Introduction by our chair, Sir Peter Hendy CBE

Railways are the economic arteries of our country and create economic growth, jobs and housing.

We are really seeing a transformation take place at Network Rail. We are now a much more customer-focused organisation, with devolved structures that allow local managing directors and their leadership teams to put their customers and passengers at the heart of everything they do. We have become more cost competitive, making over £85m of savings through our continuous improvement initiatives in the past year alone. And we are also becoming a more diverse organisation. Since 2014 we have increased the number of women working at Network Rail by 32% and we have been recognised as an inclusive employer.

Since Mark Carne CBE took over as chief executive in 2014, he has completely transformed the safety culture at Network Rail. Under his leadership not only have we seen workforce accidents reduce by 40%, but there has been a 38% reduction in train accident risk and a 16% increase in infrastructure reliability. Despite challenges, Mark has led Network Rail as it has delivered the biggest upgrade programme since the Victorian era. He has addressed big issues like aligning performance, creating scorecards that align with targets that are set by our customers - the train operators - and which are increasingly consistent with their own, and formed the System Operator function that is able to take a ‘whole system’ view of the railway.

Mark has also led the development of the best business plan for a future control period that Network Rail has ever had, and which enabled us to secure a Statement of Funds Available (SoFA) of £53bn, the largest in the railway’s history.

This transformation into a customer-focused, efficient organisation is the reason I am confident that the next five years will tell a very different story to CP5. We will start the next control period (CP6) in 2019 as a transformed organisation ready to take on this ambitious strategy. Thanks to devolution it has been planned from the bottom up, looking at asset performance and condition, and performance and costs. For the first time each route will have its own regulatory settlement, as will the System Operator. They will thus have greater ownership and greater responsibility.

Our plan for CP6 will also start the railway’s digital age with digital train control and signalling that will enable even more services to run, more safely and at a lower cost. To realise these benefits there must be a whole system change across the industry to support it, and Network Rail is ready to play its part in this transformation.

The rail network is a complex set of national systems that need to work seamlessly in order to deliver for our customers. Unfortunately the May 2018 timetable change has not yet delivered all the benefits that we had hoped for, and many passengers have had poor experiences on the GTR and Northern networks since these changes came in. We know that this level of disruption is not good enough, and we are truly sorry for the disruption that this has caused to people’s lives. In the long run, we will see more services with better, newer, longer trains on these networks. In the meantime the whole industry is working tirelessly to stabilise services, and provide more predictability for passengers.

I end by sincerely thanking Mark, from me and on behalf of the Board, for his huge contribution to the organisation over the last four years. He has worked hard to transform Network Rail into an organisation capable of delivering the railway that Britain needs. His legacy will be felt for many years to come and I look forward to continuing this great work with his successor, Andrew Haines OBE, who will join us later this year. I also thank the Board, the rest of the senior leadership team, and all our staff and contractors that work so hard to keep Britain’s railways, ever fuller of passengers, freight and trains, moving every day.

Sir Peter Hendy CBE, chair
27 June 2018
A message from our chief executive, Mark Carne CBE

Our role is to provide Britain with a safe, reliable, efficient and growing railway. While I can say that on all counts we can point to significant successes in the last year, more recent events have also highlighted that there is much more to do.

We have continued our relentless commitment to safety, and getting everyone home safe, every day, whether employees, passengers or the public. Train accident risk, level crossing risk and workforce risk are all at record low levels and we operate the safest major rail network in Europe. We never take such achievements for granted, quite the opposite. We strive everyday to find better ways of delivering improvements. For example, this year saw the launch of our Small Talk Saves Lives campaign in collaboration with Samaritans. This campaign is the first of its type on the railway and encourages the general public to support those who may be in emotional crisis around them on the rail network. It impacts hundreds of communities and countless Network Rail staff across the UK and I have been overwhelmed by the positive response that this campaign has received so far.

Sadly, however, in June 2018 a young man died while working at a station site in Scotland. Our deepest sympathies are with his family, friends and colleagues at this time. A full investigation into how this tragedy happened has been initiated; we are determined to harness the insights from this to help make our safety culture stronger, for employees, passengers and the public.

Following the publication of ‘Delivering for our Customers’ in July 2016, Network Rail continues to transform in order to better deliver for our customers. We were pleased to publish the ‘Open for Business’ pipeline in March this year. This invites third parties to fund and deliver projects on the railway. We are opening our doors, welcoming challenge and innovation.

Another major transformation milestone this year has been the formation of an additional five route supervisory boards. These boards provide independent oversight of the way track and train work together in the interests of passengers. They have now been formed for six of our eight geographical routes, with the remaining boards to be in place during 2018. Over the last few years we have been busy delivering the biggest railway upgrade since Victorian times. Many of these projects are now coming to fruition and passengers, around the country, are finally experiencing the benefits. This year we finished the Ordsall Chord as part of the Great North Rail project, reducing congestion at Manchester Piccadilly and allowing more trains to run across the north of England. We completed the electrification of the Edinburgh-Glasgow Improvement Programme that will bring faster, longer and more reliable trains to Scottish towns and cities. We transformed and reopened London Bridge station, creating a bigger and better station for passengers as part of the Thameslink Programme. And we have continued to make great progress on the huge Great Western and Great North electrification programmes, which will usher in faster journeys, more capacity and wonderful new trains at the end of this year. New services require new timetables, new trains, more drivers and a high level of integrated thinking across the railway. In the May 2018 timetable change, the industry did not account for itself well and many passengers were left deeply frustrated, particularly in Northern and GTR, at the poor standards of performance. Collectively, the industry knows that it must do much better than this and we are working together to ensure the future changes to the timetable run more smoothly.

We are now very different to the Network Rail of just five years ago. It is this transformation that gives us the confidence to set out the ambitious goals we have laid out in our plans for the next five year control period (CP6), which begins in April 2019.

In February this year we submitted our Strategic Business Plan for a better railway for a better Britain to the Office of Rail and Road (ORR) for years 2019-2024. These plans reflect that safety is of paramount importance to Network Rail. We have also committed to increasing the reliability of our infrastructure, building on the 16% improvement achieved
Chief executive’s review continued

in the last four years, revolutionising the way we measure and deliver train punctuality. We will spend and deliver efficiently and there will be a major focus on Digital Railway and securing third party funding so that the taxpayer is no longer solely relied on to maintain and upgrade our infrastructure. We will also continue to lead the way in making the rail industry more diverse and inclusive, attracting people who think differently to make Network Rail an even better place to work. Great people and great teams are what we want to be recognised for.

Our CP6 plans have built on the foundations of reform that we have put in place over the last few years. Network Rail is now a federation of devolved businesses. Each route has developed their own plan and consulted with their own customers and stakeholders to shape it. They have been built ‘from the ground up’ by local engineers who understand their assets and they will be managed and delivered by local teams. This is a fundamental change, with those closest to passengers accountable for performance.

CP6 will mark the tipping point in the evolution of our rail network, as Digital Railway starts to become a reality. This technology is already being utilised in parts of the network. In March the first mainline passenger train operating on digital railway technology took its inaugural journey through the Thameslink Core between St Pancras and Blackfriars.

Earlier this year I announced my departure from Network Rail and Andrew Haines OBE will take over from me as chief executive in the autumn to take us into the next control period and I wish Andrew every success. I feel proud of what we have achieved and the transformation that Network Rail has undergone. None of it would have been possible without the hard work and dedication I see everyday from the railway family. I would like to extend my thanks to all of you.

Mark Carne CBE, chief executive
27 June 2018

National scorecards during CP5 2014 - 2018

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Scorecard outturn</td>
<td>24.6%</td>
<td>27.9%</td>
<td>34.7%</td>
<td>22.0%</td>
</tr>
<tr>
<td>Safety</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2017/18</td>
<td>2016/17</td>
<td>2015/16</td>
<td>2014/15</td>
</tr>
<tr>
<td>Financial performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2017/18</td>
<td>2016/17</td>
<td>2015/16</td>
<td>2014/15</td>
</tr>
<tr>
<td>Investment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2017/18</td>
<td>2016/17</td>
<td>2015/16</td>
<td>2014/15</td>
</tr>
<tr>
<td>Asset management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2017/18</td>
<td>2016/17</td>
<td>2015/16</td>
<td>2014/15</td>
</tr>
<tr>
<td>Train performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2017/18</td>
<td>2016/17</td>
<td>2015/16</td>
<td>2014/15</td>
</tr>
<tr>
<td>Locally driven</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>customer measures</td>
<td>2017/18</td>
<td>2016/17</td>
<td>2015/16</td>
<td>2014/15</td>
</tr>
</tbody>
</table>

* Indicates where performance finished for the year, but no performance related pay was awarded for that element.
About us

We own and operate the railway infrastructure in England, Scotland and Wales on behalf of the nation. Here we look at what we do, how we are organised, governed and funded. We also set out our strategy to deliver a better railway for a better Britain.

What we do
Network Rail owns and operates most of Britain’s railway infrastructure, including 20,000 miles of track, 30,000 bridges and viaducts and thousands of signals, tunnels, level crossings and points. We also manage rail timetabling and operate 20 of the largest stations. Our role is to provide a safe, reliable and efficient railway while growing and upgrading the network to better serve passengers and freight.

How we are governed and managed
Network Rail is a public sector company, answerable to the Department for Transport (DfT) and Transport Scotland. Our direct customers are the companies that pay to use our infrastructure to provide passenger and freight services. While the majority of our funding comes from Government, we are increasing our partnerships with third parties and generating funds from our commercial estate to reinvest in the railway.

The Office of Rail and Road (ORR) is the independent safety and economic regulator of the railway. The ORR makes sure we meet the needs of our customers, passengers and freight users, as well as being a good neighbour to the millions of people who live or work near the railway.

The Board’s corporate governance report starts on page 53.

How we are organised and operate
We operate in a matrix structure, which means we work collaboratively across functions. This structure is made up of nine route businesses, central functions and route support services. Eight of the route businesses manage and run the rail network in a defined geographical area and work closely with local train operating companies to deliver the best service possible for passengers. The ninth route operates nationally, working with freight and long distance operators.

As part of our matrix structure, our critical central functions support our nine route businesses; these are the System Operator, Technical Authority, Route Services, Infrastructure Projects and Digital Railway. In addition to these, there is a small corporate core that covers activities such as business strategy, functional policy, legal and corporate assurance, and communications. We also have Network Rail Property, which is a commercial division of Network Rail that manages our estate and property assets.

The matrix structure has been designed to make sure that our routes are supported by a national framework. This allows us to deliver in a fair and competitive way for our customers across the UK.
More information on the activities of the individual routes during 2017/18 can be found on pages 14 – 32. Information on our Digital Railway programme can be found on page 33, and our Property division on page 34.

Our business model
We are a public sector company that operates as a regulated monopoly. Our income is a mix of grant and borrowing from the UK and Scottish Governments, charges levied on train operators that use our network, and income, mainly from our commercial property estate.

The UK and Scottish Governments specify what they want from Britain’s railway and how much they wish to contribute. Our independent regulator, the ORR, sets a framework that specifies the level of fixed income we are allowed to charge train and freight operators, as well as the prices for recovering the costs of wear and tear to our infrastructure caused by the trains using it.

The framework also includes flexible funding mechanisms which allow the level of enhancements to the railway to be varied over time. The charges we are allowed to pass on to train operators are determined so that they are fair and allow us to maintain a safe and reliable network, and deliver good customer service.

How our revenue is determined
Network Rail is funded by the Government in five-year blocks called control periods. This annual report covers the fourth year of Control Period 5 (2014 to 2019).

The ORR assesses the efficient level of expenditure that it believes we need to run our business and deliver the regulated outputs. It determines how much revenue we need, taking into account other income that we receive. Our regulatory agreements then allow us to determine the amount we are allowed to charge train operators for use of our network.

The ORR calculates our revenue based on:
- **Cost of service** – The ORR considers the costs that an efficiently run business would incur to operate and maintain our network. They vary and can include costs relating to employees, office rental, information technology systems, and taxes. The regulator determines what it considers to be an efficient cost and this may be different to the actual costs we incur.
- **Expenditure on renewals and enhancements** – The regulator assesses the capital expenditure on renewals and enhancements to the rail network that we need to undertake in the control period. This expenditure is added to the regulatory asset base in the year in which it is incurred.
- **Allowed return** – The ORR calculates the allowed return on the regulatory asset base and includes this in its determination of charges to rail users. This therefore covers, among other things, the cost of financing our capital expenditure programme.
- **Performance against incentives** – Our regulatory framework includes incentives that are designed to encourage specific actions. Failing to achieve certain minimum targets may lead to a reduction in our allowed revenue, or an increase if we exceed targets.

It is proposed that there will be changes to the method of revenue determination for CP6. This will be explained in our 2019 annual report and further details on the proposals can be found in the ORR’s draft determination published 12 June 2018.

Our transformation
Since we published ‘Delivering for our Customers’, our plan for transforming Network Rail, in 2016 there has been a
About us continued

Network Rail Limited Annual Report and Accounts 2018

fundamental change to the way we operate. Network Rail is now a federation of devolved businesses operating within a national framework. This year, each route developed its own Strategic Business Plan for the next control period (2019-2024) for the first time. The routes and the System Operator will have their plans and targets agreed with the ORR, which reinforces how important it is that we have devolved businesses making decisions at a local level. Routes will drive economic growth, jobs and housing through better relationships with the communities they serve.

Over the past 12 months we have continued to drive the pace of change within Network Rail. We want to make it easier for third parties to fund, finance or deliver work on the railways, so we are implementing a number of reforms that aim to cut red tape, so people can come forward with innovative solutions and new ways of working on the railway. This year we published a list of potential opportunities for third party involvement as part of our Open for Business work, and this is just the start of much more to come.

Becoming more cost efficient has also been a key part of our transformation and we are empowering our employees to become more cost-effective and taking a critical eye to current processes. We have already trained 5,500 of our people in continuous improvement techniques and in the last year we made approximately £85m of savings through our continuous improvement initiatives.

Real change takes time, but the progress we have made shows real improvements; working smarter, planning better and making more efficient use of the railway.

Our strategy

This year, Network Rail developed and submitted its Strategic Business Plan for the next five year control period (CP6) running from 2019 - 2024. As a passenger and customer-focused business, our plan for the next control period focuses on the following key responsibilities:

**Safe**

Keeping people safe on the railway is at the heart of everything Network Rail does. We want everyone home safe, every day. As well as it being a moral responsibility, we believe that improved safety and improved business performance go hand in hand. Safety will therefore continue to be our number one priority throughout the next control period, with a specific focus on four areas:

- **Passenger Safety** – We will reduce train accident risk by a further 10%.
- **Public Safety** – We will continue to develop programmes to reduce railway trespass and prevent suicides.
- **Level Crossing Safety** – We will reduce the risk to the public at level crossings by 13%.
- **Workforce Safety** – We want an injury-free and healthy business, so we will continue to improve our Lost Time Injury Frequency Rate (LTIFR) measure by 54%. We will also increase our work on mental health and resilience, with a target of a 30% reduction in absence due to mental ill-health by 2024.

**Reliable**

During the last 12 months we have begun to reverse the previous six year trend of declining train punctuality, but we are still not yet at a level that is acceptable. Our plan for the next five years, working with train operators, will achieve a 15% reduction in the number of trains that are delayed, focusing on:

- **Better assets** – Improving the reliability of the railway’s infrastructure to reduce incidents that cause disruption.
- **Better timetables** – Improving the accuracy of assumptions on which the timetable is based.
- **Better operations** – Improving operational processes so that service recovery from incidents is rapid.
- **Better information** – Improving the accuracy of train running data to help problem solve.

**Efficient**

Driving greater efficiency within our organisation is also a core part of our strategy. During the last 10 years we have reduced the operating and maintenance cost of passenger journeys by 40%. Our plan for 2019 – 2024 proposes spending approximately £53bn (in 2017/18 prices) to operate, maintain, renew and enhance the railway, which we will spend wisely and efficiently. Between 2019 and 2024, we are forecasting that the cost per passenger kilometre of running the railway will reduce by a further nine per cent in real terms, through smarter working, more efficient use of the railway and better technology.
About us continued

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

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

Building new projects to increase capacity can be expensive and disruptive, particularly in built-up urban settings. So the next control period will mark a turning point for Britain’s railway, with the end of major analogue re-signalling – digital signalling is the future that this plan ushers in. Over the next five years, we will be accelerating the transition to digitally-run railways so we can unlock the benefits before the network is gridlocked. Digital Railway is developing a plan that, within 10 years, could enhance the journeys of over 70% of all passengers.

The delivery of this reforming, ambitious plan will only be possible if we can attract, develop and retain the brightest and the best. We want Network Rail to be a great place to work, and help to make people proud to work on Britain’s railways.

