is carried on a fair value basis with reference to the Regulatory Asset Base, and the Regulator allows for the amortisation of renewals in-year, any such PPE additions are also expensed in year. This expense is taken through Other Comprehensive Income as part of the revaluation of PPE in line with IAS 16 requirements. In line with this, the renewals related element of the network grant is (like operations and maintenance) credited to the Income Statement in the year of the relevant additions and revaluation; no expense remains to be recognised following the revaluation entry since the additions-related asset element has been eliminated through that revaluation. Until the revaluation reserve in relation to the railway network asset is fully utilised, this difference in in-year income and expense will result in the difference between in-year capitalised renewals and the

depreciation charge (which is also subject to the same revaluation effect since it is out of scope for the RAB) representing an impact on profit or loss. In 2021-22 the net effect of this was of a £1.8bn credit (2020-21 year end: £1.9bn credit) to the Income Statement.

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.

Disposals

The disposals of £27m were as the result of property sales in the usual course of business. In line with Regulatory Accounting Guidelines the net proceeds of sales are deducted from the RAB, reducing the valuation of the Railway Network Valuation. The valuation of the disposals is assessed as being equal to the reduction in the valuation of the railway network relating to property sales.

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 (2021: 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 per cent 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. The full market cost of capital determined by the ORR, on an annual basis, is 3.8 per cent (2021: 3.8 per cent) for the current control period.

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 CP6 (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 annual depreciation charge	50	£17m	£24m
Change in annual depreciation charge	25	£8m	£12m
	50	0.9%	1.3 %
Percentage change in fair value	25	0.4%	0.7 %
	50	£666m	£967m
Change in fair value	25	£332m	£483m
	of capital (basis points)	31 March 2022	31 March 2021

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 2022 the valuation included £200m (31 March 2021: £475m) of projected financial underperformance, which is expected to crystallise in the income statement over the next two years. During the year, post pandemic travel behaviours and trends and their impact on performance have continued to be monitored in arriving at the assumptions. The result of this review is that there is no significant change in the expected underperformance for the remaining years of the Control Period prior to a refreshed determination. As there is no significant change in underlying performance, the crystallisation of underperformance and the minor adjustments to expected underperformance are the key drivers in the reduction from £475m to £200m.

Measures taken to change franchise contracts by both DfT and TS has continued to allow train operating companies to settle amounts owed to Network Rail as they fall due.

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 thirdparty valuation. As noted above, the ORR has made it clear in its final determination for CP6 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
- 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 five-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 2022 includes a downwards adjustment of £224m to exclude the fair value of investment property and relevant assets held for sale (31 March 2021: £216m).
- f) When considering the appropriateness of the valuation methodology, the directors took into account the publication of the Williams-Shapps Plan for Rail Review and its plans to reform the rail industry. The directors concluded that the current methodology remained appropriate. In considering this, the directors noted that disposals from the railway network in the last two years have been in line with the carrying value of the railway network. This emphasises that the valuation approach undertaken in these accounts remains appropriate.

At 31 March 2022 the group had entered into contractual commitments in respect of capital expenditure amounting to £3,631m (2021: £2,716m).

We have classified the valuation of the rail network as Level 3 under IFRS 13.

13. Investment property

	Group £m
Fair value	ŽIII.
At 31 March 2020	227
Additions	<u>-</u>
Disposals	(11)
Transfer from property, plant and equipment	5
Transfer to assets held for sale (Note 15)	(4)
Decrease in fair value in the year	(5)
At 31 March 2021	212
Additions	1
Disposals	(36)
Transfers from property, plant and equipment	11
Transfers to assets held for sale (Note 15)	(8)
Increase in fair value in the year	32
At 31 March 2022	212

The market values of the group's investment properties at 31 March 2022 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 15 one-off individual properties (2021: 13), amounting to 47 per cent (2021: 48 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 (2021: 18) of property and areas, assuming that the current passing rents 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 £12.9m (2021: £9.7m). Direct operating expenses arising on the investment properties in the year amounted to £3m (2021: £3.2m).

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.

	Est	Estimated rental value per sq. ft			E	Equivalent yield		
	Fair value at 31 March 2022 £m	Minimum £	Maximum £	Weighted average £	Minimum %	Maximum %	Weighted average %	
Valuation technique:								
One-off valuation	99	0.39	148.04	6.12	3.5	12.2	6.2	
Beacon method*	113	n/a	n/a	n/a	4.3	14.5	8.6	

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 rents 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.

14. Investment in subsidiaries and joint ventures

Subsidiaries in the financial statements are included in the table 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
Great British Railways Limited .	Great Britain .	100 %	Dormant
Great British Railways Transition Team Limited	Great Britain	100 %	Dormant
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. Solum is a property development business.
Network Rail One Limited	Great Britain	100 %	Dormant
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
Network Rail (Stations) Limited	Great Britain	100 %	Non trading company
Network Rail International Limited	Great Britain	100 %	Dormant
[formerly known as Network Rail (Projects) Limited]			
Great British Railways Consulting Limited [formerly known as Network Rail (Assets) Limited]	Great Britain	Company limited by guarantee	Non trading company (formerly used for other business support activities)
NR Corporate Secretary Limited	Great Britain	100%	The company provides secretarial services to other companies within the Network Rail group
Network Rail Property Limited	Great Britain	100 %	Dormant
Network Rail (Spacia) Limited	Great Britain	100 %	Dormant
Victoria Place Shopping Centre Ltd	Great Britain	100%	Non trading company
Spacia (2002) Ltd	Great Britain	100%	Dormant
Railway Property Ltd	Great Britain	100%	Dormant
Kew Bridge Manco Limited	Great Britain	Company limited by guarantee	Dormant
Railway Safety & Standards	Great Britain	Company limited by guarantee	Dormant
Railway Safety	Great Britain	Company limited by guarantee	Dormant

Shares held by a trustee			
Network Rail Infrastructure Finance PLC	Great Britain	Intertrust Corporate	Issuer of the Debt Issuance
		Services Limited	Programme
Network Rail MTN Finance Limited	Great Britain	Intertrust Corporate	Issuer of NR's Medium Term Note
		Services Limited 99.998 %	, (MTN) Programme.
		Intertrust Nominees	
		limited 0.002 %	

Directly owned by Network Rail Limited company.

