Delivering an Efficient Railway

Our National Efficiency Plans 2024 – 2029

Contents

Our Plan for CP7 Efficiencies

Foreword

Network Rail's role is to run a safe, reliable, and efficient railway. We have a fundamental responsibility to spend public money entrusted to us as efficiently and effectively as possible, to better serve taxpayers and passengers, drive down costs and be a more dependable partner to government, our customers and the wider rail industry. We have been entrusted with public money and have a responsibility to spend it wisely and to work more efficiently – to do more for less.

The financial pressures on the rail sector and the very challenging wider public finance environment have made this task even more urgent and important, and our wide-ranging efficiency activities will help to provide a solid bedrock for the new Great British Railways (GBR).

This document provides insight into our plans for CP7. It sets out how we will deliver better value for money in everything we do. It sets out how our efficiency initiatives will prepare us for our transition to the new GBR structure. It is a key part of our plan to drive the recovery from the impacts of the COVID-19 pandemic and build a rail network that is reliable, growing and fit for the future.

CP7 Ambition

Our strategic business plan includes a commitment to a further **£3.8 billion** of Operations. Maintenance & Renewals efficiency over CP7 across Great Britain.

We will achieve our objectives for CP7 through:

- Working closely with our industry partners to deliver deeper integration and become a dependable partner for delivery. We will drive greater alignment in ways of working, delivering efficiencies in areas such as access, our property portfolio as well as developing industry standards that utilise the opportunities of rail reform. We will continue the transformation of our industry in readiness for GBR.
- Adopting smarter and more efficient ways of working with our supply chain and developing intelligent client models to form closer collaborative relationships with the supply chain.
- Transforming our capital delivery capability through widespread use of SPEED and PACE to cut the time and cost of delivery; leveraging the advantages of our devolved organisation to provide the right tools and mindset to drive value for money.
- Reducing our annual operating costs and providing better value for money in how we spend our taxpayer settlements.

In total, over the course of ten years through CP6 and CP7 we will have driven robust, sustainable efficiencies that will have **reduced our costs by 23%** and delivered over **£12 billion** of savings for taxpayers and customers.

Building on Success

Through CP6 we have proven our capability to deliver on our efficiency targets. We continue to deliver against our original target of **£3.5 billion*** of sustainable efficiencies.

We have also reacted to the challenging financial climate and committed to an additional £0.5 billion* of efficiency before the end of CP6.

Transforming the Industry

Step change initiatives are required to enable us to meet the challenging level of savings that are forecast in CP7. Industry Reform provides the major transformative change required, building on the opportunities identified by the Plan for Rail.

We have begun the journey to rail reform in CP6, with transformative changes made through our workforce modernisation programmes, and in CP7 we will deliver our share of the £1.5 billion per annum industry target by the end of 2026/27, as well as supporting our colleagues across the industry in delivering the changes needed to deliver a modern, joined-up and efficient railway.

Industry reform is a key enabler for our CP7 efficiencies; in part through structural and legislative changes to the industry, but also within the current industry structure through a more collaborative mindset which considers whole-industry cost and makes smarter decisions with better information on their overall financial impact.

Jeremy Westhorpe

Chief Financial Officer

*in Cash prices

Delivering Our Efficiencies

Building on our strong reputation of success in CP6, we will deliver **£3.8 billion** in efficiency savings by end of CP7 across England & Wales. These savings are divided across three areas which each broadly comprise one-third of the overall savings:

- Efficiencies enabled through Industry Reform initiatives
- Efficiencies driven through National Programmes, delivered within our Regions
- Efficiencies created through individual strategies identified by our Regions and their constituent Routes as part of devolved efficiency approaches

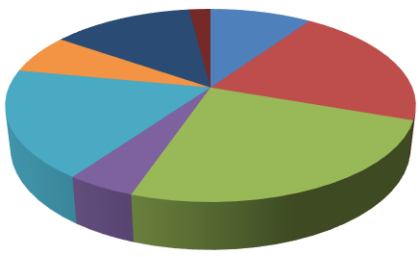
Our efficiency plans allow us to deliver more for our customers whilst delivering value for money for the taxpayer. They will enable Network Rail to play our part in the industry's transition to a dynamic, modern and integrated structure as set out in the Plan for Rail. This results into a final year efficiency of 16% on renewals spend (totalling efficiencies of £2.48 billion) and a 10% efficiency on OPEX (totalling £1.36 billion) against committed and contingent spend.

Our core strategy for CP7 is to utilise world-leading technology, radical alterations to the Industry's ways of working to deliver greater integration and alignment between Network Rail and Operators as well as working in closer partnership with our supply chain to reform the way we deliver our capital projects.