We aim to be one of Britain’s best employers. We aspire to create an environment that will allow everybody to reach their full potential. To reach our potential we must call on the talents of everyone; diverse teams perform better. We are leading the way in moving the rail industry to become more diverse and inclusive. We have set ourselves the target of increasing the female workforce to 20% by 2020 and by 2024 we aim to double the proportion of women in our business. We also aim to be in the top 25 graduate employers and to have gender-balanced recruitment of apprentices and graduates.
### How we performed in 2017/18

<table>
<thead>
<tr>
<th>Area</th>
<th>Weightings</th>
<th>Scorecard Minimum</th>
<th>Target</th>
<th>Scorecard Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Safety</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workforce safety – Lost Time Injury Frequency Rate (LTIFR)</td>
<td>2.5%</td>
<td>0.425</td>
<td>0.402</td>
<td>0.380</td>
</tr>
<tr>
<td>Workforce safety – Close calls raised</td>
<td>1.0%</td>
<td>154,000</td>
<td>205,000</td>
<td>259,000</td>
</tr>
<tr>
<td>Workforce safety – Close calls closed within 90 days (%)</td>
<td>1.5%</td>
<td>80 %</td>
<td>85 %</td>
<td>90 %</td>
</tr>
<tr>
<td>Passenger Train Accident Risk Reduction Measures</td>
<td>2.5%</td>
<td>60 %</td>
<td>80 %</td>
<td>87.9 %</td>
</tr>
<tr>
<td>Top 10 Milestones to reduce Level Crossing Risk</td>
<td>2.5%</td>
<td>6</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td><strong>Financial Performance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial performance measure (FPM) – Total efficiency generated (Em) Gross Excluding Enhancements</td>
<td>5.0%</td>
<td>-£225</td>
<td>0</td>
<td>+£225m</td>
</tr>
<tr>
<td>Financial performance measure (FPM) – Gross Enhancements Only (Em)</td>
<td>2.5%</td>
<td>-£335</td>
<td>0</td>
<td>+£335m</td>
</tr>
<tr>
<td>Cash Compliance – Income and Expenditure</td>
<td>2.5%</td>
<td>£60m</td>
<td>0</td>
<td>+£300m</td>
</tr>
<tr>
<td><strong>Investment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top 10 IP Renewals and Enhancement Milestones</td>
<td>2.5%</td>
<td>6</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>All Delivery Plan Enhancement Milestones (%)</td>
<td>2.5%</td>
<td>60 %</td>
<td>82/36</td>
<td>100 %</td>
</tr>
<tr>
<td><strong>Asset Management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composite Reliability Index (CRI)</td>
<td>2.5%</td>
<td>15.6 %</td>
<td>16.5 %</td>
<td>17.5 %</td>
</tr>
<tr>
<td>Renewals (Seven Key Volumes)</td>
<td>2.5%</td>
<td>90 %</td>
<td>95 %</td>
<td>100 %</td>
</tr>
<tr>
<td><strong>Train Performance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Train Performance</td>
<td>10.00 %</td>
<td>0 %</td>
<td>24.4 %</td>
<td>50 %</td>
</tr>
<tr>
<td><strong>Locally Driven Customer Measures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Locally Driven Customer Measures</td>
<td>10.00 %</td>
<td>0 %</td>
<td>50 %</td>
<td>60.4 %</td>
</tr>
<tr>
<td><strong>Route Performance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anglia</td>
<td>6.48 %</td>
<td>0 %</td>
<td>47.2 %</td>
<td>100 %</td>
</tr>
<tr>
<td>LNE &amp; EM</td>
<td>7.23 %</td>
<td>0 %</td>
<td>50 %</td>
<td>64.8 %</td>
</tr>
<tr>
<td>LNW</td>
<td>7.86 %</td>
<td>0 %</td>
<td>37.1 %</td>
<td>0 %</td>
</tr>
<tr>
<td>Scotland</td>
<td>4.74 %</td>
<td>0 %</td>
<td>52.1 %</td>
<td>100 %</td>
</tr>
<tr>
<td>South East</td>
<td>10.35 %</td>
<td>0 %</td>
<td>50 %</td>
<td>70.7 %</td>
</tr>
<tr>
<td>Wales</td>
<td>2.12 %</td>
<td>0 %</td>
<td>50 %</td>
<td>64.8 %</td>
</tr>
<tr>
<td>Wessex</td>
<td>3.74 %</td>
<td>0 %</td>
<td>53.4 %</td>
<td>100 %</td>
</tr>
<tr>
<td>Western</td>
<td>3.74 %</td>
<td>0 %</td>
<td>48.3 %</td>
<td>100 %</td>
</tr>
<tr>
<td>FNPO</td>
<td>3.74 %</td>
<td>0 %</td>
<td>50 %</td>
<td>61.5 %</td>
</tr>
</tbody>
</table>

- **Significantly Adverse to Target**
- **Adverse to Target**
- **Meeting or Exceeding Target**
- **Significantly Exceeding Target**
Our performance continued

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

We significantly exceeded our LTIFR reduction target of 4.02, ending the year at 3.64%. There were 580 lost time injuries over 2017/18, compared to 693 in 2016/17.

Close Calls: Means the number of close calls reported for any occurrence that has the potential to cause injury or damage – this can be an unsafe act or an unsafe condition. A higher number represents a better performance.
259,009 close calls were reported. This exceeded both the target of 205,000 and the scorecard maximum of 256,250. 82.2% of these calls were closed within 90 days, narrowly missing the target of 85%.

Train Accident Risk Reduction Measures: Measures our achievement of the key milestones and metrics to reduce train accident risk. This is reported at route level as well as national, providing greater visibility and accountability in delivering a safer railway.
In 2017/18 the target was to achieve 80% of planned volumes and milestones to reduce train accident risk. The year-end actual was 87.9% thus exceeding target. Performance against the volume components of this measure were strong; three milestone measures not completing resulted in the shortfall against the maximum of 100%.

Level Crossing Risk Reduction: A measure of benefits achieved through closures of level crossings, downgrade in status and cross enhancements.
We closed all 10 of our top 10 milestones to reduce level crossing risk in 2017/18. The scorecard target of 8/10 was exceeded.

Financial Performance
Total Efficiency Generated (excluding Enhancements): This measures our financial stewardship of the day-to-day running of the rail network by comparing income, operational expenditure and renewals expenditure to the baseline set at the start of the year. The baseline is adjusted to reflect the capital works actually delivered in the year to create a like-for-like comparison.
Our gross financial performance in 2017/18 was £1.25bn adverse to target. Primarily due to Schedule 8 underperformance, including the impact of weather this year (notably the disruptive snow that Storm Emma brought at the end of February) infrastructure failures across a number of routes, as well as a number of externalities impacting LNW (multiple fatalities, a security event at Euston and a lineside fire).
However there has been some positive Schedule 8 performance in South East where investment in performance improvement schemes has reaped benefits and LNE & EM have also managed to marginally outperform targets.

Enhancements Only: This measures our financial performance in delivering enhancement programmes by comparing expenditure to the baseline set at the start of the year. The baseline is adjusted to reflect the progress made in delivering programmes during the year to create a like-for-like comparison.
Our gross financial performance in 2017/18 was £1.4mn favourable to target. Mainly arising from agreed changes in programme baselines (Rolling programme of electrification) and scope value engineering (Thameslink) partly offset by cost escalations on EGIP and Northern relays.

Cash Compliance: This is a measure of how well we have remained within our funding envelope in total. This is an aggregation of all variances against our financial budgets within Capex, Opex and income.
Cash compliance was £38m, slightly ahead of target as a result of positive management actions.

Investment
Infrastructure Projects Renewals and Enhancement Milestones: Relates to the top ten renewals and enhancements milestones of our Infrastructure Projects (IP) work.
We have achieved seven of our top ten milestones, narrowly missing our target of eight for this measure.

All Delivery Plan Enhancement Milestones: Our investment projects are managed using the Governance for Railway Investment Projects (GRIP) approach, which has milestones at stages three and six of the eight-stage project process.
We achieved 29 out of 36 of our enhancement milestones, successfully meeting our target of 80%.

Asset Management
Composite Reliability Index: This is a measure of the short-term condition and performance of our assets including track, signalling, points, electrification, telecoms, buildings, structures and earthworks.
We achieved an improvement in CRI of 18.1%, exceeding both our target of 16.5% and our scorecard maximum of 17.5%.

Renewals (Seven Key Volumes): Our seven key volumes for renewals are plain line track; switches and crossings; signalling equivalent units; underbridges; total earthworks; wire runs; and conductor rail.
We ended the year at 100%, significantly exceeding our overall target of 95%. All key volumes performed strongly and exceeded targeted levels.

Train Performance
This is an aggregation of all train performance related measures on the route scorecards, and consolidated into one measure to summarise train performance.
We achieved 24.4%, demonstrating overall we are adverse to our train performance targets.

Locally Driven Customer Measures
This is an aggregation of all locally driven customer measures on the route scorecards, and consolidated into one measure to summarise train performance.
We achieved 60.4%, demonstrating overall we are exceeding to our locally driven customer measure performance targets.

Route Performance
Anglia: Scorecard performance was marginally adverse to 50% target, at 47.2%. Strongest performing areas were safety and investment. Weakest performing areas were financial and train performance.
LNE: Scorecard performance was favourable to 50% target, at 53.9%. Strongest performing areas were safety and asset management. Weakest performing area was train performance.
LNW: Scorecard performance was adverse to 50% target, at 37.1%. Strongest performing areas were financial and train performance.
Scotland: Scorecard performance was marginally favourable to 50% target, at 52.1%. Strongest performing areas were safety and locally driven customer measures. Weakest performing area was train performance.
South East: Scorecard performance was significantly favourable to 50% target, at 70.7%. All areas of the scorecard performed strongly.
Wales: Scorecard performance was favourable to 50% target, at 64.8%. Many sections of the Scorecard performed strongly, including safety, financial performance and asset management. Weakest performance area was train performance.
Wessex: Scorecard performance was favourable to 50% target, at 59.4%. Strongest performing areas were safety and asset management. Weakest performing areas were financial and train performance.
Western: Scorecard performance was marginally adverse to 50% target, at 48.3%. Strongest performing areas were safety and locally driven customer measures. Weakest performing areas were financial and train performance.

FNPO: Scorecard performance was favourable to 50% target, at 61.5%. Strongest performing areas were safety and investment. Weakest performing area was train performance.

*Schedule 8 (the performance regime) is the part of passenger, freight and charter operators’ track access contract with Network Rail that sets out arrangements for compensation paid to operators by Network Rail in the event of unplanned disruption to services.
Chief financial officer’s review of 2017/18

Network Rail is about to enter the final year of its five-year funding period and plans for the subsequent five years are well advanced. To continue to deliver the infrastructure required for a vibrant and growing rail network, we will need to maintain the pace of delivery that we achieved in 2017/18 through 2018/19.

Together, the rail industry is investing to innovate and improve journeys right across the UK. Network Rail is spending £128m every single week on improvements for passengers through our Railway Upgrade Plan. As a result, by 2019 there will be an extra 170,000 seats into major cities across the country every day, with 6,400 extra train services and 5,500 new train carriages; a 30% increase in capacity. Journeys will be quicker, trains will run more frequently and there will be greater comfort on board. This growth provides challenge, not least in providing the growing infrastructure that Britain needs, in a manner that provides value to both the rail user and the taxpayer.

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

Our efficiencies have faced further challenge this year. The Office of Rail and Road (ORR) and Network Rail agreed ambitious targets at the start of the control period, which have been built into the determination of charges. Efficiencies have been made, but are often offset against cost pressures; including changes to improve workforce safety, challenges in our supply chain such as the collapse of Carillion and fewer opportunities to carry out works as the network becomes busier.

Network Rail needs to reduce costs and raise funds for the final year of our control period. One of the key recommendations of the Hendy Review in 2015 was to dispose of our non-core assets. The reason for this being to help bridge the funding gap for the Railway Upgrade Plan; assisted by additional government funding and generating additional efficiencies. Network Rail has continued to progress this disposal of certain property assets over the year. The anticipated sale of our commercial estate is critical to achieving our plans in 2018/19 and we anticipate that this will take place in the second half of the year.

Devolution continues across the business. This has continued to drive a route-led and customer-driven mindset, allowing us to work more closely with our key stakeholders and further drive improved performance. It has allowed us to be more commercial, and has opened us up to becoming more cost-efficient and competitive.

Finally, in February 2018 we finalised our CP6 Strategic Business Plan; which we believe supports a clear and realistic course for the business through the next 5-6 years.

Financial summary
This review will focus on the financial performance achieved by Network Rail in 2017/18. This year we made a small profit before tax of £48m (2016/17: £483m); every penny of which has been reinvested in delivering the Railway Upgrade Plan. Low and declining profitability is assumed in the CP5 regulatory settlement determination, with a further decrease anticipated next year, the final year of the regulatory control period. This is because income, largely fixed by the regulator, does not increase in line with borrowing costs and depreciation charges, which increase as a result of the accumulated cost of delivering the Railway Upgrade Plan.

Although revenue and operating costs before depreciation increased broadly in line with each other, increased depreciation and finance costs/other gains and losses from delivery of the CP5 investment programme reduced overall profitability to £48m (2017: £483m).
Chief financial officer’s review continued

Revenue
Revenue rose in the year, as a company we achieved a turnover of £6,580m. This represents an increase of £321m (2016/17: £6,259m).

Track access and grants rose in line with the rail regulator’s determination of charges, augmented by an additional £21m recovered as a joint industry cost with regard to electricity for traction (EC4T).

Schedule 4 & 8 costs increased as the performance benchmarks tightened in the year. Asset performance was good, but performance in the year continued to be impacted by slower recovery times from incidents, a knock on effect of a more congested network. In addition discrete events such as the snow fall in February and March 2018 impacted the results. As a result, compensation paid to train operators increased by £52m.

Network Rail also generated an additional £19m of property and other revenue, an increase of around 6% with continued growth in income from retail at stations, commercial lettings and increased open access income.

Freight revenue maintained at £53m ending a trend of year-on-year declines as a result of lower volumes transported.

Operating costs
Net operating costs this year were £4,731m. This has increased by £468m from last year’s expenditure of £4,263m. This increase in expenditure is in part driven by extra investment that has increased depreciation by £124m. Operating costs before depreciation rose by £355m from £2,836m to £3,191m.

This is driven by: non-cash increases in pension liabilities (£121m); Joint Industry Cost increases including cumulo (business) rates at £54m and EC4T £21m (recovered through track access charges); additional headcount (£53m) primarily to enable the delivery of maintenance including new electrification assets; additional costs arising from legislation and legal interpretation such as the apprenticeship levy (£10m) and holiday pay rulings (£21m); and by cost inflation (£75m).

Employee costs
Staff costs increased by £259m largely as a result of an increase in pension costs (£121m), an increase in the average number of employees in the year (£53m), the recent rulings on holiday pay (£21m), and the apprenticeship levy (£10m).

Average headcount for the year was 39,370. This is an increase from 2016/17, when the headcount average for the year totalled 38,529. This was due to recruitment in Route Services to fill maintenance vacancies and reduce overtime costs, and to support new electrification assets; and in Infrastructure Projects to deliver record levels of enhancements.

Financing costs
Finance costs for the year were £2,233m. This is an increase from last year’s charge of £1,692m.

Tax
Network Rail has significant brought forward tax losses, not recognised as a tax asset in the accounts. As it continues to invest heavily in the rail network, it therefore pays relatively small amounts of corporation tax. The tax credit for 2017/18 is £27m. Our deferred tax liability has increased to £2.5bn (2016/17: £2.4bn).

Investment in the rail network
The Railway Upgrade Plan continues to transform the rail network. We have over 15,000 live projects, some of the largest and most complex in the world. These mega-projects include Crossrail, Thameslink, Great Western Electrification and the Edinburgh Glasgow Improvement Programme. Network Rail is delivering nearly a quarter of the entire spend on infrastructure in the UK.
Chief financial officer’s review continued

In order to deliver this level of investment we rely on a strong supply chain. Network Rail has a long-standing commitment to engage positively and collaboratively with its supply chain including a fair payment charter.

During the year the collapse of Carillion, one of our major suppliers, represented a major challenge. By working proactively with Carillion’s administrators we were able to make sure that Carillion’s subcontractors continued to be paid for works delivered on our projects. Furthermore by working with our supply chain we have been able to keep those projects that Carillion was delivering broadly on track.

In the year we continued to deliver historically high levels of investment at £6.6bn in the network (2016/17: £6.8bn).

Enhancements that will increase the capacity of the network have amounted to £4.1bn. This is a record year in terms of delivery; beating last year’s delivery that was valued at £3.9bn.