The shares in Network Rail Infrastructure Finance PLC are held by Intertrust Corporate Services 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.

Network Rail Infrastructure Limited (NRIL) is a member of Newcastle NE1 Limited. Newcastle NE1 Limited is a not-for-profit limited company (by guarantee); NRIL's liability as a member is limited to an amount not exceeding £1. The company is a Business Improvement District representing several businesses in Newcastle.

Joint ventures accounted for by the equity accounting method in the financial statements are included in the table below.

• • •		Proportion of all classes of issued	
Joint ventures	Country of incorporation	share capital owned	Principal activities
Innova Investment Partnership GP Limited	Great Britain	50%	Hold 0.1 % in Innova Investment
		- Harrison Philips	Limited Partnership
Innova Investment Limited Partnership	Great Britain	49.95 %	Property development
West Hampstead Square LLP	Great Britain	50 %	Property development
Blocwork LLP	Great Britain	50%	Property development
Blocwork (Henley) LLP	Great Britain	50 %	Property development
Blocwork Projects LLP	Great Britain	50%	Property development
The Station Office Network LLP	Great Britain	50%	Provides flexible office space, meeting
			rooms and virtual offices
Solum Regeneration Epsom (GP) Limited	Great Britain	50%	Hold 0.1 % in Solum Regeneration
			(Epsom) Limited Partnership
Solum Regeneration (Epsom) Limited	Great Britain	49.95 %	Property development
Partnership			
Solum Regeneration (Haywards) LLP	Great Britain	50 %	Property development
Solum Regeneration (Guildford) LLP	Great Britain	50%	Property development
Solum Regeneration (Twickenham) LLP	Great Britain	50%	Property development
Solum Regeneration (Bishops) LLP	Great Britain	50%	Property development
Solum Regeneration (Surbiton) LLP	Great Britain	50%	Property development
Solum Regeneration Holding 2 LLP	Great Britain	50%	Property development
Solum Regeneration (Maidstone) LLP	Great Britain	50%	Property development
Solum Regeneration (Walthamstow) LLP	Great Britain	50 %	Property development
Solum Regeneration (Redhill) LLP	Great Britain	50%	Property development
Solum Regeneration (Kingswood) LLP	Great Britain	50%	Property development
Solum Regeneration Holding 1 LLP	Great Britain	50%	Property development
·			

The movement in the investment in joint ventures is as follows:

	2022 Group £m	2021 Group £m
At 1 April	38	41
Investment in joint ventures	8	5
Equity repayments	(13)	-
Share of loss	(6)	(8)
At 31 March	27	38

15. Assets held for sale

	2022	2021
	Group	Group
	£m	£m
At 1 April	28	24
Transfer from investment property	8	4
At 31 March	36	28

16. Inventories

		2022 Group £m	2021 Group £m
Raw materials and consumables		. 299	286

As at 31 March 2022 a provision of £29m (2021: £31m) was held in respect of inventories.

17. Trade and other receivables

Current assets: trade and other receivables	2022 Group	2021 Group	2022 Company	2021 Company
	£m	£m	£m	£m
Trade receivables				
- receivable from contracts with other customers	320	236		-
- receivable from agreements with Government	-	•		-
- receivable from property portfolio customers	124	134	-	-
Capital grants receivable	486	394	•	•
Other taxation and social security	148	150	-	-
Collateral receivable	255	369	-	-
Other receivables	17	35	-	-
Prepayments	76	80	-	•
Accrued income				
- receivable from contracts with other customers	121	115	•	-
- receivable from property portfolio customers	50	30	-	•
Total	1,597	1,543	•	•

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 include an allowance for estimated irrecoverable amounts from the supply of services of £43m (2021: £45m). 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 49 days (2021: 49 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 97 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 DfT in England and Wales and TS 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 DfT to take over services at any time. Measures taken to change franchise contracts by both DfT and TS during the global pandemic have allowed train operating companies to continue to settle amounts owed to Network Rail as they fall due. 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 £62m (2021: £51m) 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 23 days (2021: 22 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:

Current assets: trade and other receivables	2022 Group £m	2021 Group £m	2022 Company £m	2021 Company £m
Past due by 1 – 28 days	43	40	•	-
Past due by 29 – 56 days	11	9	•	-
Past due by 57 – 84 days	3	3	-	-
Past due by 85 – 180 days	17	19	-	-
	74	71	-	•

Trade receivables of £30m (2021: £26m) are overdue by six months or more and have been fully provided for.

18. Trade and other payables

	2022 Group	2021 Group	2022 Company	2021 Company
Current liabilities: trade and other payables	£m	£m	£m	£m
Trade payables	731	586	-	•
Collateral held from banking counterparties	-	105	-	-
Payments received on account	45	26	-	
Other payables	533	431	•	-
Other interest accruals	250	241	-	-
Other accruals	968	934	•	•
Deferred income	1,139	1,278	-	
Total	3,666	3,601	-	•

Deferred income includes £831m (31 March 2021: £962m) relating to cumulative timing differences between government grants received and expenditure being incurred which gives rise to the recognition of income under grant agreements. The remainder of the balance relates principally to IFRS 15 items referred to in that standard as 'contract liabilities'.

£23m of the property deferred income balance at the beginning of the year was recognised as revenue in the current year.

The average credit period taken for trade purchases is 30 days (2021: 26 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.

The Other accruals balances contains a degree of estimation uncertainty regarding the amounts to be paid. The majority of the balance relates to COWD which is disclosed as a key source of estimation uncertainty.

Non-current liabilities: other payables	2022 Group £m	2021 Group £m	2022 Company £m	2021 Company £m
Capital grants deferred income	497	430	-	-
Other payables	14	56	•	-
Total	511	486		<u> </u>

As part of the acquisition of Railtrack PLC, Network Rail received a grant of £300m from the Strategic Rail Authority to fund the purchase. In line with Network Rail's accounting policy this revenue is deferred and amortised over the average remaining life of the railway network (as this represents the substantial part of the assets purchased), currently 40 years, on a straight-line basis. The balance on the grant after amortisation at 31 March 2022 is £105m (2021: £113m).