National CP7 Efficiencies 5-year profile (2024/25 – 2028/29)

Year	Y1	Y2	Y3	Y4	Y5	Total
Renewals efficiencies (£m)	237	409	562	602	672	**2,481**
Renewals efficiencies as a % of pre-efficient cost	5%	9%	11%	13%	16%	
OPEX efficiencies (£m)	104	190	284	356	427	**1,361**
OPEX efficiencies as a % of pre-efficient cost	2%	4%	7%	8%	10%	
Total OM&R efficiencies (£m)	**341**	**599**	**845**	**958**	**1098**	**3,842**

CP7 National Efficiencies by Fishbone Category



- Access (9.6%)
- Commercial (20.8%)
- Delivery (24.9%)
- Design (4.6%)
- Technology (18.2%)
- Workbank Planning (6.6%)
- Other (13.3%)
- Scope Efficiency (2.0%)

Fishbone Categorisation

Our plan also assigns our initiatives into Fishbone categories as in CP6. This framework allows us to robustly demonstrate cost and scope efficiencies that are being delivered through positive management interventions, while capturing and articulating other material cost drivers across our business.

In CP7, a quarter of our overall efficiencies will come from more efficient 'Delivery'; completing more projects on time, on budget and to scope that delivers against what is required to modernise the network.

Significant commercial efficiencies will be delivered through smarter ways of working with our contractors and taking a whole-industry approach to our cost base.

What We Will Deliver

Industry Reform

At both a national and regional level, we have identified Industry Reform efficiency savings for both Renewals spend and OPEX, working with our industry partners to maximise the efficiency of the industry overall. This will enable us to collectively deliver more for our customers, for less, as we fundamentally change the way that services are delivered for customers.

Each area of the business has been given a proportionate split of the £1.5bn per annum target (for 2026/27) identified in the Plan for Rail. These will be delivered across a range efficiency areas, including but not limited to:

Access Planning

Closer integration with industry partners to review when we take access to complete work on the network. We will benefit from economies of scale and minimise the impact on our customers.

Joint Property Strategy

We will review our accommodation and operational space utilisation to identify opportunities for co-location with our industry partners and will work with our TOC partners to deliver more efficient operations and maintenance at our stations.

Workforce Management

How we utilise, remunerate our staff and structure our organisation to facilitate a modern and flexible organisation that is safe, high performing, efficient, sustainable, and truly service led.

Using Data & Technology from Trains & Infrastructure

We will use data and technology to better understand the condition of assets and reduce the time our people must spend on the network.

National Efficiencies

We have identified Renewals and OPEX efficiencies that are enabled by nationally driven initiatives, seeking to maximise the benefits of a devolved railway operating under a common framework. These include but are not limited to:

Improved Use of Technology

Regions will work in partnership with the Technical Authority to develop and deploy new technologies from II and utilise the RD&I pipeline. Improvements to BAU operations and the network will be delivered at lower cost and more efficiently.

Supply Chain Operations

Adopting an agile approach to our supply chain operations, applying a central approach where this allows us to leverage our aggregate buying power to drive value while allowing regions the flexibility to engage locally with right-sized procurement solutions.

Technical Authority Standards

Using a more pragmatic, value-based approach to safety standards and reducing the complexity of standards through developing a risk-based approach

Engineering & Other Opportunities

Implementing new innovative approaches to drive asset whole life cost improvements, employing Systems Thinking to enact process improvements and drive savings

Local/Regional Schemes

CP7 represents the continued move towards a devolved railway, and our efficiency plans reflect our most diverse approach to date in delivering cost savings.

- Key initiatives such as planned improvements in Access, Delivery, as well as Commercial procurement and work bank planning have been developed and refined locally with a view to driving optimal outcomes
- Other local initiatives are driven by national themes, such as PACE, MVP or SPEED, but are tested, validated & implemented by local and regional teams

How We Will Deliver

Overarching efficiency strategy

Our overarching strategy for the delivery of efficiency in CP7 can be summarised across four key areas which align with the four elements of our overall approach to delivering these efficiencies:

1. **Transforming our Capital Delivery Capability through Widespread Use of SPEED -** to cut the time and cost of delivery, transform how we engage with our supply chain, reduce duplication and leverage the advantages of our devolved organisation to provide the right tools and mindset to drive value