We have also invested £2.4bn on renewals this year.

In the year, Network Rail hit 100% of its seven key renewal volumes (2016/17: 94.6%), 81% of its delivery plan & enhancement milestones (2016/17: 73%) and seven of its top ten renewals and enhancements milestones (2016/17: eight out of 10).

Financial Performance Measure and Efficiencies Drive

Network Rail’s key performance indicator with regard to efficiency is its financial performance measure which measures our performance against the regulatory determination and against our in year targets.

Network Rail is constantly working to reduce the cost of all the vital work that we deliver. We continue to make good progress in our commercial efficiencies and will also seek further efficiency through the leverage of new technologies. Network Rail has suffered through Schedule 8 outflows due to performance issues, an increase in incursions onto the railway and adverse weather during the current year which has meant we have had to mitigate this increase in costs through savings found elsewhere, principally in the reduction of central costs.

In the year we missed targets for turnover by £87m and renewals by £55m. We bettered targets for operating costs by £50m and enhancements by £4m.

Turnover was impacted by worse than targeted train performance from infrastructure failures across a number of routes, exacerbated by severe weather, notably the disruptive snow in February and March.

Renewals performance was impacted by higher electrification costs than targeted, including the cost of implementing the Supervisory Control and Data Acquisition (SCADA) Remote Control System, a scheme that improves our asset stewardship capabilities, and in turn drives more efficient performance in the future, and also additional civils costs. Although performance is worse than targeted, there is a marked improvement on the previous year’s comparatives and some routes (such as Scotland and South East) have been able to deliver outperformance on their portfolio.

Operating costs benefitted from efficiencies made in central costs following devolution and from a real push by our people to make those marginal gains that drive a leaner organisation. Training in lean techniques continued throughout the year and provided a series of benefits from local teams.

Savings on the Rolling Programme of Electrification and Thameslink enabled enhancements to better target.

The CP5 determination of charges frames the funding agreement with Government for CP5, and included very challenging cost reduction assumptions. These were influenced by extrapolations of historic delivery (40% reduction in the previous 10 years which, given the growth in traffic over the period, equated to halving the operating costs per train mile) and influenced by the industry wide efficiency potential suggested by the McNulty report.

Last year we explained that Network Rail needed to reduce costs and raise funds by a cumulative total of £2.3bn in the final two years of the control period in order to remain compliant to the loan limit and we are still on course to do so. We have delivered £1.3bn of the total in the current year which consists of a combination of delivery efficiency and removal of activity. We will deliver the remaining £1.0bn next year, through a combination of asset sales and continued business improvement and efficiencies.

Financial framework

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

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

As the valuation of the rail network is based on projected cash flows, we have considered the potential for underperformance in CP5; both in terms of the financial settlement and the required outputs. This therefore reflects the gap between the trajectory of costs assumed in the CP5 determination and our forecasts.

As a result, the valuation of the rail network was increased by £675m (2016/17: decrease £1,075m). This is because we forecast to spend more per activity than the settlement allowed.

Borrowing

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

The regulatory settlement provides strong security for future income and the Department for Transport (DfT) loan agreement provides a robust platform to refinance and borrow to invest in the rail network. Network Rail is in line to live within the funding envelope established at the time of agreeing the DfT loan facility.

During the year ended 31 March 2018, Network Rail borrowed £6.7bn from the DfT. Part of this new debt was used to pay back existing bonds, whilst the remainder was used to invest in the railway infrastructure. As a result net debt rose from £46.3bn to £51.3bn. See page 118 for movement in net borrowing.

Network Rail plans to borrow significantly over the final year of the control period to finance the investment programme. We plan to draw down a further £6.4bn from the agreed DfT loan facility to finance and to refinance maturing debt.

In addition to the DfT loan facility, Network Rail has plans to sell certain assets, increase efficiencies, and find other ways to attract commercial partners in order to deliver more capital investment that will help increase the capacity of the rail network.

Looking forward to Control Period 6 (2019-2024) Network Rail and the DfT have agreed that future funding will not require additional borrowing from government, but will be made available by grants.

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

The group measures its hedges for accounting purposes at their market value as required by International Financial Reporting Standards (IFRS). A market value is determined by comparing the original value of the hedges against the current market rate.

We do not intend to trade these hedges, but use them to minimise our financial risks. As long as 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 the group’s performance.

By qualifying to use hedge accounting rules, we match gains or losses in the market value of hedges to fluctuations in the hedged item (i.e. the loans). The gains on debt and derivative valuations taken through the income statement were £234m (2016/17: loss of £211m). This gain largely represents the reduction of the fair value of interest rate derivatives liabilities through interest paid on swaps (the latter is included in finance costs). In addition, £29m (2016/17: loss of £116m) of gains in the value of interest rate swaps, used to control the cost of future borrowings was posted to the hedge reserve as statistically effective cash flow hedges.

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

Network Rail’s accounting deficit at 31 March 2018 remained at £2,311m (2017: £2,311m) as gains on assets matched the decrease in discount rate from 2.5% to 2.4%. On a funding basis the schemes are not considered to be in a significantly different position than at last year end. Assets held by the schemes increased by £226m in the year and the latest actuarial valuation indicates the schemes are more than 100% funded.

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

Summary
Network Rail has continued to deliver another huge part of the Railway Upgrade Plan; delivering the highest level of enhancements to the rail network it has ever recorded. These enhancements are designed to improve performance and increase network capacity to assist in meeting the increasing demand for rail travel. To maintain this momentum in the investment programme, Network Rail plans to continue additional funding through the sale of non-core assets and continues to look for additional funding from third parties and internally by delivering further cost efficiencies.

In 2018/19 alongside the delivery of the Railway Upgrade Plan and the final year of CP5, stands the challenge, shared with our industry partners, of managing the implementation of the new capacity we have developed. By 2019 there will be an extra 170,000 seats into major cities across the country every day, with 6,400 extra train services and 5,500 new train carriages; a 30% increase in capacity. Whilst this presents rail industry-wide challenges to implement, once in place this will be transformational for our customers both now and into the future.

Our CP6 plans are now finalised; a bottom-up plan, highlighting how Network Rail will efficiently spend the funds the government has committed. It is arguably our best plan ever created.

All of which will assist the rail network to drive better connectivity, a precursor to economic growth and build a better railway for a better Britain.

Jeremy Westlake, chief financial officer
27 June 2018
Route performance

Network Rail Routes

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

The Anglia route runs a diverse railway that connects commuters, leisure travellers and freight to vital destinations including Cambridge, Norwich and the City of London. Our rural, coastal and intercity routes connect people across the region and the lines that serve London Liverpool Street station are increasingly popular for commuters. Anglia’s railway is a crucial economic gateway connecting businesses and people to three major UK ports at Felixstowe, Thameshaven and Tilbury. It also serves the busy Stansted and Southend Airports.

Key statistics

4,230 passenger and freight services per day
1,697 route miles
235 stations
770 level crossings
2,500 employees
£517m spent on renewals and enhancements in 2017/18

Key scorecard targets

<table>
<thead>
<tr>
<th>Scorecard Category</th>
<th>Minimum 2016/17</th>
<th>Target 2017/18</th>
<th>Maximum 2016/17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scorecard Outturn</td>
<td>47.2%</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>Safety</td>
<td>34%</td>
<td>30%</td>
<td>40%</td>
</tr>
<tr>
<td>Financial Performance</td>
<td>4.1%</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>Investment</td>
<td>40%</td>
<td>30%</td>
<td>50%</td>
</tr>
<tr>
<td>Asset Management</td>
<td>80%</td>
<td>60%</td>
<td>90%</td>
</tr>
<tr>
<td>Train Performance</td>
<td>35%</td>
<td>30%</td>
<td>40%</td>
</tr>
<tr>
<td>Locally Driven Customer Measures</td>
<td>30%</td>
<td>25%</td>
<td>35%</td>
</tr>
</tbody>
</table>

While we have seen some positive changes in our safety culture, we have not made the progress we wanted to in reducing the number of our people hurt while working on the railway in Anglia. We are, however, adamant that fewer people will be hurt while working on Anglia route and have refreshed our health and safety plan as a result.

The past year has also been a challenging one on train performance. While all four lead operators missed targets, c2c, TfL Rail and London Overground are all running more than nine out of 10 trains on time, Greater Anglia has improved on last year and c2c is the best performing operator in the country.

Higher than anticipated compensation to train operators and additional reactive maintenance expenditure, arising from the challenging performance conditions in 2017/18, were the key factors behind not achieving the financial target.

We have made a considered effort to remove temporary track speed restrictions, which are both disruptive to passengers and freight, and costly to the business. We hit our target to reduce the number of delays caused by infrastructure failures, such as track faults and have installed new uninterrupted power supply units which will prevent the problems we had with signalling earlier this year. We have
Anglia continued

also made real strides in embedding a new team to improve how we respond to operational problems such as signal failures, extreme weather conditions and trespass.

We have reduced the number of railway works complaints by 55% and exceeded our target of reducing the average age of complaints by 13 days. Much of this has been achieved by a greater focus on pre-notification of disruptive works to our neighbours.

Activities in the year

The last year has seen a number of improvements for passengers and rail users along the route, including the opening of a brand new station at Cambridge North. The new station has created much needed connections to the nearby Science Park and is expected to boost growth of the local economy as well as attracting new housing and businesses. Located next to the A14 and A10, with parking for 450 vehicles and 1,000 cycles, it is helping alleviate congestion on the roads and platforms of Cambridge City.

Safety is of course our key driver and level crossing users are now safer following installation of new technology at user worked crossings, and a new footbridge at Trinity Lane in Cheshunt, one of our highest risk crossings. We recognise we need to do more to help keep our people safe while they work, and have appointed a new director of safety transformation and created a new plan with our workforce and unions to effect a change in culture and behaviour.

Following the delay to the Gospel Oak to Barking electrification project, principally owing to design issues with overhead line structures and the late delivery of materials, the infrastructure on the 14-mile route was substantially completed and energised in January 2018. This was delivered with significant cross-industry collaboration and support of the DfT, TfL, ARL and the freight operators. It is anticipated that the infrastructure, which is available for testing of the new trains, will receive its Authority to Place into Service from the ORR in mid-July 2018. Passengers and neighbours along the route will soon be reaping the benefit of longer, greener and quieter trains.

We have made good progress on two vital projects on the Great Eastern Main Line that will deliver greater reliability and fewer delays. Our work for the Crossrail project means we are closer to enabling Elizabeth line services to run through central London to the west. We have also continued our £290m programme of overhead line renewals and the changes on the Southend Victoria branch line will enable the new Greater Anglia fleet to run with additional services. We once again give our thanks to everyone for their patience as we recognise that there has been a lot of weekend disruption while we deliver these much needed improvements.

In the year ahead

It’s going to be another exciting year on Anglia route, with a number of projects drawing to a close. The £25m upgrade of Hackney Wick station completion in May 2018 is helping to better connect the local area and improve access to the station. We will also make significant progress on the Lee Valley Rail Programme, which by May 2019 will deliver a tripling of peak services between Stratford and Angel Road, an upgraded station at Tottenham Hale and a brand new station to serve the Meridian Water housing development in Enfield.

Spring 2019 will also see the completion of the £68m signalling upgrade of the Wherry lines, improving overall safety and reliability of the railway. The Crossrail project and our overhead line renewals programme will continue to forge towards completion. Work to increase much needed freight paths out of Felixstowe Port will also begin in spring 2018, while we await the outcome of a Transport and Works Act Order on safety changes to level crossings. We are also awaiting the outcome of three Transport and Works Act Orders around route-wide level crossing closures across Suffolk, Cambridgeshire and Essex.

Our hi-tech track renewals machines will help us improve the reliability and comfort of travelling by train, and we will continue to work with Greater Anglia to help them introduce a new fleet of trains by 2020. We will continue to focus on maintaining a robust and reliable railway for our customers, and we have plans to further improve the safety of our workforce with additional training, improved briefing materials and a greater focus on leadership.

Efficiency case study:

The Great Eastern Overhead Line Renewal project is renewing the life-expired fixed tension overhead line equipment (OLE) from Liverpool Street to Chelmsford with a modern auto-tensioned system. The old wires, introduced around 1949, sag in hot weather and speed restrictions, which cause delays and cancellations, have to be imposed to run the service safely and prevent further damage to both infrastructure and trains.

This project is already delivering significant benefits through increased reliability and reduced maintenance costs with the new system delivered between Chelmsford and Ilford. Over the last 18 months this project has delivered financial efficiencies of circa £7m. These can be largely attributed to the following:

• De-layering of the supply chain. A direct contractual relationship between Network Rail and specialist SME sub-contractors has resulted in identifying value engineering opportunities. We have also used a new methodology to carry out the work with only two lines closed which has reduced train operator compensation payments and accelerated the programme so fewer closures have been necessary for passengers in total.
• An integrated Network Rail / supplier project team resulting in organisational efficiencies.
• Long-term planning and the implementation of a ‘manufacturing’ production line approach to the delivery of wire runs has meant we could increase productivity during each session.
• Holistic approach to delivery with suppliers focused and incentivised to complete enabling activities well in advance of the physical wiring works.
• Robust management of the process to secure access to the track to complete works.

Meliha Duymaz,
Route managing director, Anglia
27 June 2018
London North Eastern and East Midlands

The London North Eastern and East Midlands (LNE & EM) route contains strategically important national assets which connect communities and economies across the length and breadth of the country. LNE & EM encompasses three of the country’s most important rail corridors: the East Coast Main Line (ECML); the Midland Main Line (MML) and the TransPennine route. Geographically it is the biggest Network Rail route, with 4,600 miles of track spanning the length of the country from Scotland to London via Leeds and Sheffield.

Key statistics

221m passenger journeys each year
3,400 passenger trains every weekday
58m freight tonnes every year, equivalent to 6.9m lorry loads

Serving communities home to 7.6m people

4,600 miles of track
396 stations
5,696 employees
£940m spent on capital expenditure compared to £788m in the previous year

Key scorecard targets

<table>
<thead>
<tr>
<th>Scorecard Outturn</th>
<th>Minimum</th>
<th>Target</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/18</td>
<td>56.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016/17</td>
<td>51.0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Safety</th>
<th>2017/18</th>
<th>2016/17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial Performance</th>
<th>2017/18</th>
<th>2016/17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Investment</th>
<th>2017/18</th>
<th>2016/17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Asset Management</th>
<th>2017/18</th>
<th>2016/17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Train Performance</th>
<th>2017/18</th>
<th>2016/17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Locally Driven Customer Measures</th>
<th>2017/18</th>
<th>2016/17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Overall the route has delivered a positive (better than forecast) Financial Performance Measure (FPM) (inclusive of Opex and Capex). But unfortunately missed its overall financial targets; this was mainly driven by the adverse weather at the latter half of the year, which increased compensation payments to train operators, and the loss of planned work. In totality the route has delivered an increase in its overall CAPEX work totalling £940 million, compared to prior financial year of £788m.

Sadly, the impact of suicides on train performance has been significant for Northern, TransPennine Express (TPE), Grand Central, Hull Trains and Virgin Trains East Coast (VTEC). Suicide prevention patrols have been implemented at the south end of the ECML and a programme of lineside fencing enhancements is underway. This follows the very successful introduction of security patrols co-ordinated by a dedicated Network Rail funded British Transport Police inspector which
London North Eastern and East Midlands continued

has seen a 45% reduction in delays caused by suicides for Govia Thameslink Railway (GTR).

Overhead line equipment failures on the ECML have had a significant impact on Grand Central, Hull Trains and VTec. We continue to invest heavily in overhead line reliability with a programme of changes to overhead line assets. Overall, improving asset reliability for both Thameslink and Great Northern GTR services has had a positive impact throughout the year.

There have also been a number of external incidents that have impacted performance throughout the year. Performance for East Midlands Trains was impacted by the closure of Nottingham Station earlier this year due to a fire which was later found to be the result of arson. Performance for Northern and TPE was impacted by events at Manchester stations, including the arena bombing near Manchester Victoria and a protest on the tracks at Manchester Piccadilly. The earlier than usual start of autumnal weather conditions compared to recent years also affected performance, particularly for East Midlands Trains, and snow in February affected performance across the route. We have plans in place that will allow us to start the Rail Head Treatment Train programme earlier in 2018 to address issues caused by autumnal weather.

Activities in the year
Over the last year LNE & EM has seen work on the ground increase as we look to deliver key outputs of our enhancement plan towards the end of the current control period. Across all our key London arteries, we are preparing for the introduction of the new Thameslink services and began a series of improvements to our existing infrastructure to improve reliability of track and upgrade overhead line equipment.