19. Borrowings

The borrowings balance is split as follows:

	2022	2021	2022	2021
	Group	Group	Company	Company
	£m	£m	£m	£m
Net borrowings by instrument:				
Cash and cash equivalents	477	522	-	-
Collateral placed with counterparties	255	369	-	-
Collateral received from counterparties	-	(105)	-	-
Bank loans	(542)	(522)		-
Lease liabilities	(420)	(386)	•	-
Bonds issued under the Debt Issuance Programme				
(less unamortised premium, discount and fees)	(24,880)	(23,874)	•	-
Borrowings issued by the DfT*	(30,941)	(30,683)	-	-
	(56,051)	(54,679)	•	•
Movement in net borrowings:				
At the beginning of the year	(54,679)	(54,601)	-	-
(Decrease)/Increase in cash and cash equivalents	(45)	92	-	-
Proceeds from borrowings	(7,888)	(10,841)		-
Repayments of borrowings**	8,050	10,841	-	
Capital accretion	(1,497)	(281)	•	-
Exchange differences	-	20	-	
Movement in collateral placed with counterparties	(114)	(165)	•	
Movement in collateral received from counterparties	105	15	•	-
Movement in lease liabilities (see note 24)	(34)	25	•	-
Decrease in DfT collateral facility**	10	150	-	-
Fair value and other movements	41	66	-	•
At the end of the year	(56,051)	(54,679)	-	•
Net borrowings are reconciled to the balance sheet as set out below:				
Cash and cash equivalents	477	522	-	-
Collateral placed with counterparties (included in trade and other receivables)	255	369	-	-
Collateral received from counterparties (included in trade and other payables)	-	(105)	-	-
Borrowings included in current liabilities	(2,801)	(8,157)	-	-
Borrowings included in non-current liabilities	(53,982)	(47,308)	-	-
	(56,051)	(54,679)		

As at 31 March 2022, a collateral facility of £250m (2021: £260m) was included within this balance.
 Included in repayment of borrowings in cash flow statement.

	2022 Group £m	2021 Group £m	2022 Company £m	2021 Company £m
1.085% sterling index linked bond due 2052	154	143	-	-
0% sterling index linked bond due 2052	171	157		
1.003% sterling index linked bond due 2051	29	27		
0.53% sterling index linked bond due 2051	149	138	•	•
0.517 % sterling index linked bond due 2051	149	138		-
0% sterling index linked bond due 2051	172	158		
0.678 % sterling index linked bond due 2048	146	136	-	
1.125% sterling index linked bond due 2047	6,317	5,887	-	-
0% sterling index linked bond due 2047	111	101		
1.1335% sterling index linked bond due 2045	60	55	•	-
1.5646% sterling index linked bond due 2044	325	313	-	-
1.1565% sterling index linked bond due 2043	67	62	-	
1.1795% sterling index linked bond due 2041	82	76	-	
1.2219% sterling index linked bond due 2040	319	307		-
1.2025% sterling index linked bond due 2039	90	83	-	-
4.6535% sterling bond due 2038	100	100	-	-
1.375% sterling index linked bond due 2037	6,230	5,789	-	-
4.75% sterling bond due 2035	1,236	1,235	•	
1.6492% sterling index linked bond due 2035	485	467	•	-
4.375% sterling bond due 2030	873	872	•	-
1.75% sterling index linked bond due 2027	6,000	5,599	-	-
4.615% Norwegian krone bond due 2026*	45	49	-	-
4.57 % Norwegian krone bond due 2026*	13	14	-	•
1.9618% sterling index linked bond due 2025	411	395	-	-
4.75% sterling bond due 2024	747	745	-	-
3% sterling bond due 2023	399	399	-	-
2.76% Swiss franc bond due 2021	-	231	-	-
2.315% Japanese yen bond due 2021*	•	66	•	-
2.28% Japanese yen bond due 2021*	•	66	-	-
2.15% Japanese yen bond due 2021*	-	66	-	-
	24,880	23,874	-	-

^{*} Bonds treated as fair value through profit and loss.

All other bonds are shown net of unamortised discount and fees.

Bank loans are analysed as follows:

	2022	2021	2022	2021
	Group	Group	Company	Company
	£m	£m	£m	£m
Index-linked European Investment Bank	542	522	-	-
	542	522	-	-

At 31 March 2022 and 2021 the group had the following undrawn committed borrowing facilities at nominal value:

	2022 Drawn £m	2022 Undrawn £m	2022 Total £m	2021 Drawn £m	2021 Undrawn £m	2021 Total £m
DfT loan facility	30,709	1,150	31,859	30,439	1,420	31,859
DfT collateral facility	250	50	300	260	140	400
	30,959	1,200	32,159	30,699	1,560	32,259

Undrawn committed facilities expire as follows:

	2022 Group £m	2021 Group £m
Within one year	-	-
Within two to five years	1,150	1,420
After five years	50	140
	1,200	1,560

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. Following an asset disposal, this facility was reduced to £31,859m. 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

		22 oup	2021 Group	
	Fair value £m	Notional amounts £m	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	-	•	109	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	5	56	67	198
Interest rate swaps	7	2,010	211	9,140
Forward foreign exchange contracts	1	30	-	-
	13	2,096	387	9,466
Included in non-current assets	9	511	191	6,716
Included in current assets	4	1,585	196	2,750
	13	2,096	387	9,466
Derivative financial instrument liabilities				
Cash flow hedges				
Interest rate swaps	-	-	(6)	130
Forward starting interest rate swaps	-	-	-	•
Non-hedge accounted derivatives				
Interest rate swaps to hedge debt issued under the Debt Issuance Programme	(261)	11,310	(640)	9,140
Forward foreign exchange contracts	-	28	(2)	4
	(261)	11,338	(648)	9,274
Included in current liabilities	(55)	3,666	(83)	2,614
Included in non-current liabilities	(206)	7,672	(565)	6,660
	(261)	11,338	(648)	9,274

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.