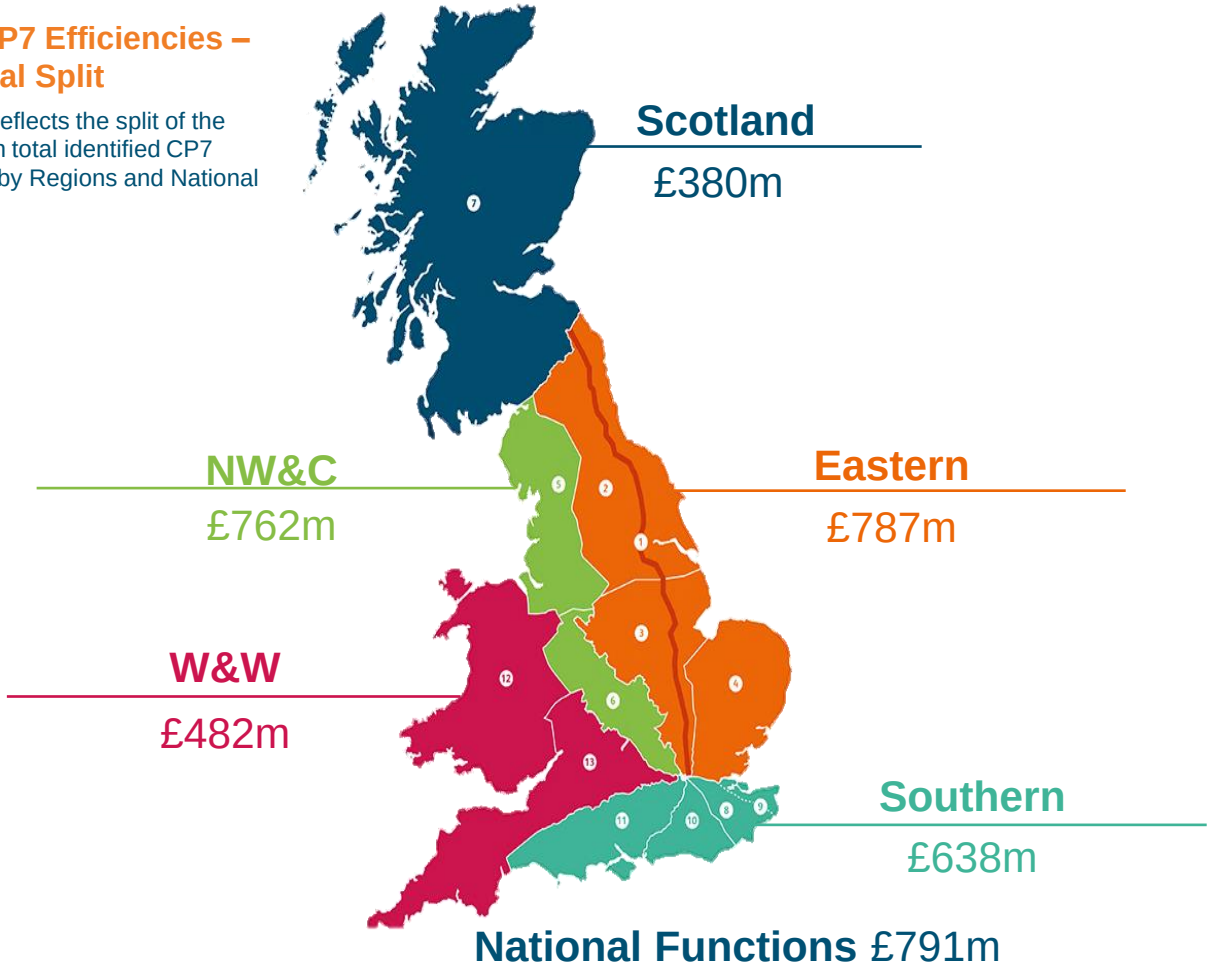
2. **Supporting the Creation of a More Integrated Industry to Maximise the Benefits of Rail Reform –** to drive aligned ways of working including using improved understanding of whole-industry costs to inform decision-making. This will also include smarter access decisions, maximising cross-industry opportunities across our property portfolio and reforming industry standards.

3. **Driving Improved Commercial Relationships to Become a Dependable Partner in the Industry** - Smarter and more efficient ways of working with our supply chain and the development of more agile client models and deeper alliances. We can also better harness the benefits of innovative private-public partnerships.

4. **Leveraging Technology, Innovation and Smarter Working to Streamline Processes and Drive New Efficiencies –** using smarter, more integrated approaches we will equip our front line staff with relevant data to allow more efficient management of our asset base.

Total CP7 Efficiencies – Regional Split

The map reflects the split of the £3.8 billion total identified CP7 efficiency by Regions and National Functions



Delivering at SPEED

Approach

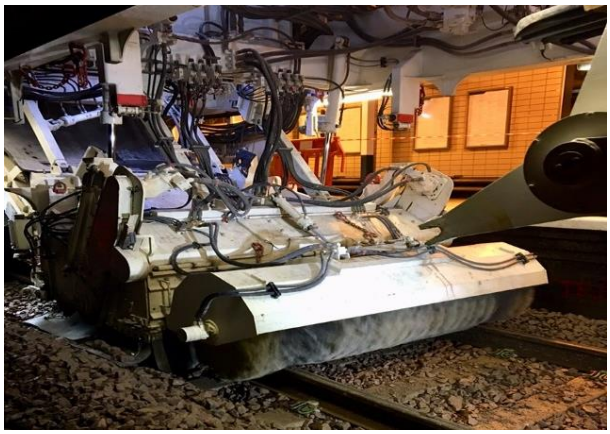
Whilst a post-pandemic recovery in revenue is underway, it will take a significant amount of time to complete. This means that the industry finances remain under pressure, meaning that we must continue the reform of our approach to delivering our work on the network to deliver efficiencies:

- A key element of our drive to deliver better value in capital delivery is **SPEED (Swift, Pragmatic and Efficient Enhancement Delivery)** which has two core principles at its heart – to halve the time and reduce the cost of project delivery.
- Utilisation of the SPEED approach will continue to empower our industry to challenge the way we deliver capital works to maximise efficiencies.
- We are replacing GRIP, the tool previously used to manage project delivery and which is seen as inflexible, with **PACE**, a new tool that allows project managers to adapt their approach, make decisions that best meet the needs of their project and delivery time and cost efficiencies whilst maintaining rigour.
- Another key tenet of the approach to SPEED is **Minimum Viable Product (MVP)** which provides a framework for scoping and undertaking a project from the concept stage through to delivery, against the minimum requirements to meet the objectives of the project.