The Midland Main Line programme saw its first commissioning of the £130m Kettering to Corby capacity project which was completed on time and to budget in February. In partnership with Derbyshire County Council a new station at Ilkeston was opened for passengers in April 2017 and we have contracted with the London Borough of Barnet to complete the development for a new station at Brent Cross in support of their housing and growth plans.

The East Coast Main Line has seen significant investment in renewing key areas of the electrified railway to improve performance and reliability. Three projects were successfully completed in August 2017 to support the introduction of the new intercity express programme (IEP) trains onto the East Coast Main Line. There has been some successful third party funded project delivery in the year including the rail connection to Rossington Inland Port, a large inland intermodal freight hub that has the potential to support up to 5,000 jobs.

A significant milestone was reached on TransPennine Route Upgrade with the submission of our proposals to the DfT in December 2017. The submission provided four different scenarios that could be implemented on the route and is currently being reviewed by the DfT. Alongside this, early works ahead of the main work starting in March 2019 have continued at pace, including a new platform, signalling and junction at Micklefield.

In the year ahead
Our role as the LNE & EM route is straightforward; we need to ensure that our railway meets the needs of the communities and economies that it serves. We have already commenced our once in a generation opportunity to realise Digital Railway on the East Coast Main Line, and we will be continuing to bring this to fruition, with all the sustained and transformative cross-industry opportunities it creates.

Next year will also see LNE & EM begin work to deliver the biggest upgrade of the Midland Main Line since it was completed, transforming passenger journeys with cleaner, greener and more services on the electrified railway to Corby as well as 50% more seats on journeys to London. The East Coast Main Line will see the introduction of the IEP trains, and the biggest infrastructure project in Network Rail for the next few years – the upgrading of the TransPennine route – will begin in earnest.

The work we are undertaking in the coming year is crucial to growing our railway and improving the reliability of our infrastructure, but we will also continue to put safety first, particularly focusing on the safety of our staff, and the safety of the public, on our railway.

Efficiency case study: Million-dollar man (March 2018)

A maintenance delivery unit’s stores are a one-stop shop for equipment, tools and parts to keep the railway running. At many stores though, things can get a bit complicated – which can lead to wasted money.

Andy Lewis, professional logistics programme manager, was tasked with making £1,000,000 worth of savings by reviewing the stock at stores across the LNE & EM north area, finding opportunities for unneeded materials to be returned and improving how stock is managed within the stores.

Andy said: “We were aware that stores weren’t as efficient as they could be and there was definite room for improvement at a lot of sites. It was a tall order but the project has been a huge success – we reached a million pounds worth of savings and then surpassed our stretched target of £1,100,000. There hasn’t been a single week where we’ve not been able to find some unused stock and get some money back – in one week alone we found more than £100,000 worth of materials to return.”

Rob McIntosh,
Route managing director,
London North Eastern and East Midlands
27 June 2018
London North Western

London North Western (LNW), the largest of Network Rail’s route businesses, is the economic ‘Backbone of Britain’ - the vital connection between many main cities. We serve all customer segments of the rail market. Our customers travel long distance for business and leisure, competing with domestic airlines. We help carry commuters in and out of Manchester, Liverpool, Birmingham and London. LNW is also a key rail freight route. We are home to the West Coast Main Line, the busiest mixed-use (freight and passengers) railway in Europe, serving London, Birmingham, Manchester, Liverpool, Edinburgh and Glasgow. Our infrastructure runs from London Euston and Marylebone in the South through the Chiltern and West Midlands regions, the North West of England and Cumbria before joining with Scotland at Gretna.

Key statistics

- 24% of Britain’s railway
- 6,009 train services a day
- 246.5m passenger journeys each year
- 7,100 bridges
- 728 level crossings

Key scorecard targets

<table>
<thead>
<tr>
<th>Scorecard Outturn</th>
<th>Minimum</th>
<th>Target</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/18</td>
<td>37.1%</td>
<td>50.9%</td>
<td></td>
</tr>
<tr>
<td>2016/17</td>
<td>40.9%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Safety</th>
<th>Minimum</th>
<th>Target</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016/17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial Performance</th>
<th>Minimum</th>
<th>Target</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016/17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Investment</th>
<th>Minimum</th>
<th>Target</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016/17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Asset Management</th>
<th>Minimum</th>
<th>Target</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016/17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Train Performance</th>
<th>Minimum</th>
<th>Target</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016/17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Locally Driven Customer Measures</th>
<th>Minimum</th>
<th>Target</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016/17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Activities in the year

Workforce safety performance on LNW was good in 2017/18, exceeding target. But, as always on safety, the job is never done. Safety remains our foremost priority. As we head into 2018/19 we have plans for ongoing workforce campaigns to involve all LNW staff actively participating in workplace safety improvements. Our Take 5 for safety initiative is embedded in everyday life. We remain committed to instilling a safe, caring workforce culture where we welcome everyone and embrace new ideas and fresh thinking.
London North Western continued

Passenger satisfaction at our managed stations (Birmingham New Street, London Euston, Liverpool Lime Street and Manchester Piccadilly) was above target as were railway work complaints. This is something we intend to build on in 2018/19.

The Great North Rail Project (GNRP) hit major milestones as it continued its quest to transform train travel for customers both now and in future. Its achievements included the unveiling of the iconic Ordsall Chord viaduct connecting Manchester’s main stations for the first time. Ordsall, together with other GNRP upgrades, will ease rail congestion across the city giving rise to more services in future and improved journey times as far afield as Newcastle. Liverpool Lime Street station underwent stage one of its transformation including the creation of two new platforms. The Blackpool-Preston line was closed for five months for its electrification upgrade, but reopened in April 2018, allowing new electric trains to run along this line.

Unpredictably poor ground conditions hampered progress on the Manchester-Bolton-Preston line electrification. This led to it being delayed from May to December. This challenge was further compounded by the collapse of Carillion, our principal contractor. We remain committed to delivering this scheme. When complete, it will bring faster, more spacious, more reliable electric train services for customers.

The route’s financial target was impacted by a high number of trespass incidents on the West Coast Main Line south of Rugby, affecting train performance and increasing Schedule 8 payments to train operators. The delayed completion of the Manchester to Bolton upgrade also had a financial impact and was a contributing factor to some of the performance issues seen when the May 2018 timetable was introduced.

Work continued to electrify the Walsall-Rugeley line. The Bromsgrove electrification project will complete two months after its intended May deadline. Meanwhile work is under way on HS2 enabling activity. Consultations continued to take place for the East West Rail 2, Bicester-Bedford scheme.

Train punctuality fell frustratingly short of the record levels achieved on LNW in 2016/17. A combination of factors led to this, notably weather, industrial action by train crew and naturally a high incidence of suicides on the line. As well as impacting operational performance, fatalities between Rugby and Euston had a significant adverse financial impact. Thirty platform patrols were deployed at stations in this area. Their purpose is to intervene to prevent these tragedies.

In February we submitted to the regulator, the Office of Rail and Road, our Strategic Business Plan for the five years to 2024. It proposes more than £5bn of vital operations, maintenance and renewals activities in support of LNW’s CP6 (2019-24) vision: “One team safely delivering excellent service for customers and taxpayers.” The plan prepares LNW for the impacts of HS2’s construction and for future forecast growth in commuter demand in London, Birmingham, Liverpool and Manchester.

In the year ahead
The GNRP milestones we plan to celebrate in the first half of 2018/19 include the unveiling of Halton Curve, which will enable more frequent services between Chester and Liverpool, and the new Maghull North and Newton le Willows stations, which we have delivered for Merseytravel.

The next major phase of the Liverpool Lime Street transformation takes place in summer 2018. The long-awaited Bromsgrove, Walsall-Rugeley and Manchester-Preston line upgrades are also set to complete in time for the December 2018 timetable change.

Improved safety and efficiency on railway work

LNW’s Possession & Delivery team plan track access to carry out safety critical work on the railway. Track possessions need to be carried out when trains are not running. Much of the work takes place at night. The work ranges from routine maintenance to major railway upgrades. In 2017/18 the LNW team oversaw more than 10,000 possessions. By improving the process by which these possessions are planned and delivered, the LNW team has dramatically improved safety and efficiency.

In 2016/17 there were 41 “irregularities”. In 2017/18 there were 21. This is still too many. Our aim is to eradicate them completely. But 19 irregularities is a more than 50% improvement on the previous year. “Irregularities” are mistakes by workers putting possession protection in the wrong place. For example, at a complex location with, say, 20 different lines converging on the approach to a station, often in darkness and in foul weather, someone unfamiliar with the track layout could mistakenly block the wrong line. These irregularities can delay work and train services and lead to potentially very serious safety risks for track workers. Delays to trains and work are very costly and can inconvenience customers.

The LNW team achieved this improvement by using practical problem solving (PPS) techniques learnt under the Lean business training programme. PPS led to two major changes: Firstly, we now use signals to define a section of track being shut for work in preference to using sets of points. This reduces the risk of possession protection (eg, detonators and flashing ‘stop’ warning boards) being placed incorrectly. Secondly, possession staff rotas are now drawn up to ensure there is an ‘expert’ at every complex track layout where we take a possession. This ensures safety critical knowledge is always in the right place at the right time.

Martin Frobisher, Route managing director, London North Western
27 June 2018
Safety remains a key focus across the route with Lost Time Injury Frequency Rates (LTIFR) showing an improvement year on year. Efforts to instil a safety conscious culture continue with the development of safety briefing videos that are used to help engage front line members of staff. Nonetheless, there have been some operational incidents that serve as a reminder of the need to focus ever more on getting our processes and assurance at the front end of our business up to the very highest standards.

Train performance continues to be a concern for the route with public performance measures declining year on year,
Scotland continued

currently at 89.7%, down 2% against our target. Following a
difficult autumn, performance was further affected by a
number of weather related incidents including Storm Caroline
and “The Beast from the East” which had a hugely negative
impact given the scale and remoteness of our network.

Heavy rain, winter weather and the subsequent thawing of
snow and ice resulted in two major incidents causing parts of
the network to be closed for a short time. Landslides on the
Glasgow to Anniesland via Maryhill line caused a huge number
of public performance measure failures, while the line between
Fort William and Mallaig was also blocked due to a landslip.

The derailment of a High Output Ballast train on the line at
Ravenstruther, caused by excessive ballast coming off the
machine’s belt, was also a major contributor to the overall
train performance for the year.

Some elements of financial performance have suffered as a
result of the poor train performance last year. Endeavours
are being made across the business to improve processes
and identify new, innovative and more efficient ways of
working to address this decline. We continue to work hard
with ScotRail, our Alliance partner, to deliver an improved
service led by a single managing director and senior
management team.

Activities in the year

The Edinburgh Glasgow Improvement Programme (EGIP)
completed the electrification works of the Edinburgh to
Glasgow via Falkirk High Line and the route was energised for
electric trains in October. Electrification of the route allowing
electric trains to operate will help to deliver a 20% reduction
in journey times and adds 30% more capacity when the new
ScotRail electric fleet is introduced later in the year.

The Edinburgh Waverley improvement works will increase
capacity and operational flexibility at the station. Platform
12 was completed in December 2017 and accommodates
the new eight-car class-385 electric trains being introduced by
ScottRail later in 2018. The Intercity Express Programme
(IEP) is introducing longer platforms to the east of the
station, accommodating greater capacity from the East
Coast Main Line (ECML). The newly constructed Edinburgh
Gateway Station received the ‘Building award’ at the Saltire
Scottish Civil Engineering Awards.

The Aberdeen to Inverness project celebrated the opening of
the new Forres station as part of the work to improve
capacity between the two major cities in the North of
Scotland. Other work carried out included platform
extensions and an upgrade to the level crossing at Elgin as
well as signalling work on the line.

The electrification projects to support the introduction of
new electric trains from Grangemouth Junction through
Falkirk Grahamston and Stirling to Alloa and Dunblane
continue with preparatory work being undertaken including
altering bridges, piling and installing masts.

The Highland Main Line celebrated the completion of the
Findhorn Viaduct refurbishment with £4.5m invested to
improve the structure and ensure it is fit for purpose for
future generations.

The Access for All programme has delivered improved
accessibility at a number of stations across the country, with
new lifts, stairs and footbridges installed to enhance the
facilities for people with reduced mobility.

In the year ahead

Our aim for next year is to deliver a punctual and reliable
railway for passenger and freight services in Scotland and
across the border. A number of the projects will be nearing
completion with further improvement works taking place
across the route.

Edinburgh Waverley station will see further capacity
improvements with the completion of extensions to
platforms five and six to accommodate the new 10-car
Azuma Intercity Express trains. Dunbar station will see the
start of construction of a new second platform to help
improve capacity on the East Coast Main Line, expected for
completion in 2020.

The delivery of the Stirling, Dunblane and Alloa
electrification will facilitate the final improvements on the
Edinburgh Glasgow corridor resulting in 30% increased
capacity and reduced journey times, with the fastest journey
expected to be around 42 minutes.

The Shotts electrification project will include platform
extensions to a number of stations including Shotts, Carfin
and West Calder, while Livingston South station will be
reconstructed. Expected to be complete in 2019, the project
will create the fourth fully electrified line connecting
Scotland’s largest cities.

The redevelopment of Glasgow Queen’s Street station will
continue providing extended platforms for longer trains and
creating a brighter and more spacious facility that is set to
be complete in 2020, that will be fully accessible.

Dual track will be installed between Aberdeen and Inverurie
to reduce journey times and increase the number of trains
available. Two new stations will be constructed at Dalcross
and Kintore to improve accessibility for local communities.

Works will commence on the Highland Main Line that will
support the introduction of the longer High Speed Trains,
which will start to be introduced on the route later this year.
In addition to these works we will be developing proposals to
improve the access arrangements within stations on the line.

Efficiency case study:

Scotland has delivered a fundamental change in
delivery of signalling maintenance through risk
based maintenance. A review of the condition of the
asset had been undertaken and maintenance
schedules smoothed and realigned to minimise
travelling time and maximise productivity. This has
resulted in significant savings, reduced backlog and
improved asset reliability.

Alex Hynes,
Route managing director,
Scotland
27 June 2018
South East

The South East route delivers almost a third of the total passenger journeys across the network. Our infrastructure connects the capital and its southern and south-eastern suburbs with Kent, Surrey, Sussex and Channel Tunnel routes to Europe and we manage four of the busiest stations in the country – London Victoria, London Bridge, Charing Cross and Cannon Street. Commuters make up the largest proportion of our passengers, but we also carry leisure travellers to the south coast and run the line to and from Gatwick, the UK’s second busiest airport.

Key statistics

- **510m** passenger journeys each year
- **5,000** passenger trains every day
- **2,000** route miles
- **372** stations
- **3,000** employees
- **6,700** freight services in 2017/18
- **23%** freight growth since 2014
- **£903m** spent on renewals and enhancements in 2017/18

Key scorecard targets

- **Scorecard Outturn**
  - 2017/18: 70.7%
  - 2016/17: 67.1%
- **Safety**
  - 2017/18: 67.1%
  - 2016/17: 67.1%
- **Financial Performance**
  - 2017/18: 67.1%
  - 2016/17: 67.1%
- **Investment**
  - 2017/18: 67.1%
  - 2016/17: 67.1%
- **Asset Management**
  - 2017/18: 67.1%
  - 2016/17: 67.1%
- **Train Performance**
  - 2017/18: 67.1%
  - 2016/17: 67.1%
- **Locally Driven Customer Measures**
  - 2017/18: 67.1%
  - 2016/17: 67.1%

This has been a truly transformational year for the South East route; the underlying performance of our assets and our people has improved dramatically and our customers are feeling the benefit – though it’s clear there is still much more we can do.

We continue to embed a strong safety culture, with improvement in the number of Close Calls raised and closed within 90 days. While our lost time injury frequency rate (LTIFR) has deteriorated this year, it improved in the second half of the year following the appointment of a Safety Transformation Director, with more mature improvement plans and stronger, more inclusive governance arrangements now in place to drive cultural change.
South East continued

Train performance has improved this year, driven largely by greater collaboration with our train operators – a great example of which is our new joint performance teams with GTR and Southeastern, who are setting the standard for joint working across the industry.

That said, performance remains among the lowest on the network and the year has not been without challenges, including adverse weather, a spike in trespass and suicides and major incidents such as the London Bridge terror attacks. The successful completion of our work around London Bridge as part of the Thameslink Programme, including the fantastic new concourse and extra platforms, means passengers are now beginning to feel the benefits.

Asset reliability remains high, though increasing congestion on the route means that any incident can cause disproportionate knock-on impacts for passengers. That is why we are focusing on further reducing our fault response times and investing in intelligent infrastructure such as remote condition monitoring.