The majority of the group's remaining derivative are forward-starting interest rate swaps which were initiated prior to Network Rail's reclassification. The 'pay fixed, receive floating' arrangement had — at hedge inception — the effect of fixing Network Rail's exposure to interest rate movements between the date of entering into the swap and the drawdown of expected future debt issuances. The balance in the hedging reserve represents the cumulative loss on these instruments at the point of debt drawdowns, less amounts reclassified into profit and loss in line with the maturity of the hedged item (debt).

Following the passage of the hedged events (debt issuances), which have all now occurred, movements on these instruments have been taken in full to profit and loss since the economic relationship underpinning the hedge no longer exists. Interest rate swaps included within the derivatives population above also include reversing swaps entered into at the point of debt drawdowns to cancel the floating leg effect of the original swap. Movements in fair value for these reversing swaps are taken against profit and loss throughout the life of these instruments.

21. Provisions

		Commercial and				
	Restructuring £m	Legal £m	other claims £m	Total £m		
At 1 April 2021	5	23	67	95		
Charge for the year	5	12	23	40		
Utilised in the year	•	(8)	(8)	(16)		
Release for the year	(10)	(3)	(28)	(41)		
At 31 March 2022	•	24	54	78		

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 liabilities

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.

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 2020	2,984	•	604	17	(25)	-	3,580
Charge/(credit) to income	287	(4)	(2)	(53)	-	114	342
Charge/(credit) to other comprehensive income	-	•	(344)	(118)	29	-	(433)
Transfer between reserves	-	•	(6)	6	-	•	-
Utilisation of losses previously derecognised		-	-,	-	-	(77)	(77)
Utilisation of ACT	-	-	•	-	•	(37)	(37)
De-recognition of deferred tax asset (income)	-	4	•		•	-	4
De-recognition of deferred tax asset (equity)	-	-	-	-	(29)	-	(29)
At 31 March 2021	3,271	•	252	(148)	(25)	-	3,350
Charge/(credit) to income	92	10	-	(94)	34	82	124
Charge/(credit) to other comprehensive income	-	•	461	242	22	-	725
Impact of rate change (income)	1,012	•	-	(121)	(8)	-	883
Impact of rate change (equity)	•	-	80	74	(1)	-	153
Transfer between reserves	-	-	(8)	8	•	-	-
Utilisation of losses previously derecognised	-	•	•	-	-	(82)	(82)
De-recognition of deferred tax asset (income)	-	(10)	-	-	-	-	(10)
De-recognition of deferred tax asset (equity)	-		-	-	(22)	-	(22)
At 31 March 2022	4,375	•	785	(39)	•	-	5,121

Certain deferred tax assets and liabilities have been offset. The following is the analysis of the gross deferred tax balances:

	2022 £m	2021 £m
Deferred tax liabilities	5,160	3,523
Deferred tax assets	(39)	(173)
	5,121	3,350

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. Note 10 includes further discussion around the recognition of deferred tax assets. The deferred tax asset on tax losses of £2,305m (2021: £2,736m) has therefore not been recognised. The reduction in available losses is due to losses being used when finalising the main trading company's (NRIL) 2021 financial statements. The deferred tax asset for surplus ACT was fully utilised in the previous financial year.

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.

23. Notes to the statement of cash flows

	2022 Group £m	2021 Group £m	2022 Company £m	2021 Company £m
Profit before tax	324	1,613	-	-
Adjustments for:				
Property revaluation movements and profits on disposal	(51)	5	-	-
Fair value gain on derivatives and debt	(157)	(176)	-	-
Net interest expense	2,844	1,741	•	-
Depreciation of the rail network and leases under IFRS 16	2,197	2,094	-	-
Amortisation of grants	(248)	(137)	-	-
Amortisation of intangible assets	1	1	-	
Movement in retirement benefit obligations	266	164	-	-
(Decrease) / Increase in provisions	(17)	15	-	-
Operating cash flows before movements in working capital	5,159	5,320	-	-
Increase in inventories	(13)	(24)	-	
(Increase)/Decrease in receivables	(88)	60	-	-
Increase in payables	220	104	•	-
Cash generated from operations	5,278	5,460	-	•

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 and commercial paper, all of which are on call with the exception of short-term deposits. There were £558m (excluding offsetting clearing accounts) of short-term deposits with the government banking scheme (GBS) held as at 31 March 2022 (2021: £576m).

24. Leases

Group as a lessee

Property lease payments largely represent rentals payable by the group for certain of its office properties. In addition, rentals are paid for land adjacent to the railway required for maintenance and renewal activities. Non-property leases include the group's vehicles, on track machines and wagons that are leased

The movement in the period for the lease liability is reconciled as follows:

	B	Non	
	Property leases	property leases	Total
	£m	£m	£m
Lease liabilities at 31 March 2020	230	181	411
New leases entered into in the period	23	57	80
Leases renewed in the period	-	-	-
Change in assumptions	(5)	(4)	(9)
Interest charged in the period	` 5	6	11
Payments in the period	(48)	(59)	(107)
Lease liability at 31 March 2021	205	181	386
New leases entered into in the period	28	89	117
Leases renewed in the period	-	-	
Change in assumptions	29	10	39
Interest charged in the period	5	6	11_
Payments in the period	(48)	(85)	(133)
Lease liability at 31 March 2022	219	201	420
The lease liabilities are split between the current and non-current liabilities as shown below:		2022 £m	2021 £m
Current lease liabilities		130	107
Non-current lease liabilities		290	279
Total lease liabilities		420	386

The movement in the period for the ROU assets is reconciled as follows:

Property leases £m	property leases £m	Total £m
246	182	428
23	57	80
(19)	(6)	(25)
(46)	(56)	(102)
204	177	381
28	89	117
28_	2	30
(44)	(60)	(104)
216	208	424
	leases fm 246 23 (19) (46) 204 28 28 (44)	Property leases £m property leases £m 246 182 23 57 (19) (6) (46) (56) 204 177 28 89 28 2 (44) (60)

Expenses relating to short-term lease (included in net operating costs) were £0.2m. The total cash outflow for leases during the year was £133m (2021: £109m).

The following table details the group's remaining contractual maturity for its financial liabilities. See note 25 for details of how liquidity risk is managed across the group.