Our efficiencies

The SPEED approach (as well as the PACE and MVP frameworks which support it) is at the heart of several key CP7 efficiency initiatives including:

- **Capital Delivery Acceleration / Transformation / Intelligent Client –** These initiatives will change the way in which capital projects are developed and delivered applying SPEED and PACE to save time and cost. They will also provide a platform to revise capital project delivery allowing our teams to be less prescriptive, reduce duplication, manage risk appropriately throughout, and strengthen our assurance.
- **Systems Thinking** which will create a culture of fast-paced local improvement in our maintenance delivery organisation to deliver measurable improvements in the delivery of the right work, on time and with the right resource to remove delivery inefficiencies.



Accelerating Our Capital Delivery

Overview

Our ability to deliver the services expected by the communities that we serve at a price that ensures **value for money**, is driven by our ability to deliver capital projects **on time and on budget**.

Capital projects which are delayed and run over budget undermine our credibility, and we must accelerate our delivery timeframes and focus our ability to control costs.

As part of the drive to modernise and 'do more with less' we are revising our delivery structures and processes and applying the principles of **Project SPEED** to halve time and reduce costs by challenging previous thinking and practices to better deliver for the communities that we serve:

- Instituting a common safety method, to ensure requirements are proportionate and uniform, with a commitment to safety.
- Challenging all industry standards, to ensure that they deliver safety and value for money rather than red-tape and waste.
- Simplifying our project management structure to facilitate cross-team working.
- Using our new **PACE** system to manage projects to provide flexibility to our project managers.

Customer Benefits

Our capital projects will be safer, more efficient and agile, delivering better value for money and a better service for customers including via:

- **Fewer delay minutes** due to more efficient delivery of needed renewals and repairs.
- **Better overall customer experience** as repairs are addressed more quickly delivering better service performance
- **A safer work place** for our frontline staff which also contributes to a better performing system overall

Key Success Factors

As this acceleration to delivery will result in changes to processes and standards on safety and working conditions:

- We will continue to **consult with trade unions** throughout implementation to ensure that changes work for all parties.
- We will also need to ensure **maximum uptake** not just through Network Rail, but also the industry as a whole, to ensure that the changes in delivery approach and mindset are industry wide.

£ 300m

"SPEED is a call to arms to cut unnecessary red tape, be bold and purposeful, and empower the railway to be radical in its thinking to halve the time and reduce the cost of delivering infrastructure projects. "

Case Study

Regional Renewal Contracting Strategy

The Challenge

At present, our contracting strategy is based on a one size fits all approach and can often limit the number of non-rail and Tier 2 / 3 suppliers which we engage with.

For our renewals work in particular, one opportunity is to use a cross-portfolio approach more widely than in CP6 which will help us to make better decisions. Not using a cross-portfolio approach leads to inefficiencies both within Network Rail and our supply chain.

Our Approach

- Holding tiered preliminary meetings with an increased number of suppliers, including non-rail and Tier 2/3 suppliers to increase our supply chain base.
- Implementing a flexible approach to contract forms and engagement
- Link the incentivisation of our supply chain to our own time, cost and quality objectives.

Efficient Design

Overview

Critical to delivering projects more efficiently is how we determine 'what we need and how we'll deliver it' as we design and scope our projects:

- We are utilising **Minimum Viable Product** (**MVP)** as a guiding framework to ensure projects are scoped to provide for customers' needs but are not 'gold-plated'
- Additionally, **Network RailDD (Network Rail Design & Delivery),** our in-house central design function, produces design and delivery solutions for regions for selected projects applying **MVP principles** to allow for lower cost, more efficient designs.

In order to deliver MVP, and drive efficiency savings across the asset lifecycle, we will:

- Utilise a continuous improvement approach, always exploring all opportunities to provide better services at a lower cost.
- Challenge management at all levels to find efficiencies, capture these savings and return them to rail users.
- Drive best practice across the industry to drive efficiency savings across the entire network.

Customer Benefits

Applying MVP principles in the design and scoping of projects will benefit customers by:

- Delivering design outcomes at a lower cost reducing taxpayer burden
- Reducing both initial capital investments, as well as whole life asset costs to reduce both the upfront and ongoing funding burden on taxpayers.
- This will allow us to focus our resources on providing better, more reliable outcomes for rail users.

Key Success Factors

- Coordination of MVP principles on a cross-industry basis through the supply chain and trade bodies and unions will be an important factor to cement its use.
- Preventing over-delivery without compromising on safety, security or operations will be critical to applying MVP successfully.

£ 94m

"We will use modern, innovative ways of working to drive improvements across the network"

Case Study

Wales and Western 'Flow' Footbridge

The Challenge

The need for a new design of footbridge was driven by two key factors:

- the drive to improve safety at level crossings and
- the need to find an alternative to the standard, heavy steel footbridge commonly used on the railway which is time-consuming and costly to plan and deliver

Our Approach

- Network RailDD took the lead in the design and construction of a new type footbridge developing the 'Flow' footbridge
- This project challenged us to identify a way to deliver a modern footbridge that is not only quicker to produce but critically, also cheaper and could be scaled up.
- The bridge is made from Fibre-Reinforced Polymer (FRP) – a material that is very strong but lightweight, leading to lower transport and installation costs.
- Critically, the bridge design drives reduced time and cost to produce and install with the aim to install it in days rather than weeks.