Financial performance overall was positive, thanks largely to improved railway performance resulting in lower-than-forecast compensation payments to train operators. Looking to the future, we submitted robust, well-evidenced plans for the next control period following consultation with, and scrutiny by, a wide range of stakeholders in support of our vision for the South East route.

The improvements we have delivered this year underline that the team in place on South East are some of the most committed and talented people within Network Rail. We continue to invest in our people’s development and I am delighted that our new leadership programmes are already delivering benefits for hundreds of people across the route.

Activities in the year
The infrastructure upgrades successfully completed this year, primarily through the Thameslink Programme, have set the foundation for significant improvements for passengers. The iconic, new London Bridge station is now fully open to passengers and we have completed all track and signalling work in the surrounding area to enable service improvements in the future.

An additional platform at Redhill on the Brighton Main Line, commissioned in January, will support the new timetable and could allow an enhanced service on the North Downs line between Reading and Redhill in future, offering better connections to Gatwick Airport.

We have delivered major work as part of a £300m asset resilience programme, including a junction renewal at Earlswood, drainage improvements through Sevenoaks Tunnel and vegetation and trespass management along the busiest parts of our route – all designed to reduce delays and provide a better service for passengers.

Signalling work at Ashford International means the new Eurostar rolling stock will be able to continue serving the station, which is of huge economic importance to the whole of Kent. We have also made progress on power supply upgrades in Kent and Sussex to support longer and more frequent services.

The opening of a number of footbridges over the railway means we have been able to close some of our high-risk level crossings – such as Stone Crossing near Dartford and the last remaining footpath crossing over the four-track Brighton Main Line at Salfords.

In the year ahead
By far the most significant event of the new financial year is the May 2018 timetable change. It is clear that we in the rail industry have let passengers down in the way the new timetable has been planned and introduced; for that, I am very sorry.

Network Rail and GTR are working together on a recovery plan which will give passengers the reliability they expect and deserve. Once that stability has been achieved, our focus will turn to delivering the remainder of the capacity and connectivity benefits enabled by completion of the Thameslink Programme.

Elsewhere on the route, additional capacity will be provided through enhancements, such as power supply upgrades, which enable longer trains. Further stations will see step-free access enhancements being delivered, benefiting a wide range of passengers.

We will also complete our work as part of the £300m resilience programme, including two nine-day planned closures of the railway between Three Bridges and Brighton in October 2018 and February 2019 to enable major improvements to tracks, signalling and tunnel drainage and provide a more reliable service for passengers.

Efficiency case study: Improving safety at depots and sidings

A project to improve public and workforce safety at depots and sidings in Kent by installing and refurbishing walkways, handrails and other improvements has delivered efficiency savings of £3.7m against the budgeted estimate.

This was primarily achieved through the use of ‘structured continuous improvement’ tools taught on an in-house leadership programme. This included tendering and packaging delivery of similar works to eliminate waste, deliver appropriate site-by-site solutions rather than ‘one size fits all’ and avoiding scope changes by ensuring those working at depots and sidings were engaged from the start.

John Halsall, Route managing director, South East
27 June 2018
Wales

The railway in Wales and Borders connects people, businesses and communities to support both regional and national economic growth. Almost 50% more passenger journeys are made to, from and within Wales than a decade ago. We employ well over 6,000 people directly or indirectly and spend tens of millions of pounds with local suppliers every year.

Our devolved leadership team works within a national framework while proactively supporting the aspirations of Transport for Wales, Welsh Government, the Department for Transport and the wider Wales and Borders stakeholder community. Our route Supervisory Board, chaired independently, ensures we build on our partnership approach; the Board holds the industry to account, brings track and train closer together and supports improvements to passenger services.

Key statistics

- **30.4m** passenger journeys each year
- **1,100** level crossings
- **3,002** bridges
- **1,340** services per day
- **1,505** track miles

We have seen some great improvements in safety for our workforce and for the communities we serve. This year we closed six level crossings and commissioned 13 audible warning devices on level crossings across our route, as part of our level crossing risk reduction programme. Our workforce lost time injury (LTI) frequency rate has improved by 33% as a result of a reduction in staff lost time accidents - from 23 to just 17 LTIs in the year.

Our Public Performance Measure (PPM) was 92.2%, slightly below target. However, this was a 0.3% improvement on last year’s figure. Wales and Borders has the lowest level of
Wales continued

delays recorded for each incident which occurs on the network, with less than 5% of the overall national delay minutes occurring within the route.

Working in partnership with our train and freight operating companies, we achieved a further reduction in service affecting failures which improved by 4.5%. This builds on last year’s improvement of 14.5%, bringing us to 19% in the last two years, and resulting in more consistent journeys for passengers and freight customers with fewer delays or cancellations associated with infrastructure failures. We also delivered within our budget, which included efficiency savings of 4.5%.

We owe our success to the great teams of people across Wales and Borders. Our route people engagement score of 68% was above national best practice and above Network Rail’s overall score of 53%.

Activities in the year

Our lead train operator, Arriva Trains Wales, was the most reliable operator in 2017, achieving an average of 82.8% of trains arriving at their terminating station early or within 59 seconds of schedule. The flagship £300m Cardiff area signalling renewal scheme continued to contribute to significant performance improvements on the Valley Lines (which carry 50% of route services and passengers), consistently achieving over 95% of trains arriving within five minutes of their scheduled time. This boost in performance has meant a huge improvement to the day to day lives of thousands of passengers.

We also delivered 100% of our key renewals volumes representing £175m capital investment. This included the North Wales Coast modular signalling and a successful high output programme, resulting in a more reliable railway for passengers. We completed a number of bridge renewals and refurbishments including a major upgrade of the 100-plus year old Llanfairpwll station footbridge, creating a bridge fit for this popular tourist destination.

We also completed a number of third-party funded investment projects, principally funded by Welsh Government. These include the commissioning of the North South Wales Enhancement Project, unlocking the potential for faster and more frequent services between Holyhead and Cardiff. Improvements were also made to Treherbert and Machynlleth stations to make them fully accessible to passengers, opening up the railway to those who may not have been able to use it previously and new highways and overbridges at Talerdig enabling us to close level crossings and eliminate their risk to the community.

The National Rail Passenger Survey results in February indicated that 79% of passengers are dissatisfied with crowding on trains. Network Rail has been helping Arriva Trains Wales and Transport for Wales identify solutions for providing more seats for passengers.

Our collaborative approach during the Champions League final in Cardiff was praised by Ken Skates, the Welsh Government’s Cabinet Secretary for Economy and Infrastructure, who thanked us for helping to get passengers safely to and from this global event. Mr Skates also praised the rail industry during Storm Emma in March 2018, and the teams who worked tirelessly in exceptionally challenging weather conditions.

We worked with our train operating partners to respond with one voice to stakeholder issues. The Welsh Assembly Members’ (AMs) favourability survey of January 2018 found that for the first time in ten years, over 90% of AMs were familiar with Network Rail, and a third of those surveyed agreed that devolution of Network Rail in Wales is improving the performance of the network.

In the past year we have acted on the results of the previous employee survey, such as refurbishing staff facilities and helping staff find more volunteering opportunities. We have attracted new talent through our apprenticeship and graduate schemes and deployed our science, technology, engineering and maths (STEM) ambassadors to schools and colleges across the route. Our workplace diversity and inclusion champions programme appointed 11 new champions in the last quarter, bringing our total to 33, and this year 12 women participated in our women in leadership programme with ChwaraeTeg (Fair Play). More women are working in the railway in Wales than ever before and half of the Wales and Borders leadership team are now women.

In the year ahead

The final year of Control Period 5 is an exciting time for Wales and Borders. We will continue our mission to run a safe, reliable, efficient and growing railway that better meets the needs of passengers and provides maximum value for taxpayers and our funders.

Over the next year we are renewing track along the North Wales Coast Line, upgrading signalling between Port Talbot and Swansea and modernising the South Wales Main Line. Another 116 projects are also planned over the next 12 months to repair, renew and refurbish our assets across Wales and Borders.

We anticipate that KeolisAmey, the new Transport for Wales franchised train operating company, who will take over the reins from Arriva in October, will bring significantly increased passenger service performance and additional capacity. During the months ahead we will work with Arriva and the Welsh Government to ensure a smooth transition into the new franchise and with Transport for Wales to implement plans to begin improving the experience for passengers.

Our route Strategic Business Plan for our next funding period, Control Period 6, will be published following the Office of Rail and Road’s final determination. The plan has the support of the Welsh Government and seeks to deliver many diverse schemes and local improvements which benefit as many rail users as possible across Wales and Borders.

Efficiency case study:

Devolving energy and utilities has enabled us to make efficiency savings of £846,000. This improved management of energy and water will continue to save us £234,000 every year.

Andy Thomas,
Route managing director,
Wales
27 June 2018
Wessex

The Wessex route is one of the busiest in the UK, providing a vital economic artery into central London from the south coast, with 230 million passenger journeys each year generating £1bn in revenue.

As well as a commuter service connecting many towns and cities between London and the south coast, the route is an important freight link for the UK, bringing goods in and out of Southampton docks, one of the country’s busiest deep-water ports. Our network also plays a key role in supporting tourism and weekend travel across the region.

Our biggest challenge is peak-time capacity. Passenger numbers on Wessex continue to grow, having more than doubled in the last 20 years. London Waterloo is the busiest transport terminal in the UK, with almost 100 million passengers travelling through the station each year.

Key statistics

230m passenger journeys each year
More than 2,000 passenger and freight services
Around 1,180 miles of track
More than 200 stations
323 level crossings

1,924 bridges
1,878 employees
£328m spent on renewals and enhancements on the route from 2014-2019 (CP5)

Key scorecard targets

<table>
<thead>
<tr>
<th>Scorecard Outturn</th>
<th>Minimum</th>
<th>Target</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/18</td>
<td>53.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016/17</td>
<td>50.3%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Safety</th>
<th>2017/18</th>
<th>2016/17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial Performance</th>
<th>2017/18</th>
<th>2016/17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Investment</th>
<th>2017/18</th>
<th>2016/17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Asset Management</th>
<th>2017/18</th>
<th>2016/17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Train Performance</th>
<th>2017/18</th>
<th>2016/17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Locally Driven Customer Measures</th>
<th>2017/18</th>
<th>2016/17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Wessex continued

Safety is our number one priority and we are pleased to have achieved a 29% reduction in our Lost Time Injury Frequency Rate this year. We have continued to hold our safety workshops for frontline staff, which more than 1,000 employees registered to attend, and held more than 25 events across the route on a variety of safety topics as part of Trade Union Health and Safety Week.

We have made good progress in terms of our relationships with those who live close to the railway, reducing the number of railway worker complaints significantly. Through targeted communications, keeping our neighbours informed of planned works as well as upskilling our teams and highlighting the effect their actions have on our neighbours and our reputation, we have reduced the number of complaints by 52%.

It has been a challenging year for train performance and we have not achieved the level we wanted to over the last 12 months. Post-commissioning problems following the Waterloo upgrade last August undermined overall performance and had a negative impact on PPM figures, as did a number of infrastructure, weather and fleet issues. In April 2018 the Secretary of State, Chris Grayling, commissioned an independent review into South Western Railway performance, and we expect the results of this to be published later this year. In the meantime, we are working hard, in alliance with our colleagues at South Western Railway, to address these performance issues. Service affecting infrastructure failures are down 6% from 2016/17. This represents a 27% improvement over the control period to date. Intelligent infrastructure also saw us intervene on nearly 500 occasions in advance of a predicted failure that may have disrupted services.

Since we welcomed South Western Railway on to the route in August 2017, we have been working closely to improve reliability and punctuality for our passengers. We were pleased to set out our plans together at a public meeting with Transport Focus in January 2018. This includes introducing new teams to deal with any incidents on the network 24 hours a day, 365 days a year; increasing the number of infrastructure inspections in the Waterloo area to fix problems before they turn into delays and rolling out new technology to avoid teams going onto the track to disconnect the power, which is safer for our staff and lessens disruption for passengers.

As part of our alliance agreement, we have also introduced joint performance teams and are in the process of finalising our joint performance improvement plans.

Train performance affects financial performance due to the compensation we are required to pay train operating companies for delays. We have been focused on where we spend our money, investing in improvements that will deliver business benefits, while ensuring we remain cash compliant.

Activities in the year
We have made great strides in reducing risk at level crossings, including completing outline designs on two new bridges at Farnborough North and White Hart Lane. We have also closed two level crossings, Shortwood Common and Enham, improving safety on the railway.

We completed the most complex phase of the £800 million Waterloo and South West Upgrade, rebuilding platforms at Waterloo station while keeping trains moving. Thanks to this work, new ten car trains are now running on our route, giving our passengers more space.

We carried out a range of successful renewals across our network, providing passengers with more reliable journeys. This includes investing £8 million on renewing tracks in Southampton and investing more than £7 million to replace life-expired Victorian bridges in Portsmouth and South West London.

Our people are key to the success of our business. A diverse and inclusive work environment is one where people feel trusted, supported and able to bring their whole selves to work. This year we increased the number of diversity and inclusion champions on the route to more than 60, launched our Inspire network and have increased our female workforce by 2.49%.

In the year ahead
We will:
- Complete the final phase of the Waterloo and South West Upgrade with the reopening of the former Waterloo International Terminal in December 2018, creating five new high-frequency platforms. This, alongside the work completed last year, will provide 30% more peak time capacity at Waterloo.
- Complete work at Twickenham station with improved facilities, a new public plaza and 115 new homes, as well as moving forward with the approved proposal for the re-development of Guildford station featuring a new station building and 438 new homes. We will also continue to work with Reading Borough Council on construction of a new Reading Green Park station.
- Continue our extensive programme of track renewals and level crossing closures, while working with industry to agree a long term solution in tackling overcrowding at Clapham Junction and laying the groundwork for our significant re-signalling work at Feltham, helping prepare us for the digital railway.
- Remain focused on our people. Next year we will look to extend our reverse mentoring programme, complete the roll out of our Everyone Learning Programme and continue to focus on our Science, Technology, Engineering and Mathematics (STEM) ambassador early engagement programme with local schools and colleges.

Efficiency case study:
We have continued to deliver our efficiency plans, of particular interest is our Faster, Safer Isolations work which, as demonstrated during the recent successful trial in the Guildford area, will provide us with the opportunity to increase the amount of productive time within mid-week night possessions by up to 20%. These possessions will be taken using fewer members of staff (so they can take part in more productive work) and involve fewer vehicle miles travelled.

Becky Lumlock, Route managing director, Wessex
27 June 2018
Western

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

Key statistics

92m passenger journeys each year

2,200 train services per day

c. 6m tonnes of stone, steel and petroleum carried annually

2,839 bridges

650 level crossings

2,600 employees

£1,150m spent on renewals and enhancements on the route in 2017/18

Key scorecard targets

<table>
<thead>
<tr>
<th>Scorecard Outilturn</th>
<th>Minimum</th>
<th>Target</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/18</td>
<td>48.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016/17</td>
<td>52.0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Safety</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016/17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial Performance</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016/17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Investment</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016/17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Asset Management</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016/17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Train Performance</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016/17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Locally Driven Customer Measures</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016/17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Activities in the year

We have made excellent progress on safety this year, with positive results across the board, including an impressive 32% reduction in lost time injuries across our workforce. Looking after our workforce is important to us: we want great people working in a great culture, so it was good to exceed our people measure target for this year. We have set further ambitious goals for the coming year, including significant investment in front-line accommodation, and we are committed to attracting and nurturing the strongest talent regardless of race, gender, religion or sexual orientation.
Western continued

2017/18 has also been a strong year of delivery, with key projects online after several years’ work, bringing benefits which are being felt by thousands of passengers across the route. The upgrades and improvements we have made to power, signalling, track and stations across the route are enabling the largest fleet upgrade in a generation.

Last year the first brand-new class 387 Electrostar trains started to run between Paddington and Hayes & Harlington; they extended their range to Maidenhead in May 2017 and to Didcot by December as we delivered new overhead electric power lines to Didcot. In addition to greater comfort and reliability, each train offers up to 30 % more seats. This influx of new rolling stock into the Thames Valley has released a fleet of newer Class 165/6 Turbo trains to move to the West and South West, improving services on local Bristol, Exeter and Cardiff routes.

Just as significant has been the arrival of the new GWR Intercity Express Trains which can operate in diesel and electric modes with faster acceleration and braking which reduces journey times. These new trains provide 10 % more seats into and out of London Paddington during peak hours and 20 % more seats through Bristol Temple Meads.

This year we welcomed a new operator to our route in the form of MTR Crossrail, who are operating the Elizabeth line on behalf of Transport for London and managing stations between Acton Main Line and Twyford. The effort to prepare the network for the new Class 345 trains, which the service will use, was a major part of our work at Christmas 2017.