Group	Within 1 year	1-2 years	2-5 years	5+ years	Total
	£m	£m	£m	£m	£m
Lease liabilities	129	97	132	119	477

Group as a lessor

Minimum lease payments receivable on leases where the group is lessor are as follows:

Group	Within 1 year	1-2 years	2-5 years	5+ years	Total
	£m	£m	£m	£m	£m
Minimum lease payments receivable	429	346	678	1,681	3,134

25. Funding and financial risk management

Introduction

The group's funding requirement is met by the DfT via a loan facility and grants. Previously, the group was almost entirely debt financed. Of the total £56.4bn borrowings, £25.4bn 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. This debt has been issued by Network Rail Infrastructure Finance PLC under the Debt Issuance Programme which is rated AA by Standard and Poor's, Aa3 (outlook stable) by Moody's and AA- (outlook stable) by Fitch. The Debt Issuance Programme is supported by a financial indemnity from the Secretary of State for Transport which expires in 2052. The remaining £30.9bn was issued to Network Rail Infrastructure Limited through the DfT (refer to Reclassification of Network Rail below).

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.

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 2022 and 31 March 2021.

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 (see Accounting policies in note 2):

- bank loans based on market data at the balance sheet date and the net present value of discounted cash flows
- bonds issued under the Debt Issuance Programme based on market data at the balance sheet date. There are a small number of privately held bonds that are valued by management. Management review comparator bonds and determine an appropriate yield rate based on similar bonds that have available prices.

For cash and cash equivalents, finance lease receivables, trade and other payables and trade and other receivables, fair value equates to carrying value.

	2022 20		021	
Group	Carrying value £m	Fair value £m	Carrying value £m	Fair value £m
Financial assets				
Cash and cash equivalents	477	477	522	522
Other non-derivative financial assets				
Trade and other receivables (less prepayments and accrued	947	947	799	799
income and other taxation and social security)	J47	J47		
Collateral receivable	255	255	369	369
Derivatives				
Derivatives designated as cash flow hedging instruments		•	109	109
Other derivatives as fair value through profit and loss	. 13	13	278	278
Total financial assets	1,692	1,692	2,077	2,077
Financial liabilities				
Financial liabilities held at amortised cost				
Bank loans	(542)	(912)	(522)	(864)
Bonds issued under the Debt Issuance Programme	(24,823)	(39,473)	(23,613)	(40,310)
Borrowings issued by DfT	(30,941)	(30,092)	(30,683)	(30,971)
Collateral payable	•	•	(105)	(105)
Trade and other payables at amortised cost (less deferred income)	(2,541)	(2,541)	(2,274)	(2,274)
Financial liabilities designated as fair value through profit and loss				
Bonds issued under the Debt Issuance Programme	(57)	(57)	(261)	(261)
Derivatives				
Derivatives designated as cash flow hedging instruments	-	-	(6)	(6)
Other derivatives as fair value through profit and loss	(261)	(261)	(642)	(642)
Total financial liabilities	(59,165)	(73,336)	(58,106)	(75,433)

The bonds issued under the Debt Issuance programme are a combination of level 1 (£34,650m) and level 2 (£4,880m). Financial liabilities designated at fair value, the bank loans, the derivatives and the loan from the Department for Transport are all level 2. For all of the remaining balances, the carrying value approximates fair value and these are level 3.

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.

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. Derivatives 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 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 £nil (2021: £30m) 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 2022 the fair value of collateral held was £nil (2021: £105m). 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 2022 was £255m (2021: £369m).

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 creditworthiness 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 in note 17.

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.

The group considers a 10 percentage point increase in the value of any currency against sterling to be a reasonably possible change and this would not have a material impact on the group's net profit before tax or equity.

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 £13,320m (2021: £18,410m) 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 (£56m), thus exposing the group to cash flow interest rate risk.

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 2022	Group 31 March 2021
	Impact on the income statement £m	Impact on the income statement £m
1% increase in the interest rate	196	213
1% increase in the GBP RPI on index linked bonds	(195)	(186)

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.

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. Treasury provides sufficient liquidity to meet the group's needs, while reducing financial risks 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.

The disclosure for 31 March 2021 is based on a refined analysis from the published position.