Leading the Integration of the Industry

Approach

The Plan for Rail makes the case for changing the rail industry to achieve seven key objectives, of which efficiencies is one.

The focus of Network Rail's industry reform activities covers two broad areas:

- **Workforce modernisation**, which is largely delivered in CP6 is already well developed and plans are being implemented. This includes both pay reform and organisational change for management and maintenance.
- **Structural and Commercial reform**, which requires close collaboration with industry, has kicked off in CP6 but is targeted primarily for CP7 delivery. We have created cross-industry Regional Efficiency Boards (REBs) with our industry partners to develop cost saving initiatives. These are already actively identifying and developing cross-industry efficiencies. Examples include reformed ways of taking access to complete work, sharing of property/offices, stations reform, and insurance procurement reform. REBs are generating opportunities across both Network Rail and operators.

Our CP6 Industry Reform initiatives will form part of the pre-efficient baseline against which CP7 efficiencies will be measured.

Pressures on public and industry finances resulting from the pandemic make this industry-wide drive for efficiency through reform critical to the success of the railway and key to demonstrating value for money to the taxpayers and customers.

As a key enabler of our CP7 efficiency plans, reform-driven initiatives contribute over £1 billion of cost savings. In combination with the reform savings we will deliver by the end of CP6, which CP7 builds on top of, this equates to a planned annual saving in excess of £0.6bn, in line with Network Rail's target share of the £1.5bn industry target. In addition to this, we will continue to support & empower all other areas of the industry to deliver better value for tax- and fare-payers.

Key Efficiencies

In CP7 we will continue to progress against our commitment to deliver our share of the £1.5bn per annum industry target by the end of 26/27 focussing on structural and commercial savings to be made through revisions in approach to key areas such as:

- **Access Planning –** Working with our industry partners to minimise the impact of our vital infrastructure work, we will specifically target efficiencies through improved productivity and improving how efficiently we deliver capital works, taking account of current and future timetables to ensure we identify the optimal times to access the network.
- **Standards and Controls –** Reforming our standards regime will enable us to drive down the cost of operating and maintaining the network. Using a more pragmatic, value-based approach to safety standards and reducing the complexity of standards through developing a risk-based approach to drive cross-industry efficiencies.
- **Joint Property Strategy –** Working collaboratively with TOC partners for more efficient operation, occupancy and maintenance of our train stations as well as offices including rationalisation where optimal. Revising staff timetabling, maintenance contracts and control integration.
- **Workforce Management –** How we utilise, remunerate, and structure our staff to facilitate a modern and flexible organisation that is safe, high performing, efficient, sustainable, and truly service led

Improving Access

Overview

The reform of the railways will deliver the largest change to the approach to access management in the last 25 years. COVID-19 has changed the way the network is used, both in terms of passenger demand patterns and freight service growth.

Therefore, we will take account of current and future timetables to identify optimal access times. We will work across the industry to develop best practice guidance to drive a more coordinated approach delivers better value outcomes for customers and taxpayers. We will also target specific efficiencies through improved maintenance productivity.

Specific initiatives include:

- Improving the use of cross-industry data to make holistic decisions on access that view requirements on an integrated rather than individual basis
- Utilising modern, innovative access strategies which focus on the customer experience and worker safety
- Develop access KPIs to allow for the objective assessment of utilisation and efficiency
- Use of demand-led access programmes to model passenger demand and possession planning to ensure that the strategy chosen is the most efficient and least disruptive.

Customer Benefits

Access related efficiency initiatives will:

- Provide customers with fewer delays and less disruption to their services overall due to greater collaboration across stakeholders
- Reduce the cost and length of infrastructure work, reducing the impact of essential maintenance on customers
- Drive improvements in maintenance productivity through longer periods of access overnight

Key Success Factors

- It will be critical that any changes in approach to access have a positive impact on safety (or at minimum a neutral impact). We will risk assess our proposed changes to ensure that they do not compromise safety.
- It is necessary to engage across the industry to ensure alignment on overall objectives for access. We will jointly sponsor access initiatives with our industry partners to ensure that our organisations are aligned on success criteria.

£ 445m

"It is critical to work with industry parties in order to optimise the access strategy and make the most efficient use of the access available"

Case Study

Devon and Cornwall Railway (Wales and Western)

The Challenge

The railway in Devon and Cornwall has unique characteristics, presenting challenges for access planning.

The remote lines have limited capacity and many spurs, and the Region is also delivering major enhancement works, requiring significant access.

These factors, alongside challenges from changing passenger behaviours and the impact of industrial action, mean we must optimise our approach to access planning.

Our Approach

Wales and Western have completed a pilot initiative to identify access solutions. These have included re-planning a long-distance train service (e.g. start and end services on the Barnstaple Branch) to enable longer periods of access.