Our Railway Upgrade Programme includes continuing weather resilience work across the South West, notably major drainage works at Hinksey and Chipping Sodbury, the start of Cornwall resignalling, enabling increased services between Plymouth and Penzance, and the commissioning of a new platform at Bristol Parkway. This will improve the reliability of both direct GWR services between Bristol and London and CrossCountry Services. The fact that we have managed to significantly reduce complaints by lineside neighbours during this volume of work is testament to our commitment to being a good neighbour.

Behind all of this success is our Alliance with Great Western Railway. This partnership, supported by the independently-chaired Route Supervisory Board, has given us a sharper focus on customer service and enabled us to deliver benefits while minimising disruption and cost. The new timetable introduced on 2 January 2018 was just one direct result of this ethos of joint working, which is being applied to other operators, including Heathrow Express, CrossCountry and the freight operators.

Both train performance and asset reliability have fallen short of target (despite asset performance having a strong recovery in the second half of the year) but we have aggressive short- and long-term plans to rectify this, such as the replacement of track circuits in the Paddington area, which will help improve reliability.

Financial performance has been negatively impacted, largely due to increased compensation paid to train operating companies. This arose from our asset performance during the summer and autumn (some but not all of which was weather-related), plus the effects of the snow and storms towards the end of the year. Our track renewals programme has also been impacted as we balance the huge demands for track access on our route with the need to minimise the impact on passengers.

Delivery against our financial plans in operations, maintenance, renewals and other income has been on plan with a number of additional efficiencies delivered. Strong management and control of our route-wide expenditure has resulted in an overall neutral cash position despite the financial challenges we faced.

In the year ahead

Over Easter 2018 we replaced the signals in the Bristol area, the single largest programme of its type ever undertaken by Network Rail, relocating most of Bristol’s signal control to our Didcot signalling centre. This year we will also install two extra tracks into Bristol at Filton Bank. The combined result of all this work will enable more and faster services between Bristol and London from 2019. We will work to complete the Great Western electrification programme to Cardiff and Newbury, extending the benefits of electric trains to more passengers.

The new 2019 Western timetable will improve journeys, providing more services with more seats, faster journey times and new connections across the route.

The biggest change for the Thames Valley will come with the arrival of the Elizabeth line. Our focus for 2018/19 will be the final work on this huge programme and the integration of the new lines onto the network in advance of the Elizabeth line opening fully in December 2019. This line will run from Reading to Paddington, through new tunnels under London, to Essex and Kent, increasing the total rail capacity for London by 10 %. Benefits to passengers will start to be felt from summer of this year as MTR take over some services from Paddington using new Class 345 trains. Meanwhile we will continue to develop plans for a Western Rail Link to Heathrow, and third party schemes such as MetroWest. The Western route is being transformed, with new trains, more seats, greater capacity and better connections, and this remains one of the most exciting periods for our railways in generations.

Efficiency case study:

Didcot/Cocklebury sidings: The electrification of the Great Western Main Line is bringing a new fleet of electric trains to the route. The new longer trains require new longer sidings for when they are not in use. The original plan was for the new sidings to be located at Didcot. However, following collaboration between GWR and Network Rail it was identified that it would be possible to locate the new sidings at existing facilities in Cocklebury, Swindon, and by agreeing this change a saving of approximately £11m was made.

Mark Langman,
Route managing director,
Western
27 June 2018

30
Freight and National Passenger Operators

Freight and National Passenger Operators route (FNPO) manages nationally focused customers whose interests extend across our geographical routes’ boundaries. As well as freight operating companies (FOCs), customers include CrossCountry, Caledonian Sleeper, charter operators and aspirant open access passenger operators.

FNPO is different to the other routes: we do not directly manage assets or control train operations, but deliver by working closely with and through the geographic routes, System Operator and other parts of Network Rail. We are accountable for the delivery of performance and other outputs for our customers and provide them with a principal point of contact.

Key statistics

Together, our customers operate around 1,000 trains a day including 600 freight trains.

Rail freight removes 7.6m lorry journeys from the roads annually.

The FNPO team has 68 members of staff, 38% of whom are female.

The rail freight sector produces £1.7bn economic benefits for Britain.

The Caledonian Sleeper trains cover 3,500 miles every night between Scotland and London.

CrossCountry covers around 1,500 route miles and calls at over 100 stations.

Key scorecard targets

Our route scorecard for 2017/2018 includes 28 individual measures. Our full-year scorecard achievement is 61.5%, which was above target.

<table>
<thead>
<tr>
<th>Scorecard Outturn</th>
<th>Minimum</th>
<th>Target</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/18</td>
<td>61.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016/17</td>
<td>61.0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Safety</th>
<th>Minimum</th>
<th>Target</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016/17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial Performance</th>
<th>Minimum</th>
<th>Target</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016/17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Investment</th>
<th>Minimum</th>
<th>Target</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016/17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Train Performance</th>
<th>Minimum</th>
<th>Target</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016/17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Locally Driven Customer Measures</th>
<th>Minimum</th>
<th>Target</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016/17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Safety

We finished the year on target for all our scorecard safety measures except for Signals Passed at Danger (SPADs), which ended the year at 59 against a target of 44.

A key focus over the past 12 months has been working with colleagues across the industry to reduce the number of freight operator staff injured on Network Rail infrastructure. This is also a key work stream for the cross-industry National
Freight and National Passenger Operators continued

Freight Safety Group and delivery is supported through our programme of joint safety tours with our customers.

We continue to exceed targets on close calls raised with over 276 calls raised and closed within 90 days. Our teams’ attendance at a weekly safety hour is above target and we have covered a wide variety of topics during the year.

Finance

Freight track access income performed well and was broadly in line with growth targets for the year, with container and construction traffic continuing to show encouraging growth, and an unexpected small increase in coal traffic late in the summer.

We finished the year in an adverse position against our business plan, for the overall financial performance measure (FPM), mainly as a result of high levels of compensation being paid under schedule 4 and 8, as well as reduced traffic levels, as a result of the adverse weather in February. This was despite returning a surplus up to and including period 11.

Train performance

For the majority of the year our results were on target. In line with other routes, ‘The Beast from the East’ in March had a significant impact on the delivery of our targets. This means that we finished the year at 93.5% Freight Delivery Metric (FDM) moving annual average (MMA) against a 94% scorecard target.

Cross Country performance was down from the last financial year at 87.7% against a target of 90.1% PPM (MMA). We have developed and put in place a joint performance strategy to achieve future targets.

We have worked very closely with Caledonian Sleeper to exceed the target of 75% MMA at 75.1%. FNPO supports Caledonian Sleeper through added scrutiny and monitoring of the Caledonian Sleeper service by Freight Service Delivery Managers.

Customer focused

We also have seven individual customer scorecards, measures which are jointly agreed with our customers.

Activities in the year

- We have worked with the industry to produce our CP6 Strategic Business Plan. This is the first time FNPO has submitted a stand-alone plan and we are proud to have produced it collaboratively with our numerous stakeholders.
- FNPO has grown to support the needs of our customers. During the past year we made some specific increases to our team including adding a number of route freight managers. We have also strengthened our links to the central functions such as System Operator.
- We have been working with the Freight Operating Companies and port and terminals such as the Port of Immingham, Drax power station and Port of Felixstowe to build on work to improve right time departures.
- We have taken on the role of client for the fitment of digital signalling technology (ECTS) onto freight trains.
- We have seen schemes at Chelmsford, Small Heath, Hope Street Manchester, Bristol East and Southall be delivered to provide support for construction sector supply chains.
- We continue to work with the industry to provide stable and sustainable track access charges for CP6.
- We held two charter conferences, developed a charter strategy and we are working with the charter sector on a plan to eliminate effluent released onto the track.

In the year ahead

- Continuing our focus on freight service recovery following delays and incidents on the network.
- We will see key Strategic Freight Network schemes such as the Felixstowe Branch Line Capacity Enhancement and Southampton to the Midlands train lengthening being delivered to provide extra capacity for our customers.
- Our Business Development team will be continuing to develop new opportunities to bring in revenue streams to the railway and to help more users access the railway through new railheads and connections.
- We are working to define a measure that can be implemented to improve speed on selected services in-line with operator aspirations.
- Work with industry to support the High Level Output Specification (HLOS) metrics for freight in Scotland.
- We are developing a freight end-user scorecard to sit alongside our customer scorecards.
- Continue to work with DfT on the CrossCountry refranchise.

Efficiency case study:

The Port of Felixstowe is the UK’s largest container port and it sees up to 66 train movements per day (in and out). The route freight teams in Anglia and the South East have been working closely with the port and freight operators to improve right time departures from the port. A significant amount of work has gone into creating joint working and establishing a weekly visualisation session at the port, attended by all parties.

Rail freight plays an essential role in distributing goods around the United Kingdom and because of the nature of the freight network, the benefits are wide ranging. Improved, efficient right time departures mean that the positive impact has been felt across multiple routes and operators. The FNPO team is looking to replicate this approach at other end-user terminals to drive continuous improvement across the network.

Paul McMahon,
Route managing director,
Freight and National Passenger Operators
27 June 2018
Digital Railway

In 2017/2018 the Digital Railway Programme has continued to build upon the momentum achieved from the previous year, by working in close collaboration across the railway industry and with our partners in government.

Digital Railway (DR) has continued to receive strong support from Government including a reference in the Industrial Strategy White Paper and the Secretary of State for Transport agreeing to speak at the launch of the DR strategy in May 2018. We have also achieved the following:

- We have supported the Network Rail routes in preparing their Strategic Business Plans, incorporating digital railway technology into their future signalling workbanks.
- The DR Programme (DRP) strategy was produced with cross industry and government consultation, and was publicly endorsed by the Secretary of State for Transport in May 2018.
- A contract was awarded to Siemens in December 2017 to deploy on board European Train Control System (ETCS) as part of the first-in-class fitment of go-anywhere freight trains.
- Back-to-back commercial agreements were also put in place with the freight operating companies.
- Work has continued on the deployment of Traffic Management on the Wales and Anglia routes. The deployment of Traffic Management between London and Bristol is progressing towards go-live planned for 2018.
- The internal audit of the DRP carried out in November 2017 concluded with a good rating, noting a robust operating model in place to support delivery.
- The second Early Contractor Involvement (ECI) report was issued as part of the DRP’s ongoing commitment to actively engage with the supply chain in order to support collaboration and innovation. The successor to ECI, the Joint Design Group (JDG), has since been established as a new way of working with the supply chain, building on the success of the ECI workstreams, creating a community of suppliers with a wide range of skills and capabilities to support DRP development activities.
- The DfT has issued an Invitation to Tender (ITT) for the forthcoming South Eastern franchise with support from the DRP working with the South East route to develop the Traffic Management scheme. Digital Railway options are also being investigated for the TransPennine route.
- March 2018 saw the demonstration of Automatic Train Operation (ATO) over European Train Control System (ETCS) Level 2 through the Thameslink Core via a Class 700 mainline service train from Peterborough to Horsham. The delivery of ATO over ETCS is one of the first deployments of the digital railway on the mainline rail network – a world first – and it is delivered as part of the £7 billion Thameslink Programme.

David Waboso,
Managing director,
Digital Railway
27 June 2018
Property

We are experts in developing railway-owned land and property assets to help fund the railway and reduce the burden on the taxpayer. We play a key role in contributing to railway investment, customer experience, regeneration, housing and economic growth, creating great places for rail passengers, businesses and communities.

Open for Business: Partnering with the private sector
Our role in providing long-term, strategic stewardship of Network Rail’s land and property assets has never been more important as the British population continues to grow and the pressure on transport infrastructure, housing and commercial space increases.

We are now taking a more proactive and ambitious approach to working with stakeholders and delivering positive outcomes for communities by playing a full role in regeneration schemes, releasing land for housing, providing space for people to work and supporting economic growth.

We are open for business, and have begun to transform our operations to make it easier for sector stakeholders to work with us. In the last year, we have introduced a raft of measures to help encourage partnerships, including: new insurance/risk cover for developers and a new development asset protection agreement.

We also released the first in a series of multi-site land packages aimed at accelerating the delivery of land for housing while generating more income to reinvest back into the railway. In the past year we have delivered £44.2 million in development income and land for 707 homes. We have continued to accelerate our delivery with a commitment to deliver land for around 12,000 homes by 2020. The current rolling total is 3,557 since 2015.

Safe, secure, sustainable stations
We continue to create world-class environments in our stations through our commercial, retail and advertising assets. Between October and December 2017 our like-for-like sales increased by 0.8% while our sales growth increased by 3.5%.

Our stations division is striving to ensure our stations are places where people want to be, have the facilities they need are integrated with and deliver for local communities, create positive social outcomes and drive long term value. We have also taken on Guildford and Clapham Junction stations, which were previously managed by South Western Railway, to support the ongoing delivery of the Railway Upgrade Plan and support future development schemes.

Supporting devolution
Our planning and land services, and property services teams work alongside the routes to ensure the efficient operation and future expansion of the network. In the past year, we have shifted our approach to better support devolution and have implemented route-based land strategies to optimise the long-term use of Network Rail’s estate. We are also supporting on major projects such as HS2, helping the routes protect the railway and its heritage, while maximising the use of available land.

We are also working on a national strategy to improve land acquisition processes for operational railway purposes and supporting the reduction in Delays Per Incident by improving access to the railway.

Key initiatives we have underway
Our Commercial Estate business is currently being sold, with the transaction launched to the market in November 2017, and we expect the sale to be complete in the 2nd half of the year. The Commercial Estate is a non-core railway asset and a successful business that operates commercially. All the proceeds from the sale will be retained by Network Rail and will help us to fund the Railway Upgrade Plan. Safeguards will be in place to ensure that there will be no impact on the safe and efficient running of the railway.

Other assets from our strategic disposals programme sold this year have delivered £36.5 million for railway reinvestment.

David Biggs,
Managing director,
Property
27 June 2018
Great people, great teams

The Strategic Business Plan published in February 2018 quite rightly shines a light on the importance of great people and great teams. This people vision underpins Network Rail and the transformation that is ongoing, to enable devolution to separate route businesses. From this our People Strategy is also developing and will set the agenda for Network Rail to be one of Britain’s best employers.

Did you know - Apprentices?
- Network Rail enrolled 814 apprentices, including:
  - 145 female apprentice starts (18%).
  - 80 BAME apprentices (10%).
- We have beaten our ambitious forecast (of c. 600 starts over the year), and have plans to increase apprentice starts in 2018/19, expanding to a broader range of higher / degree level programmes.
- We offer a range of apprenticeships across apprenticeship levels 2 to 7, and types of programme (e.g. engineering, administration, finance, cyber security, project management, construction, surveying, property management, customer service).

Our apprenticeship programme has won the National Transport Awards’ Apprenticeship Champion of the Year Award, recognising our commitment to investing in the future talent that we need to build a better railway for a better Britain.

Did you know - Graduates?
- 153 graduate starts at Network Rail.
- We have 11 different graduate schemes available.
- We are working closely with those on the schemes to further develop these graduates through placements, qualifications, skills training.

Aligned to this we are working hard to support the skills agenda and developing strategic workforce planning to further develop our people. We are engaging with university technical colleagues up and down the country and one of our senior managers is chairing the Government’s Transport & Logistics route for technical education. Work is also ongoing to lead the development of a number of apprenticeships via ‘trailblazer standards’ and we can often be seen supporting events like The Big Bang Exhibition.

Our work with the Armed Forces has also been publicly recognised by the Ministry of Defence’s prestigious badge of honour. The Gold Employer Recognition scheme award was presented to Network Rail for outstanding support to the Armed Forces community.

Did you know - Diversity & Inclusion?
This year we have set about developing the 20by20 project, to increase our number of female employees from the current 16% to 20% by 2020.

Each route business and functional area has a 20by20 lead and an action plan describing the necessary activities to achieve our ambition, some example activities are: hosting open days for women; introducing women’s welfare packs; encouraging girls and young women to continue studying STEM subjects; promoting female role models in our job
adverts and through social media; understanding why women leave or stay in Network Rail. These activities delivered across the routes and business functions and supported by our centres of expertise, will improve gender diversity and contribute to reducing the gender pay gap over time.

Mark Carne CBE also raised the profile of the 20by20 project by announcing a commitment to improve welfare facilities trackside and in depots by 2019, an initiative which benefits everyone.

**Gender pay gap reporting**

In December 2017, ahead of the UK government deadline, we published the details of our gender pay gap. Our 2017 pay gap is 11%. This is substantially lower than the average UK pay gap of 18.1% and we are proud of the progress we have made to date. But we are determined to reduce it further.