Group	Within 1 year £m	1-2 years £m	2-5 years £m	5+ years £m	Total £m
31 March 2022					
Non-derivative financial liabilities					
Bank loans and overdrafts	(7)	(7)	(20)	(641)	(675)
Bonds issued under the Debt Issuance Programme					
– Sterling denominated bonds	(150)	(1,300)	(307)	(2,966)	(4,723)
– Sterling denominated index-linked bonds	(295)	(295)	(1,295)	(23,888)	(25,773)
Foreign currency denominated bonds	(2)	(2)	(61)	•	(65)
Loan from the Department for Transport	(3,270)	(3,285)	(25,668)	(205)	(32,428)
Trade and other payables	(1,514)	(14)	-	•	(1,528)
Derivative financial liabilities				,,,	(260)
Net settled derivative contracts	(120)	(67)	(69)	(4)	(260)
Gross settled derivative contracts – receipts	29	29	88	•	146
Gross settled derivative contracts – payments		-	•	•	<u> </u>
	(5,329)	(4,941)	(27,332)	(27,704)	(65,306)
	Within 1 year	1-2 years	2-5 years	5+ years	Total
	£m	£m	£m	£m	£m
Group		Em (Restated)	£m (Restated)	Em (Restated)	£m (Restated)
31 March 2021	£m				
31 March 2021 Non-derivative financial liabilities	£m (Restated)	(Restated)	(Restated)	(Restated)	(Restated)
31 March 2021	£m				
31 March 2021 Non-derivative financial liabilities Bank loans and overdrafts	£m (Restated)	(Restated)	(Restated)	(Restated)	(Restated)
31 March 2021 Non-derivative financial liabilities Bank loans and overdrafts Bonds issued under the Debt Issuance Programme	£m (Restated)	(Restated)	(Restated)	(Restated)	(Restated)
31 March 2021 Non-derivative financial liabilities Bank loans and overdrafts Bonds issued under the Debt Issuance Programme — Sterling denominated bonds	£m (Restated)	(Restated)	(Restated)	(Restated)	(Restated)
31 March 2021 Non-derivative financial liabilities Bank loans and overdrafts Bonds issued under the Debt Issuance Programme - Sterling denominated bonds - Sterling denominated index-linked bonds	(6)	(Restated) (6) (150)	(Restated) (19) (1,505)	(Restated) (595) (3,068)	(Restated) (626) (4,873)
31 March 2021 Non-derivative financial liabilities Bank loans and overdrafts Bonds issued under the Debt Issuance Programme - Sterling denominated bonds - Sterling denominated index-linked bonds - Foreign currency denominated bonds	(6) (150) (268)	(Restated) (6) (150) (268)	(Restated) (19) (1,505) (1,204)	(Restated) (595) (3,068) (22,189)	(626) (4,873) (23,929)
31 March 2021 Non-derivative financial liabilities Bank loans and overdrafts Bonds issued under the Debt Issuance Programme - Sterling denominated bonds - Sterling denominated index-linked bonds	(6) (150) (268) (441)	(Restated) (6) (150) (268) (3)	(Restated) (19) (1,505) (1,204) (8)	(Restated) (595) (3,068) (22,189) (57)	(626) (4,873) (23,929) (509)
31 March 2021 Non-derivative financial liabilities Bank loans and overdrafts Bonds issued under the Debt Issuance Programme - Sterling denominated bonds - Sterling denominated index-linked bonds - Foreign currency denominated bonds Loan from the Department for Transport	(6) (150) (268) (441) (7,834)	(Restated) (6) (150) (268) (3) (3,123)	(Restated) (19) (1,505) (1,204) (8)	(3,068) (22,189) (57) (508)	(626) (4,873) (23,929) (509) (32,107)
31 March 2021 Non-derivative financial liabilities Bank loans and overdrafts Bonds issued under the Debt Issuance Programme - Sterling denominated bonds - Sterling denominated index-linked bonds - Foreign currency denominated bonds Loan from the Department for Transport	(6) (150) (268) (441) (7,834) (1,363)	(Restated) (6) (150) (268) (3) (3,123) (56)	(Restated) (19) (1,505) (1,204) (8) (20,642)	(Restated) (595) (3,068) (22,189) (57) (508)	(626) (4,873) (23,929) (509) (32,107) (1,419)
31 March 2021 Non-derivative financial liabilities Bank loans and overdrafts Bonds issued under the Debt Issuance Programme - Sterling denominated bonds - Sterling denominated index-linked bonds - Foreign currency denominated bonds Loan from the Department for Transport Trade and other payables	(6) (150) (268) (441) (7,834) (1,363)	(Restated) (6) (150) (268) (3) (3,123) (56)	(Restated) (19) (1,505) (1,204) (8) (20,642)	(Restated) (595) (3,068) (22,189) (57) (508) -	(626) (4,873) (23,929) (509) (32,107) (1,419)
31 March 2021 Non-derivative financial liabilities Bank loans and overdrafts Bonds issued under the Debt Issuance Programme - Sterling denominated bonds - Sterling denominated index-linked bonds - Foreign currency denominated bonds Loan from the Department for Transport Trade and other payables Derivative financial liabilities	(6) (150) (268) (441) (7,834) (1,363)	(Restated) (6) (150) (268) (3) (3,123) (56)	(Restated) (19) (1,505) (1,204) (8) (20,642)	(Restated) (595) (3,068) (22,189) (57) (508) - (14) 29	(626) (4,873) (23,929) (509) (32,107) (1,419) (437) 858
31 March 2021 Non-derivative financial liabilities Bank loans and overdrafts Bonds issued under the Debt Issuance Programme - Sterling denominated bonds - Sterling denominated index-linked bonds - Foreign currency denominated bonds Loan from the Department for Transport Trade and other payables Derivative financial liabilities Net settled derivative contracts	(6) (150) (268) (441) (7,834) (1,363)	(Restated) (6) (150) (268) (3) (3,123) (56)	(Restated) (19) (1,505) (1,204) (8) (20,642)	(Restated) (595) (3,068) (22,189) (57) (508) -	(626) (4,873) (23,929) (509) (32,107) (1,419)

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.

	Gross amounts	Gross amounts of recognised financial	Net amount of financial assets	Related amounts no balance s		
Group	of recognised financial assets £m	liabilities set off in the balance sheet £m	presented in the balance sheet £m	Financial instruments £ m	Cash collateral received £m	Net amount
31 March 2022						
Derivative financial assets	13		13	(13)	95	95
31 March 2021						
Derivative financial assets	387	-	387	(283)	235	339

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.

	Gross amounts	Gross amounts of recognised financial	Net amount of financial liabilities	Related amounts no balance s		
Group	of recognised financial liabilities £m	assets set off in the balance sheet £m	presented in the balance sheet £m	Financial instruments £m	Cash collateral paid £m	Net amount £m
31 March 2022						
Derivative financial liabilities	(261)	-	(261)	. 12	160	(89)
31 March 2021						
Derivative financial liabilities	(648)	-	(648)	283	28	(337)

Cash flow hedges

Contractual payments on derivatives designated as cash flow hedges impact the income statement as described in Note 20 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.

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).

	2022			
	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Derivative financial assets	-	13	-	13
Assets	-	13	-	13
Derivative financial liabilities	-	(261)	-	(261)
Financial liabilities designated at fair value through profit and loss	•	(57)	•	(57)
Liabilities	-	(318)	•	(318)
Total		(305)	-	(305)

	2021			
	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Derivative financial assets	-	387	-	387
Assets	-	387	-	387
Derivative financial liabilities	-	(648)	-	(648)
Financial liabilities designated at fair value through profit and loss	-	(261)	-	(261)
Liabilities	-	(909)	•	(909)
Total	-	(522)	-	(522)

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.

26. Retirement benefit schemes

Defined contribution schemes

On 1 April 2004 the company introduced a defined contribution pension scheme, the Network Rail Defined Contribution Pension Scheme (NRDCPS). These schemes are offered to all new employees of Network Rail, except those who have the legal right to join the Railway Pension Scheme (RPS). 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 2022, the NRDCPS had 12,960 active members (2021: 14,082) and the average employer contribution rate in the year was 4 per cent (2021: 4 per cent).