Wales and Western are planning to roll this approach out across other routes and will develop a good practice guide to ensure the consideration of all options when planning access to maximise efficiency.

Industry Standards and Controls

Overview

Standards are essential ways of reducing risk and ensuring safety, but there is an opportunity to take a more pragmatic and value-based approach to safety standards without compromising safety performance.

The mandate set by the Plan for Rail provides us an opportunity to work with stakeholders to improve both safety and delivery performance while reducing costs.

To achieve our goal of delivering pragmatic, joined-up and world leading standards we are:

- Building on our relationships with relevant stakeholder bodies to create mutual understanding of issues, and as the first step to sector-wide harmonisation.
- Working across Network Rail to ensure that teams at all levels are able to have their voice heard in 'Standards Steering Groups'.
- Developing a risk-based approach to challenging our existing standards to both identify 'Gold Plated' standards and also to ensure that areas where regulations fall short are brought up to the requisite level.

Customer Benefits

- Delivering Savings for Taxpayers – Focus on standards will drive costs down without impacting safety.
- Leading the industry **–** Upcoming Industry reforms offers us the opportunity to lead the way in setting standards
- Industry Wide Culture shift **-** Building on the improvements to culture over CP6, we can ensure that our staff feel confident to challenge unnecessary standards, promoting efficiencies

Key Success Factors

- Understanding legislative changes which may increase costs rather than reduce them. It will be important to understand any such change as early as possible and work to find the most cost-efficient way of implementing new requirements.
- Working with our stakeholders including trade unions to ensure that standards changes are robustly considered, tested and validated to not compromise safety
- Working across industry to ensure a common approach to any legislative changes to ensure that they don't disrupt our focus on delivery.

£ 156m

"We will take a more pragmatic, proactive and value-based approach to safety standards to drive down our operating and maintenance costs"

Case Study

Wales and Western Fixed Telecoms Network

The Challenge

At the beginning of CP6, Wales and Western worked to a specific standard for the Fixed Telecoms Network (FTN) which transmits key information for the signalling system.

Battery back-ups are used to provide critical life support to the FTN when the main power supply cannot function and enables continued operations under battery power for a limited period.

The standard mandated that a 12-hour supply was required to be provided for FTN in all locations with no risk-assessment required to assess whether a smaller back-up supply could be used.

Our Approach

During CP6, the standard was reviewed and this resulted in an updated standard being implemented.

The new standard requires a risk assessment to be completed at each site, with four different types of site identified each with their own specific requirement.

This then led to a risk-informed decision on the size of the back-up required to be provided and can deliver cost efficiencies where a smaller supply is deemed as being viable.

Joint Property Strategy

Overview

Industry Reform will allow Network Rail and operators to better coordinate property requirements to drive efficiencies through their collective scale and buying power also providing a better platform for industry collaboration.

Changes to the way we manage our property base will drive significant efficiencies for both customers and taxpayers.

- We have already generated savings in CP6 through an Industry-wide review of accommodation requirements
- In CP7, we will continue to develop and roll out a plan of workplace consolidation to drive savings internally and across the industry

We will drive cross-industry collaboration in our property management by:

- Continuing to support cross-industry Regional Joint Property Boards to deliver changes, including sharing key office accommodation with other industry stakeholders
- Using the land we already own more effectively to create social benefit, new tourism and leisure hubs using easy access leases to provide opportunities to local businesses and communities
- Repurposing outdated/unused ticket offices into modern commercial hubs
- Reducing our carbon footprint through the use of Solar Cells to generate energy

Customer Benefits

- More efficient use of Property Portfolio – Working more closely with industry stakeholders, sharing offices to ensure that our property portfolio is leaner.
- Cross-industry collaboration – By creating shared workspaces, we will enable closer working as one team and deliver an enhanced customer experience
- Developing unused land – Collaborating with local community groups to build housing and provide easy access leases to local businesses

Key Success Factors

- Regional Joint Property Boards will be essential to secure industry buy-in to remove inefficiencies and create benefits by creating a coordinated industry vision.
- We will ensure that we have a robust method of forecasting headcount and the corresponding space requirements prior to consultation and implementation to ensure any office rationalisation is future-proofed

£ 146m

"Working with our industry partners, we have identified areas within our property estate where closer collaboration will drive efficiencies"

Case Study

Southern - Joint Accommodation Strategy

The Challenge

Southern and its industry partners have identified that there are under utilised working spaces within their local office portfolio which has resulted in rent, rates and utilities cost inefficiencies.

Our Approach

Southern analysed its office portfolio to identify opportunities to increase efficiency through better use of facilities and is working with industry partners to on a joint approach to sharing access to underutilised spaces.

This proposition is appealing to Southern's industry partners given rental costs are lower than their current premium office space.

As a result of this work joint agreements were reached allowing for more efficient usage of our office space. This also supports a key tenet of the Plan for Rail of having multiple industry partners under the same roof, collaborating and working together.