**Other initiatives**

We know that unconscious bias can be an issue in recruitment which is why we are trialling anonymous or ‘name-blind’ shortlisting to eliminate any chance of bias. We have rolled out ‘inclusive leadership training’ for all hiring managers which includes a focus on unconscious bias, in the hope of tackling gender and diversity bias.

We have also developed a menopause project, sponsored by Graham Hopkins MD ST&E, producing a guide for women and line managers to support them through this time that is rarely spoken about, but can cause an immense impact.

Our property function also developed a very supportive ‘returners’ programme to encourage surveyors back to the workplace after a period of absence, which has received a great take up.

This year we have also maintained the Business in the Community Diversity Benchmark, Silver Banding for Race and Gender Diversity Benchmarks, which has given us a fantastic stepping stone for the future into 2018/19.

We take proactive action to make sure the policies relating to our people are compliant and supportive. We also extend this to policies that have a people impact that are owned by other parts of the organisation, for example the ethics policy.

Our future vision is to create a more productive workforce and for Network Rail to be a more desirable place to work. Future initiatives such as digital signalling and intelligent infrastructure will continue to broaden the diversity of skills required to make a “better railway for a better Britain”.

**Our disability policy**

Network Rail has a policy of not discriminating against potential and current employees due to their age, disability, employment status, gender, health, marital status, sexual preference, membership or non-membership of a trade union, nationality, race, religion, social class or other non-job-relevant personal characteristics.

Reasonable adjustments will, where possible, be made to support new employees with a disability and those returning to work after injury or from a period of illness.

Network Rail offers training and development opportunities to staff to ensure that we have the right people with the right skills to help us deliver for our customers, and also to help our people achieve their full potential.

**Employee engagement**

Each year Network Rail runs a series of business briefings, aimed at updating internal colleagues on what’s happening across the business, and providing opportunities for staff to raise questions directly to senior management. Business briefings are held at 11 locations around the country to allow as many employees as possible to attend. Approximately 6,000 employees attend the briefings each year, and material from those briefings is made available on the company’s intranet for those who cannot attend.

Our intranet is updated daily with news from around the business, as well as information on the major industry and political events that impact Network Rail, and weekly round-up emails are circulated to the whole business. Our monthly internal magazine, Network, is also available to read in hard copy or via our intranet.

In September 2017 Network Rail carried out its periodic employee engagement survey. Over 21,000 employees completed the survey, an increase of 5 percentage points on previous participation levels. Teams are now working to address this feedback from employees.
Being responsible

At Network Rail we promote sustainable development and responsible business through our Responsible Railway Plan and our vision of a “Railway Fit for the Future”. We are keen to always understand how our activities affect the environment locally as well as globally and, at the same time, we drive social responsibility and actively seek to maximise opportunities to create social value, all whilst running a safe and reliable railway.

Environmental management

Biodiversity
As one of the largest landowners in the UK our impact on national biodiversity is significant. In 2017 we developed and published a rail industry biodiversity calculator to allow Network Rail and our supply chain to demonstrate commitments to “no net loss” to biodiversity and, in the case of the Thameslink project and the Gospel Oak to Barking electrification project, “net gain”. Work is now taking place to improve other tools, such as geospatial mapping, to better plan for ecological risks and opportunities.

Waste
Network Rail is a major producer of waste and generates a wide range of waste types including; construction, demolition, commercial and hazardous wastes. In 2017/18, Network Rail generated 2.14 million tonnes of waste, of which 33% was reused, 56% recycled, 5% recovered (for energy generation) and 6% sent to landfill. The landfill diversion rate of 94% falls just short of our target of 95%, however with increased focus this year we are confident it will be exceeded by the close of CP5.

<table>
<thead>
<tr>
<th></th>
<th>2017/18</th>
<th>2016/17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste diverted from landfill</td>
<td>94%</td>
<td>92%</td>
</tr>
<tr>
<td>Re-used</td>
<td>710,818 tonnes</td>
<td>663,481 tonnes</td>
</tr>
<tr>
<td>Recycled</td>
<td>1,197,820 tonnes</td>
<td>1,128,469 tonnes</td>
</tr>
<tr>
<td>Recovered (e.g converting waste material into energy)</td>
<td>106,556 tonnes</td>
<td>211,442 tonnes</td>
</tr>
<tr>
<td>Disposed</td>
<td>120,852 tonnes</td>
<td>171,243 tonnes</td>
</tr>
</tbody>
</table>

Energy and carbon
For Network Rail, energy is a vital part of our core business and we spend over £60m each year on keeping the railway running. Reducing our energy use not only reduces operating costs, but also reduces our carbon footprint and improves our environmental impact.

We have seen many energy, cost and carbon reduction initiatives across the business. For example, we are working hard to recover energy costs and encourage energy reduction throughout our managed stations through an ongoing programme of in-depth survey work of all station retail areas, with benefits to date exceeding £2.5m. Business units are implementing energy efficiency projects to achieve targeted energy savings, and are shaping energy and carbon reduction plans for CP6.

Weather Resilience and Climate Change Adaptation
Many rail assets are vulnerable to weather, a reflection of the characteristics of a nationwide transport system. Controls are in place to mitigate the impacts from weather-related events, ranging from speed restrictions during high temperatures and high winds to investments in improving the condition of high risk assets. However, the nature of weather and the scale and age of the rail network mean that impacts are still experienced.

We have been working to implement the 2017 Weather Resilience and Climate Change Adaptation Strategy with a particular focus on integrating climate change requirements into asset policies, and have developed a cost:benefit analysis tool to support decision making and development of business cases for resilience projects.

Social performance
At Network Rail we are striving to improve our social performance, recognising that running Great Britain’s railway is more than just transporting passengers from ‘A’ to ‘B’. It is a vehicle for connecting communities, creating jobs, regenerating areas of social deprivation, and driving socio-economic growth.

Community engagement
Many of our projects have chosen to ‘give back’ to the communities they serve by building long-term partnerships with local schools, businesses and lineside neighbours. In 2017 a community art project changed the face of rail infrastructure in south east London by painting meaningful images that resonate with the local community across Network Rail bridges and rail infrastructure. Graffiti and vandalism has been replaced in London Bridge by a mural dedicated to those who lost their lives in the terror attacks, whilst a Forest Hill structure now boasts an image from a well-known exhibit displayed at the local Horniman Museum.

Volunteering
This year 10% of Network Rail employees used at least one of their five days of volunteer leave to support local charities and community groups, which is a 73% increase on last year. Volunteering activities across the business have included careers workshops in schools to promote Science, Technology, Engineering and Maths (STEM) subjects to young people,
garden and building renovations in Barnardo’s assisted living and children’s centres, and community support for those affected by the Grenfell Tower fire in May 2017.

Charitable giving
In March 2017 we launched a two-year charity partnership with Barnardo’s and fundraised £123,000 by the end of the first year. In addition, we saw a 5% increase in people using our Payroll Giving scheme to donate to their selected charities; this year Network Rail employees have donated an average of £45,000 to charity per month. In addition to Payroll Giving, train passengers have donated a further £1.1m through charity bucket collections at our stations.

Keeping communities safe
In 2017/18 we continued our community safety campaigns to reduce trespass on the railway across Great Britain. Over 25% of trespass incidents are reported to involve children and young people, which is why we work closely with schools to provide a range of education and prevention activities.

As part of the Great West Electrification Project alone, we have delivered rail safety activities to 118,305 pupils at 301 school events. For this area of the railway line, between Maidenhead and Bristol Parkway (approx 90 miles), we have seen just 17 trespass incidents in 2017/18 compared to 319 incidents across the remainder of the route.

Suicide prevention
246 suicides took place across the rail network in 2017/18, 4% more than the previous year despite the industry continuing to dedicate significant resource to this issue in support of the government’s commitment to reduce the national suicide rate by 10% by 2020.

The industry continued to work closely with local authorities and health agencies to promote early intervention for those in emotional crisis whilst at the same time deploying physical and psychological suicide prevention measures at known high risk locations across the network.

A cornerstone of the industry’s work this year is the training of staff to intervene in suicide attempts. In 2017/18 1,711 interventions were made – 7.5% more than 2016/17 – and our Small Talk Saves Lives bystander campaign (launched in November 2017) has enabled our customers to help prevent suicides both on and off the railway.

Level crossings
Level crossings continue to be one of the biggest safety risks on the rail network. In conjunction with our rolling programme to close or alter level crossings to reduce safety risk we have continued our awareness campaigns on how to use a crossing safely. This year we have closed 55 level crossings which takes the total number of closures within CP5 to 320.

Economic impact
Did you know?
- This year we worked directly with over 3,860 suppliers, 66% of whom were SMEs, spending over £6.51bn.
- We are a major user of UK steel. All of the steel used for rail replacement or upgrade is manufactured in the UK under an agreement with British Steel.

<table>
<thead>
<tr>
<th></th>
<th>2017/18</th>
<th>2016/17</th>
<th>2015/16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of days spent volunteering with charities and community groups</td>
<td>6,748.5</td>
<td>3,895</td>
<td>1,645</td>
</tr>
</tbody>
</table>
Our approach to risk management

Our approach to risk management across Network Rail balances the risks associated with our operational environment and identifying opportunities to improve performance, through careful acceptance of some risk.

We recognise our status as a regulated rail network infrastructure provider and the importance of maintaining essential service provision.

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

Our principal risks are outlined in the ‘Key strategic risks’ section on page 40-45.

Embedded risk management processes

We take an enterprise-wide approach to risk management and have an Enterprise Risk Management (ERM) framework in place for the identification, analysis, management and reporting of all risks to strategic objectives. The purpose of our ERM framework is to identify and mitigate risks to the delivery of a safe, reliable, efficient service to our customers. Our ERM framework supports all areas of the business to recognise both threats and opportunities early. Early recognition of risk allows us to work collaboratively and proactively with customers, stakeholders and suppliers to manage our extensive portfolio of works better. Being better every day requires us to look at areas where we can improve our service. By careful consideration of risk we can focus on those opportunities that have the highest potential to increase efficiency and provide a better experience for our customers.

The risk processes within our ERM framework provide tailored approaches for specialist areas such as safety, project management and information security. The use of a standard risk assessment matrix and defined risk appetite enables integration of operational and strategic risks. Line of sight and links between risks are documented and visualised through our award winning risk visualisation approach. Strategic risks are linked to our corporate scorecard and business plans are required to document and assess risks to delivery against the corporate risk appetite statements.

Clear escalation criteria and the use of business assurance committees throughout the business provide structured governance, challenge and assurance. We have introduced the concept of risk trajectory to enable more informed challenge on the effectiveness of risk mitigations. The establishment of early warning indicators (EWIs) provides the ability to continuously monitor how effective our controls are at managing the root causes of our principal risks. By using current reporting and monitoring techniques, such as visualisation boards and periodic reviews, we can better link risk with performance.

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

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

All principal risks are mapped to performance reporting and strategic objectives. The assessment of risk is informed by the performance targets and the company’s risk appetite statements. Each risk is appointed an executive committee owner.

Network Rail has defined its risk appetite as follows:

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

In the pursuit of its objectives, Network Rail is willing to accept, in some circumstances, risks that may result in some financial loss or exposure including a small chance of breach of the loan limit. It will not pursue additional income generating or cost saving initiatives unless returns are probable (85% CI for income and 60% CI for cost reductions where potential returns are high).

The company will only tolerate low to moderate gross exposure to delivery of operational performance targets including network reliability and capacity and asset condition, disaster recovery and succession planning, breakdown in information systems or information integrity.

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

<table>
<thead>
<tr>
<th>Risk</th>
<th>Risk Owner</th>
<th>Current Actions</th>
<th>Planned</th>
</tr>
</thead>
</table>
| Failure to safeguard our workforce resulting in single and/or multiple fatalities to Network Rail staff (employees and contractors). | Group director of Safety, Technical and Engineering | • We fitted a vehicle speed warning system to 7,700 fleet vehicles to enable our drivers to get immediate support to drive within the speed limit. This has reduced speeding events.  
• We implemented the revised standard Safety of People at Work on or Near the Line as a critical element for the successful delivery of Planning and Delivering Safe Work.  
• We have reviewed and revised the Industry Common Induction. A programme for electrical safety delivery was agreed by executive committee and SHE committee, focusing on improved isolation methods, better test equipment, accountabilities and competence / training.  
• We established a fatigue risk management programme aligned to a proposed new standard and delivered educational videos for our staff.  
• Implemented Safe Trackside Working programme - including development of strategic signal controlled warning system and preparation for trials of tactical high integrity protection system. | • To introduce proactive risk management through use of the leading indicators provided by the Vehicle Speed Warning System. Investigate vehicle utilisation to ensure that the most appropriate vehicles are used.  
• Develop integrated safe system of work planning tool for use by Network Rail and its contractors. Including development of a mapping solution to deliver improved planning and hazard identification.  
• Introduce a single source of task based risk information system to allow all staff to easily access relevant hazard and risk information.  
• Additional ESD: Complete revision of 25kV isolation instructions and associated training material to enable commencement of trial.  
• Produce a fatigue risk tool kit and guidance for line managers.  
• Introduce revised Sentinel Scheme rules and revisions to core track safety competences.  
• Safer Trackside Working programme – feasibility studies for Signal controlled warning technology and trials for Lineside Early Warning System. |
| Failure to prevent a major avoidable train accident (collision, derailment etc.) which results in multiple injury/fatality to members of the public/passengers resulting in loss of reputation, finance and reduced performance. | Managing director, England and Wales | • Corporate Scorecard measure for risk reduction adjusted to allow for effectively targeted measurement of priority activities.  
• Targeted communications campaigns for the users of Automatic Half Barrier and User Worked level crossings.  
• Targeted action at level crossings through the Level Crossing Risk Reduction programme.  
• Increased coverage using train-borne track monitoring.  
• Plain Line Pattern Recognition operational for 14,496 miles.  
• Targeted removal of lineside vegetation that presents a risk to train derailment/collision.  
• Targeted reduction in the number of high risk road vehicle incursion sites.  
• Targeted reduction in the number of high risk scour sites. | • Research and development of the COMPASS alternative signalling system to facilitate systems-based degraded mode working with the aim of reducing the reliance on human processes and enhancing the resilience of degraded operations against human error.  
• Continued focused measurement through the train accident risk element of the corporate scorecard.  
• Further public education campaigns and targeted action at level crossings through the Level Crossing Risk Reduction programme.  
• Additional targeted reduction in the number of very poor condition fences that could present a risk to train derailment/collision.  
• Extended use of trainborne equipment for track condition monitoring. |
Risk management continued

- Targeted reduction in the number of very poor condition fences that could present a risk to train derailment/collision.
- Revision of the signalling design handbook.
- Continued roll-out of new control framework in the form of Business Critical Rules.
- Development of Engineering Competence Framework.
- Development and roll out of Civils Strategic Asset Management System to provide better asset information.

- Continued targeted removal of lineside vegetation that presents a risk of train derailment/collision.
- Further targeted reduction in the number of high risk road vehicle incursion sites.
- Continued targeted reduction in the number of high risk scour sites.
- Publication and implementation of the revised signalling design handbook.
- Delivery and implementation of new training and competence support materials for staff undertaking and monitoring safety critical communications.
- Completion and implementation of a Network Rail Single Competency Framework for professional Engineers and Asset Managers.
- Further system evolution and deployment of the Civils Strategic Asset Management System to provide better asset information.
- Completion of Business Critical Rules improvement projects.