The estimated amounts of contributions expected to be paid by the company to the schemes during the year ended 31 March 2023 are £140m.

Defined benefit schemes

The principal pension scheme in which the company participates is the 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 company 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 company, 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 company 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 company 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 2022 and 31 March 2021.

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 valuations of both the RPS and CARE schemes were undertaken by the Scheme Actuaries, at WTW and XPS respectively. These triennial valuations showed a technical combined funding surplus of £1,065m.

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 company and the members. In practice the contributions are adjusted at each triennial valuation to reflect the funding position of the schemes at that time.

If a surplus or deficit arises, the provisions in the rules mean that the company and members benefit from or pay for this respectively in the proportion 60:40.

	2022 %	2021 %
Key assumptions used:		
Discount rate	2.7	2.1
Expected rate of price inflation and CARE benefit increases (RPI measure)	3.6	3.2
Future earnings increases*		
- after changes to benefits from 1 April 2016	3.6	3.2
Pension increases (CPI measure)	3.2	2.8

Excluding promotional salary scale. Promotional salary scale increases apply only in respect of service after the date of promotion.

	2022		2021	
	Males	Females	Males	Females
Average life expectancy for mortality tables used to determine defined benefit obligations:				
– Member aged 65	21.0	23.0	21.1	23.0
– Member aged 45	22.7	24.9	22.7	24.9

For Network Rail Section of the RPS the discounted mean term of the defined benefit obligation is 21 years, for the CARE scheme it is 37 years.

Amounts recognised in the Income Statement in respect of the company's pension arrangement are as follows:

	463	334
Interest cost	60	44
Current service cost – defined benefit (see note 6)	379	266
Current service cost – defined contribution (see note 6)	24	24
	2022 £m	2021 £m

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 statement of comprehensive income in respect of the company's pension arrangement are as follows:

	2022 £m	2021 £m
Gain on defined benefit obligation due to experience	(224)	(48)
(Gain) / Loss on defined benefit obligation due to assumption changes	(438)	1,566
Return on plan assets (greater) / less than discount rate	(304)	(897)
Actuarial (gain) / loss recognised in the statement of comprehensive income	(966)	621

The cumulative amount of actuarial gains recognised in other comprehensive income was £432m (2021: £1,398m). In the year the discount rate increased by 60 bps and the RPI assumption increased by 40 bps. These factors combined have had a significant impact on the defined benefit obligation leading to the £438m gain noted above arising from assumption changes. The other movements increase that gain to £966m which is recorded in the statement of comprehensive income.

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The amount included in the balance sheet arising from the company's obligations in respect of its defined benefit schemes is as follows:

13 d3 10110W3.	2022 £m	2021 £m
The defined benefit obligation is made up as follows:		
Active members	(7,664)	(7,701)
Deferred pensioner member	(1,716)	(1,752)
Retired members	(3,560)	(3,917)
Present value of defined benefit obligation	(12,940)	(13,370)
Fair value of scheme assets	9,175	8,537
Deficit in the scheme	(3,765)	(4,833)
Group's share (60%) of the scheme deficit recognised in the balance sheet	(2,259)	(2,899)

This amount is presented as a non-current liability in the balance sheet. Cumulative gains or losses are recognised in equity. Movements in defined benefit plan assets and liabilities (including members' share):

	Asset* £m	Liabilities** £m	Deficit £m
At 1 April 2020	6,951	(10,401)	(3,450)
Current service cost including members' share	-	(465)	(465)
Interest on pension deficit	152	(226)	(74)
Section amendment (Past Service Costs)	-	-	•
Administration expenses	(15)	-	(15)
Return on plan assets greater than the discount rate	1,495	-	1,495
Actuarial gain arising from experience adjustments	-	80	80
Actuarial loss arising from demographic assumptions	-	32	32
Gain on DBO – financial assumption	•	(2,642)	(2,642)
Regular contributions by employer	126	-	126
Contributions by employees	80	-	80
Benefits paid	(252)	. 252	-
At 1 April 2021	8,537	(13,370)	(4,833)
Current service cost including members' share	-	(650)	(650)
Interest on pension deficit	178	(278)	(100)
Section amendment (Past Service Costs)	=	_	-
Administration expenses	(21)	-	(21)
Return on plan assets less than the discount rate	508	•	508
Actuarial gain arising from experience adjustments	-	377	377
Actuarial loss arising from demographic assumptions	•	70	70
Gain on DBO – financial assumption	-	662	662
Regular contributions by employer	135	-	135
Contributions by employees	87	-	87
Benefits paid	(249)	249	-
At 31 March 2022	9,175	(12,940)	(3,765)

^{*} Including CARE scheme assets at 31 March 2022 of £393m (2021: £339m)

The actual return on scheme assets was £686m (2021: £1,647m).

Scheme assets

The asset values disclosed below reflect Network Rail's exposure to underlying asset classes through holdings of units of the pooled funds in which the underlying assets are held. Underlying assets are managed by the pension administrator, RPMI and the control over economic benefits for Network Rail established through the unitisation of those funds. The table below has been used to illustrate the underlying assets proportional to Network Rail unit holdings in various pooled funds, and their position in the fair value hierarchy of the underlying assets.

Level 1 and 2 assets include diversified Exchange Traded Funds valued at open trading prices; the Level 3 include property, private equity and non-exchange-traded Pooled Investment Vehicles equity. Level 3 fair value measurements are those

^{**} Including CARE scheme liabilities at 31 March 2022 of £959m (2021: £909m)

derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs) and therefore are inherently more subjective than Level 1 and Level 2 assets.