How Are We Becoming a Dependable Partner

Approach

A key source of efficiencies in CP7 is our new approach to delivery, commercial agreements and the interface with our supply chain which is being enhanced to meet the needs of our modernised railway and drive value for customers and taxpayers:

- **Improved engagement with the supply chain** will help us continue to build a collaborative, agile working approach and drive down contractor costs. Suppliers will have more visibility of our workbanks and can better plan their resourcing. This will lead to improved confidence to invest in new skills and technology to deliver our projects
- **We will make it easier for third parties to invest in projects** on the railway, including by improving engagement through our specialised business development teams, simplifying standards, and offering projects out to market
- **We are also harnessing the benefits of innovative commercial** approaches to delivery such as private-public partnerships which can help us deliver projects on a transparent, cost-efficient basis

Our efficiencies

The key CP7 efficiency initiatives which are driven through our focus on being a dependable partner are:

- **Commercial and procurement (C&P) strategic approaches** – both nationally (via the central Network Rail functions) as well as through Regional Procurement Strategies. These will consider workbank risk and suppliers' capabilities to drive better value through procurement and incentive regimes
- **Driving a Digitally Connected Railway (Project Reach) –** we will secure private sector funding necessary to upgrade the telecoms infrastructure along the rail network without requiring additional subsidies from government or fares from passengers
- **Integrated planning tool -** which will be used to integrate the network into cross-discipline, task focused teams to drive more efficient delivery
- **High Street Principles (HSP)** – Greater use of HSP will remove barriers in assurance, procurement, and delivery, to open up railway projects to a greater pool of suppliers and drive better value for money.

Commercial and Procurement (C&P)

Overview

We work with a diverse range of supply chain partners across our five Regions. For certain significant procurements we apply a central approach to leverage our aggregate buying power to drive value while allowing regions the flexibility to deliver their objectives.

This approach also allows us to build innovative, strong supply chains to drive efficiencies that benefit both local communities and the economy as a whole. We will:

- Focus on using diverse business models, ensuring our procurement exercises aren't prescriptive in what systems we use to draw out efficiencies.
- Retain our focus on safety as a priority outcome for procurement processes.
- Complete the devolution of purchasing authority to our Regions to enable locally driven procurement activity to drive efficiencies.
- Structure our procurement exercises to incentivise the use of technology and data to reduce waste, improve customer satisfaction and drive value.

Customer Benefits

- We will deliver better procurement outcomes, both in terms of output quality and lower whole-life costs allowing savings to be reinvested in the network, improving performance
- Suppliers will have more visibility of our workbanks to plan resourcing. This will lead to improved confidence to invest in new skills and technology to deliver our projects

Key Success Factors

- We will need to strike a balance between our new requirements under upcoming legislative changes to procurement, and supplier confidentiality. We will work proactively with our partners to agree solutions.
- Ensuring Regional buy-in to the final stages of devolution to mitigate any potential disruptions. Our national C&P team will work closely with both Regional leadership and C&P teams to agree future ways of working

£ 250m

"In partnering with our supply chain, we will seek to create real opportunities for innovation and help drive change."

Case Study

Eastern Regional Procurement Strategy

The Challenge

It is recognised that Eastern's legacy procurement approach did not fully consider the railway as a system, nor did it take on the impact to passengers, the supply chain or sustainability to the fullest extent possible.

Therefore, going into CP7, our procurement activities will share the same CP7 strategic focus areas, with flexibility, commercial tension and performance-based incentivisation at the core.

Our Approach

We will look to align workbank requirements regionally with where supply chain capabilities are strongest and support our collective regional objectives through the use of targeted commercial levers in our contracting approach.

For the SBP workbank in particular, we will be looking to establish long-term partnership arrangements across the individual disciplines which make up the rail system, and support this cultural change.

Digitally Connected Railway (Project Reach)

Overview

Project Reach will deliver a comprehensive upgrade of our trackside fibre cable and wireless infrastructure to create a safer, more modern and digitally-connected railway.

Project Reach will utilise private sector funding and expertise, thus reducing reliance on subsidies from government or passengers to drive efficiencies:

- Reach will deliver state-of the art digital infrastructure, without forcing a decision between capital investment and operational spend reductions.
- We are identifying long-term private sector partners, with the expertise and funding necessary to work in partnership with us.

£ 344m

"We get a cutting-edge telecoms infrastructure, the private sector partner gets a great business opportunity, train passengers get an improved service for years to come, and the taxpayer saves a significant amount of money."
– Andrew Haines, CEO - Network Rail

Customer Benefits

- Savings generated from a third party investor's contribution (compared to direct funding) will enable more investment in infrastructure for our customers and better performance.
- The project will facilitate the live monitoring of the network to allow for faults to be identified and located in real time, reducing the need for manual inspections – creating a safer railway.
- Enhancing telecoms infrastructure will enable an improved operational railway - Trains, signalling and level crossings will be better connected, reducing delays and disruption
- Enhanced connectivity in support of the government's commitment to roll out gigabit capable connections across the UK.

Key Success Factors

- It will be important that the REACH proposition is successful for both Network Rail and the private sector partner both in driving efficiencies for CP7 and beyond and in demonstrating to the market that this arrangement is an attractive option
- Connectivity solutions delivered by REACH must be sufficiently robust to drive confidence in stakeholders and passengers to ensure project can become a benchmark

Engineering Innovation

Overview

We have industry leading, in-house engineering expertise which we will leverage to deliver efficiencies, with a focus on improving productivity and value for money for the taxpayer.