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

<table>
<thead>
<tr>
<th>Failure to have suitable and sufficient infrastructure, systems and controls in place to safeguard passengers and public at the interface with trains and the railway (excluding train accident risk), resulting in a fatal or major injury.</th>
<th>Group director of Safety, Technical and Engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safe</td>
<td>55 Level Crossings permanently closed in Year 4; 320 permanently closed in CP5 to date.</td>
</tr>
<tr>
<td></td>
<td>27 (31 planned for the end of the year) commissioned asset improvements at level crossings in Year 4; 65 asset improvements to date in CP5.</td>
</tr>
<tr>
<td></td>
<td>12 crossings temporarily closed, removing risk, whilst permanent risk reduction measures are developed in Year 4; 48 temporarily closed in CP5 to date.</td>
</tr>
<tr>
<td></td>
<td>Recast of the previous Level Crossing Strategy to Enhancing Level Crossing Safety.</td>
</tr>
<tr>
<td></td>
<td>TWAO Cambridgeshire, Essex and Suffolk public inquiries are underway.</td>
</tr>
<tr>
<td></td>
<td>Refresh of the All Level Crossing Risk Model to improve the accuracy of risk modelling and calculations of level crossing risk.</td>
</tr>
<tr>
<td></td>
<td>Supported RSSB to educate other Station Infrastructure Managers about how to use the PTI risk assessment tool across the railway stations estate.</td>
</tr>
<tr>
<td></td>
<td>Revision of the Community Safety Strategy, including development of metrics to help measure the reach and impact of our Community Safety Campaigns.</td>
</tr>
<tr>
<td></td>
<td>Targeted local campaign for addressing the issue of trespass at stations.</td>
</tr>
<tr>
<td></td>
<td>Closure of an additional 126 Level Crossings (subject to feasibility studies and liabilities negotiations).</td>
</tr>
<tr>
<td></td>
<td>Development of the Meerkat solution for user worked crossings.</td>
</tr>
<tr>
<td></td>
<td>Deployment of Red Light Safety Equipment Cameras at up to 18 sites.</td>
</tr>
<tr>
<td></td>
<td>Embedding of Enhancing Level Crossing Safety within the business.</td>
</tr>
<tr>
<td></td>
<td>Procurement and installation of up to 30 COVTEC SAWDs.</td>
</tr>
<tr>
<td></td>
<td>Completion of GRIP Stages 1-4 of the Anglia TWAO to include completion of public inquiries in Cambridge, Suffolk and Essex.</td>
</tr>
<tr>
<td></td>
<td>Continued development of an AHB+ solution.</td>
</tr>
<tr>
<td></td>
<td>Procurement and installation of overlay MSLs at up to 28 sites.</td>
</tr>
<tr>
<td></td>
<td>Review and further development of the current Narrative Risk Assessment Process.</td>
</tr>
<tr>
<td></td>
<td>Establish the cross industry trespass prevention programme.</td>
</tr>
<tr>
<td></td>
<td>Delivery of targeted public communications campaigns.</td>
</tr>
<tr>
<td></td>
<td>Development of a user interface for the new All Level Crossing Risk Model (ALCRM) risk engine, together with full impact assessment of changes to the national risk profile, in preparation for CP6 activation.</td>
</tr>
<tr>
<td></td>
<td>Further delivery of community safety campaigns and interventions directed towards.</td>
</tr>
</tbody>
</table>
• Delivery of the Small talk Saves lives campaign for suicide prevention.
• Roll out and deployment of the Platform Train Interface (PTI) risk assessment tool at Network Rail Managed stations.
• Delivery of the next cycle of the railway safety educational programme in schools located near sites with high levels of trespass and vandalism during academic year 2017/18.
• Public education and engagement.
• Trespass prevention.
• Suicide prevention.
• Level crossings risk reduction.

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

Failure to:
– live within our funding envelope.
– to achieve net receipts from asset sales to support shortfall funding and
– to deliver efficiency savings programme.

Chief financial officer
• Quarterly financial model review.
• Improved modelling relating to material and irregular cashflows with the relevant business areas.
• Regular open and transparent engagement with DfT and HMT with regard to our financial plans.
• Engagement with DfT / HMT to ensure strategic direction and approvals are streamlined; e.g. sale process.
• Value for money is understood within the asset divestment portfolio and approach agreed at BICC.
• Agreement reached with HMG on the property asset portfolio eligible for sale.
• Ongoing engagement with Government to ensure all options are explored regarding asset disposals.
• Rolling out more sophisticated cash flow forecasting tools and encouraging devolved businesses to take accountability for cash forecasting.
• Collateral facility specifics are agreed with DfT with an aim to implement in April 2018.
• Completion of the asset sales programme to meet the targets agreed with DfT and HMT.
• Ensure retained property business is fit for purpose.
• Ongoing development, embedding and improvement of the continuous business planning process.
• Development of early warning indicators for the start of CP6.
• Development of reporting framework for CP6.

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

Group Human Resources director
• Establish the Transformation Directorate, with a defined remit and accountabilities.
• Transformation Working Group established to provide direction to and oversee the development and delivery of transformation activity, with a clear terms of reference and governance structure through to the executive committee and Board.
• Key transformation programmes established supported by underpinning enabling projects to ensure successful delivery.
• Develop and Communicate the Transformation vision, aligned to Network Rail’s strategic objectives.
• Establish and communicate a clearly defined, prioritised portfolio of change activities with accountable owners agreed.
Delivery of our extensive enhancement and renewals portfolios is a key priority for us. New controls and governance arrangements have proved successful over the last 12 months and seen us deliver our largest ever portfolio of works with no major possession overruns.

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

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

Managing train service reliability to meet performance targets remains extremely challenging, with a higher than desirable likelihood of the risk materialising. Mitigations in this area remain a priority over the next 12 months and significant improvement in train performance is expected to provide the platform for CP6 delivery. We remain confident that over the longer term we will reduce risks in this area to within acceptable levels.

<table>
<thead>
<tr>
<th>Failure to deliver the enhancement portfolio to time and cost.</th>
<th>Managing director, Infrastructure Projects</th>
<th>Quarterly business assurance committees (BACs) held in each Region and Programme, and as part of the MD’s IP Executive Leadership Team meeting; Risk and assurance metrics reviewed monthly.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Risks aligned to and reviewed against strategic objectives and risk trajectories in the IP Executive BAC, following the update of the management system in 2017 through the One Vision One Way change programme.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Regular meetings between NR, DfT and ORR to review the tri-partite integrated assurance process. Peer Review process fully embedded and aligned to the Enhancements Delivery Plan.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Implementation of a robust tender review process to assure major infrastructure programme bids and ensure Network Rail is capable of delivering the expectations set out in the business case, along with the anticipated outcomes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ongoing integrated planning processes to assign critical resources at times of peak demand, e.g. bank holidays, with continuing focus on delivery governance (e.g. GRIP, DWWP) and assurance; resulting in 99.5% safe, on time hand back at bank holiday possessions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Development of a portfolio approach to risk and contingency management reflecting industry best practice.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ongoing improvements in the planning process (GRIP 4 Track) throughout the project life cycle with the continuation of GRIP4Track (G4T) across all elements of the programme.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Weekly G4T escalation reviews.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Understanding various access regimes and impact on cost.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Embed risk and assurance metrics into monthly business reviews, reinforcing the quarterly BACs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Application of risk visualisation techniques and monitoring of risk trajectories to manage risk at the IP Executive BAC.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Implementation of the portfolio approach to risk and contingency management reflecting industry best practice and building on in-house capabilities to model project, programme and portfolio risk.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Further development of risk management techniques for major programmes with complex timetable changes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Contribute to the DfTs update to guidance on risk uplifts to support business case submissions and investment decisions.</td>
</tr>
</tbody>
</table>
## Risk management continued

<table>
<thead>
<tr>
<th>Failure to deliver the renewals portfolio to time and cost.</th>
<th>Managing director, Infrastructure Projects</th>
<th>Renewals deliverability reviews of the Strategic Business Plan for CP6 on a route and national basis.</th>
<th>Completion of actions associated with Network Rail’s ‘Must Wins’ as they relate to renewals for CP5.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Continued focus on renewals related delivery risks as part of the ongoing management of risk led by the IP Executive Team.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Management of risks associated with the smoothing of the renewals workbank and transition from CP5 to CP6, to provide assurance to the industry supply chain.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CP6 contracting strategy for IP Track renewals.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Contribute to the DfT’s update to guidance on risk uplifts to support business case submissions and investment decisions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Failing to attract, retain and develop the full potential of our pipeline of talent for key roles; resulting in sub-optimal leadership capability, worse business outcomes and a compromise of our ability to deliver a better railway for a better Britain.</th>
<th>Group Human Resources director</th>
<th>Implement and communicate NR’s strategy to be an employer of choice to emerging talent.</th>
<th>Socialise the strategy to communicate and position NR as an employer of choice to emerging talent.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Heads of Professions appointed to establish and implement career pathways within each profession.</td>
<td>Continue delivery of professions programme identifying and implementing career pathways within each professions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ongoing support and engagement with talent groups.</td>
<td>Develop and deliver early talent engagement strategy.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Developed and agreed group talent strategy and roadmap.</td>
<td>Review and deliver leadership programmes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Revised the list of critical roles that will make the greatest contribution to execution of the strategic plan.</td>
<td>Continue development of networks and alumni for roles in NR professions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Introduced a model to understand and measure the potential of our talent.</td>
<td>Roll-out the potential model to HR and defined managers.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Developed the training material on the potential model for managers and HR.</td>
<td>Continue to rollout SWP.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Process designed for critical role succession planning.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Establish, procure and piloting a Strategic Workforce Planning (SWP) tool to give focus to our talent strategy and initiatives.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Failing to secure employee and Trade Union support for our forward change agenda.</th>
<th>Group Human Resources director</th>
<th>Regular and positive engagement with Trade Unions providing opportunity for bargaining groups to meet early.</th>
<th>Continue positive engagement with Trade Unions providing visibility of major change programmes.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Engagement with Trade Unions to review and update the collective bargaining framework.</td>
<td>Implement and roll-out updated collective bargaining framework.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Roll-out industrial relations learning programme to HR Business Partner community.</td>
<td>Engage HR Business Partners to deliver industrial relations learning to upskill their key frontline manager.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Support the routes to develop and build robust operational contingency plans, including appropriate HR mechanisms.</td>
<td>Business test operational contingency plans.</td>
</tr>
</tbody>
</table>
## Risk management continued

| Failure to recover from a business interruption to pre-defined output levels and within agreed recovery timescales. | Chief financial officer | • Central Business Continuity (BC) team resourced and in place to support the delivery of the Business Continuity Management (BCM) framework and provide expertise and advice.  
• BCM framework designed and tested through route and group pilots.  
• Critical systems and assets identified across the business.  
• Business Continuity plans developed for critical assets.  
• Resilience risks identified, documented and reviewed at business assurance committees.  
• Incident management process reviewed and improved. National Emergency Plan reviewed and updated. | • Testing schedule agreed for critical assets.  
• Desktop testing of all asset recovery strategies.  
• Full scale scenario based testing of emergency response plans.  
• Further Strategic and tactical investment to provide more resilient network and systems based on the highest priority critical assets. |
| --- | --- | --- | --- |
| Unable to achieve TOC / FOC performance targets as agreed with stakeholders, to meet NR’s CP6 business plan trajectory including CP5 exit position. | Managing director, England and Wales | • Delivery of Delay per Incident Programme, including the introduction of Chief Operating Officers and Senior Incident Officers to strengthen service recovery.  
• National Task Force (NTF) agreement for TOCs and FOCs driving increased focus on right time starts as a key performance lever.  
• Agreed joint BTP Industry reviews of all fatalities and attempts to aid prevention.  
• Initial Industry advice and High Level Output Statement (HLOS) setting out the Industry’s performance agenda to CP6.  
• Review of seasonal management process to better align TOC preparedness with the routes.  
• Development of CP6 metrics to better reflect local passenger and freight priorities. | • Route Strategic Plans (RSP) will now drive an update to the joint performance strategies agreed with operators.  
• Introduction of route supervisory boards.  
• System Operator is implementing timetable resilience and performance modelling team to improve detailed challenge to rolling stock specifications.  
• Delivery of the Route Transformation Programme.  
• Roll out of technology to improve our predict and prevent capability such as Remote Condition Monitoring, Intelligent Infrastructure and Whole System Modelling.  
• Alignment of performance objectives across the industry.  
• Focus on response and recovery times when incidents occur.  
• Building on the work of our suicide prevention programme to include trespass.  
• Better understanding of sub-threshold delay through GPS data and new industry wide analysis database.  
• Further trials of traffic management to improve recovery of service. |
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.

The Board considered three years to be an appropriate timeframe. There is certainty over the final year of CP5 and increasing certainty over the first two years of CP6. Network Rail’s proposals for CP6 are substantially similar to the Draft Determination published on 12 June 2018. However as the Final Determination for CP6 has not yet been finalised the Board did not feel able to confirm NR’s viability beyond three years at this stage. 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 2021. This longer-term assessment process supports the Board’s statements on both viability, as set out below, and going concern, made on page 87.

Network Rail is funded in five-year blocks called control periods. This five year block runs from 2014-2019 and the next runs from 2019-2024. The Office of Rail and Road (ORR) determines charges and outputs before the start of each five-year period. In doing so the ORR has statutory obligations with regard to producing a settlement that is equitable to the licence holder, Network Rail. This allows Network Rail a high degree of certainty with regard to funding for its operations and investment activities.

The regulatory process towards setting charges and outputs allows stakeholders to define their required outputs from the network, and governments in Westminster and Holyrood to set out the funding they have available. These are built into Network Rail’s Strategic Business Plan. Once the ORR has determined outputs and charges, Network Rail produces a Delivery Plan. This plan is refreshed by bottom up forecasts on a quarterly basis in order to manage outputs within the resources available. Network Rail has secured a £30.875bn loan facility with the Department for Transport (DfT), which it intends to draw upon to specifically support its investment activities in the period to March 2019. This facility remains within its parameters. Network Rail is also investigating various methods of attracting third party capital to finance enhancements to the railway network including the disposal of non-core assets, planned for 2018/19.

Business plans and financial models are used to project cash flows and monitor financial risks and liquidity positions, forecast future funding requirements and other key financial ratios, including those relevant to our network licence.

Analysis is undertaken to understand the resilience of the group and its business model to the potential impact of the group’s principal risks, or a combination of those risks. This analysis takes account of the availability and effectiveness of the mitigating actions that could realistically be taken to avoid or reduce the impact or occurrence of the underlying risks. In considering the likely effectiveness of such actions, the conclusions of the Board’s regular monitoring and review of risk management and internal control systems, as described on pages 29 to 45, is taken into account.

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

We have set out the details of the principal risks facing Network Rail on pages 40 to 45 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 process considered those combinations of risks which were most likely to lead to severe but plausible scenarios. 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 took into account 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.

A number of mitigating actions were identified including insurance arrangements, re-planning exercises and management of industrial relations.

The time period of three years was selected even though it runs into the next control period, as the impact of some scenarios will be felt beyond the current control period.
### Scenario 1
A train accident occurs as a result of an attributable error to Network Rail which leads to injuries and fatalities to members of the public, reputational damage and ORR intervention.

**Risks:**
- Train Accident (L0)
- Business Continuity Management (L0)

### Scenario 2
Network Rail fails to exit CP5 within the financial and delivery boundaries set, leading to fines, increased regulatory scrutiny, and reputational damage.

**Risks:**
- London Infrastructure Changes 2018/19 (L0)
- Project/Programme delays and/or increased costs (L0)
- Effective Governance of the Enhancements portfolio (L1)
- Great Western Route Modernisation Delivery (L1)

### Scenario 3
Network Rail fails to achieve a suitable settlement for CP6 and is unable to deliver the planned improvements and/or funding is inconsistent with expected outputs.

**Risks:**
- CP6 NR Plan (L0)
- Ready to Deploy (L0)
- System Operator Fit for the Future (L1)
- Future Funding & Outputs Framework (L1)

### Scenario 4
A significant loss of personal or operational information due to a security breach caused by an internal or external threat actor resulting in operational loss, a civil lawsuit and/or EU fines related to GDPR legislation.

**Risks:**
- Cyber Security (L0)
- Information Governance (L0)
- Data Protection Compliance (L1)
- IT Disaster Recovery (L1)

---

**Viability statement continued**

This year we have assessed four severe but plausible scenarios covering fourteen of the principal risks:

This builds on the three severe but plausible scenarios, covering seven risks that were reviewed in the previous year.

---

**Scenario 1**
Non-delivery of planned efficiencies, scheduled cost slippage does not occur and failure to achieve the expected income from asset sales within the anticipated timelines leads to the deferral of projects, a shortfall of cash to deliver the CP5 business plan and a request for more money with corresponding reputational damage.

**Risks:**
- Programme and Schedule Cost Slippage and NR Asset Divestment

**Scenario 2**
A large amount of organisational change either nationally or in a given organisational area, further restrictions on senior pay and reward options from HMG, and/or specific disputes arising from pay negotiations or other business consultations adversely impacts employee relationships and engagement. A national rail strike leads to significant UK economic consequences, loss of talent and disengaged staff results in reduced operational performance and difficulty in maintaining and improving safety. Business continuity issues are also created.

**Risks:**
- Destabilising Effect of Change, Industrial Relations Management, Talent Management and Business Continuity Management Risk

**Scenario 3**
A train accident occurs as a result of an attributable error to Network Rail which leads to injuries and fatalities to members of the public, reputational damage and ORR intervention.

**Risks:**
- Train Accident, Business Continuity Management and Destabilising Effect of Change Risk

---

On the basis of this robust assessment of the principal risks facing the group and on the assumption that they are managed or mitigated in the ways disclosed, the Board’s review of the business plan and other matters considered and reviewed during the year, and the results of the sensitivity analysis undertaken and described above, the Board has a reasonable expectation that Network Rail will be able to continue in operation and meet its liabilities as they fall due over the period to March 2021.

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

_Sir Peter Hendy CBE, chair_
27 June 2018