	2022			2021	
	Level 1	Level 2	Level 3	Total	Total
RPS Scheme	£m	£m	£m	£m	£m
Pooled investment vehicles		-		-	39
Private equity and non-exchange-traded pooled investment vehicles	-	387	2,056	2,443	2,406
Cash and current assets	704	•	,000	704	969
Equities	4,371		106	4,477	3,750
Fixed interest securities	236	24	12	272	252
Derivatives – Futures	-	•	-	•	7
Derivatives – FX contracts	-	-	•	-	•
Index linked securities	245	-	-	245	223
UK Property .	-	-	641	641	552
Total Assets RPS Scheme	5,556	411	2,815	8,782	8,198
CARE Scheme					
Growth assets			*	259	248
Government bonds				31	35
Non-Government bonds				39	31
Property				17	8
Other assets				47	17
Total assets CARE Scheme				393	339
Total scheme assets				9,175	8,537

As a result of the economic uncertainty following measures undertaken as a result of the global pandemic, the private equity and non-exchange traded pooled investment vehicles have required additional activity to assess their value at 31 March 2022. If the valuation was 5 per cent higher or lower this would decrease/increase the retirement benefit obligations by £141m.

In 2020-21 the scheme assets included Level 3 investments of £2,406m private equity and non-exchange traded pooled investment vehicles, £65m in equities, £14m fixed interest and £552m in property. The total value of Level 3 investments accounted for 37 per cent of the total scheme assets held.

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 corresponding reduction in the value places on the defined benefit obligation scheme (DBO). The scheme holds a proportion of growth assets, which are expected to outperform corporate and 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 DBO, 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. The CPI(H) assumption is derived from the RPI assumption. On 4 September 2019, the Government and UK Statistics Authority (UKSA) published correspondence relating to the future of RPI. A consultation on the proposed changes ran from March to August 2020 and a formal response to the consultation was published on 25 November 2020. Given that the UKSA have noted their intention to align RPI with CPIH from February 2030, the post-2030 market-implied RPI assumption should theoretically reflect market expectations for CPI(H). CPI(H) has historically been closely aligned with CPI, so it has been assumed there is a nil gap between RPI and CPI(H) from February 2030. This calculation assumes the market has not included any compensation or adjustment for the change from RPI to CPI(H) from 2030. The starting point for the RPI assumption is the yield rate curve reflecting the scheme's average duration of 22 years. The rate is then adjusted downwards to reflect the fact that buyers of these instruments are prepared to pay a premium for inflation protection and as such the yield is not a true reflection of market expectations of inflation. This adjustment is consistent in 2022 and 2021. The difference between RPI and CPI(H) is 40bps (2021: 40bps).

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. Management's view is that it is currently too early to establish the long-term impact on healthcare and mortality of the global pandemic. The average life expectancy therefore does not include any adjustment in relation to the global pandemic.

Discount rate

The discount rate needs to be based upon yields on high quality corporate bonds at the balance sheet date. A range of bonds are included when calculating this rate. Further, extrapolation of bond yields is required where there is a lack of bonds at long duration.

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.

Expected future benefit payments from the Network Rail Section, based on data from the 2019 formal valuation and the 31 March 2022 IAS 19 assumptions are as follows:

	£m
Benefits expected to be paid within 12 months	237
Benefits expected to be paid between 2 to 3 years	483
Benefits expected to be paid between 4 to 6 years	851
Benefits expected to be paid between 7 to 10 years	1,396
Benefits expected to be paid between 11 to 15 years	2,138
Benefits expected to be paid in over 15 years	16,085

The following table shows the effect of changes in these assumptions upon the defined benefit obligation:

	2022 £m	2021 £m
Discount rate		
Change in defined benefit obligation at year end from a 25-basis point increase	(683)	(721)
Change in defined benefit obligation at year end from a 25-basis point decrease	737	780
Mortality		
Change in defined benefit obligation from a one-year increase in longevity	504	534
Change in defined benefit obligation from a one-year decrease in longevity	(501)	(534)
Earnings increase		
Change in defined benefit obligation at year end from a 25-basis point increase	204	217
Change in defined benefit obligation at year end from a 25-basis point decrease	(197)	(209)
Price inflation (CPI measure)*		
Change in defined benefit obligation at year end from a 50 (2021: 50) basis point increase	981	1,082
Change in defined benefit obligation at year end from a 50 (2021: 50) basis point decrease	(908)	(968)

Including consistent increases to Retail Price Index, salary growth and Retail Price Index / Consumer Price Index related pensions assumptions.

27. Related parties

The DfT and TS are considered related parties of Network Rail. Network Rail received grant income of £5,988m from the DfT in the year ended 31 March 2022 (2021: £6,162m). Network Rail received grant income of £525m from TS for the year ended 31 March 2022 (2021: £480m). The total of this income is "Grant income" in note 3. At 31 March 2022 the company held £30,941m of loans issued by DfT (2021: £30,683m).

The British Transport Police (BTP), with whom Network Rail has a Police Service Agreement is also a related party. Network Rail incurred £97m (2021: £98m) of costs relating to services provided by the BTP in the year ending 31 March 2022 and received £1m (2021: £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 £165m (2021: £181m) of capital work in progress relating to works on HS2 and had also received £199m (2021: £193m) of capital grants that was recorded against property, plant and equipment.

East West Rail (EWR) is also a related party of Network Rail. During the year ended 31 March 2022, Network Rail received income of £0.3m (2021: £0.2m) from EWR for the provision of feasibility studies and development activities services.

On 1 April 2021 Mr Ismail Amla was appointed a Non-Executive Director to the NRL Board. At the time of appointment Mr Ismail Amla served as the Chief Growth Officer and a Director at Capita. Prior to and since his appointment, NRL engaged Capita for the provision of various services. All services are provided on an arm's length basis. On 30 July 2021 Mr Amla resigned at Capita, therefore at that date, the entity ceases to be a related party of NRL. Related party transactions between NRL and Capita during the period 1 April 2021 to 31 July 2021 amounted to £9m.

Network Rail is one of DfT OLR Holdings Limited's main industry stakeholders, with common ownership through the latter being wholly owned by the Secretary of State for Transport. Transactions between Network Rail and DfT OLR Holdings Limited are at arm's length. During the financial year ended 31 March 2022 £507m (2021: £382m) for services rendered was received from DfT OLR Holdings Limited. Capital project funding paid, net of capital costs amounted to £5m (2021: £8m). At year-end balances with DfT OLR Holdings Limited included payables of £11m (2021: £3m) and receivables of £13m (2021: £1m).

28. Post balance sheet events

As at the date of signing these financial statements there have not been any significant post balance sheet events, whether adjusting or non-adjusting.



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