Our innovative engineering solutions are centrally driven, but locally deployed in our Regions and are aimed at:

- Driving asset 'whole life cost' improvements and efficiencies from better coordinated maintenance
- Providing innovative solutions to renewals and maintenance problems, improving reliability and reducing requirements.

To develop solutions that will drive the outcomes set out above we will:

- Undertake robust financial assessments of revised processes and ensure they are locally driven to deliver the best value and savings
- Strictly review each innovation/improvement to ensure it will meet pressing requirements.
- Ensure that the innovation pipeline is proactively managed and is meeting the network's requirements.

Customer Benefits

- We will deliver measurable reductions in costs as a result of increased productivity and more efficient design processes freeing up funds to be invested in other areas
- Innovative engineering solutions will result in fewer delays and cancellations, providing a better service for our customers.
- Reducing the maintenance interventions required for the network, improving productivity and performance.

Key Success Factors

- Working with the industry – Iteratively work to ensure we respond with agility to the needs of the industry as a whole.
- Integrating new Industry Standards – Focusing on innovative engineering solutions in step with changing industry standards
- Trade union engagement – We will proactively engage with trade unions to ensure that they are fully consulted as required on our engineering solutions with safety as our key priority.

£ 46m

We have industry leading in-house engineering expertise which we will leverage to deliver cross-industry efficiencies, focussing on improved productivity and driving better value for money for the taxpayer.

Case Study

Switching and Crossing (S&C) design standard

The Challenge

The current industry standard Switching and Crossing (S&C) infrastructure has high wear, high capital costs and a risk of crossing failure.

Our Approach

We worked to redesign the standard S&C design, creating the Network Rail60 Mk2, which has a compatible footprint, a tried and tested switch design and an optimised crossing system.

To match the needs of the industry we have also worked to develop different options for consumers, allowing them to select specifications that meet their individual requirements.

Overall, these changes will allow for a more reliable and flexible Switching and Crossing infrastructure, a key part of our day to day maintenance work.

How We're Using New Technology, Innovation and Smarter Working

Approach

We are developing a portfolio of new technologies and approaches to speed-up our work, on and off the track including enhancing how we capture and use asset data to optimise our approach to maintenance and renewals:

- Our new technologies, such as improvements in how we capture and interpret data on the condition of our asset base (as well as drive remediation action), will enable us to deliver the renewals and maintenance required to support safe and reliable train services more efficiently. This will enable us maximise the value from our taxpayer settlement.
- We will implement streamlined processes and structures that make us more agile as an organisation, and more effective at what we do, reducing costs and addressing issues more effectively
- We will implement better planning processes, complete better deals and produce better designs – that will allow us to deliver our plans for customers at lower cost

Our Efficiencies

The key CP7 efficiency initiatives driven by technology, innovation and smarter working include:

- Intelligent Infrastructure, driving digitisation in asset management to allow better informed, more timely decision making. This will work with the Infrastructure Monitoring programme to improve the delivery of trackside and other asset based work
- Our Research, Development and Innovation (RD&I) programme, which has driven step-change efficiencies in CP6 and has a strategic pipeline for CP7 aimed to deliver significant cost savings via investment in Innovation Programmes such as Shift2Rail, and Target 190+ which will reduce signalling whole life costs
- Electrical Safety Delivery (ESD), aimed at improving electrical safety by simplifying the process of switching off the electrical supply to the railway saving time and improving safety
- The Digital Factory programme, which aims to accelerate digital adoption across Network Rail and the wider rail industry through the adoption and convergence of digital services and approaches

Intelligent Infrastructure

Overview

Intelligent Infrastructure (II) will transform the way we manage our asset base and allow us to use our maintenance time more effectively, focussing on reducing customer delays.

Using technology, we will turn data into actionable information so we can work safely, smartly, and seamlessly.

We have already launched over 100 digital transformation projects to improve asset management using innovative technology, and in CP7 we will build on our successes by focusing on five key themes:

1. Improving our interventions through the consolidation and exploitation of asset condition and usage data to optimise asset repairs and enhancements.
2. Integration of planning across the industry, aligning access and resources.
3. Facilitation of real-time reporting of conditions to facilitate greater safety and efficiency.
4. Enhancing network resilience through tackling crime hotspots to the impacts of climate change.
5. Finalising our transformation plan to meet regulator and customer requirements.

Customer Benefits

Innovation will allow us to benefit from technological advances and improve our productivity by:

- Better equipping maintenance teams with data to plan and fix faults before they happen, improving performance.
- Improving safety by reducing asset failures as teams will be able to schedule maintenance work with improved visibility of what, where and when assets need repairing
- Allowing us to do more with less, freeing up resources for further investment to benefit customers.

Key Success Factors

- Collaboration – Our central II team will work collaboratively with our Regions to optimise efficiency opportunities in each region working with regional asset management leads and engaging with the II team's Steering and Working Groups.
- Testing - We will robustly test the new systems to ensure that they are built to last and avoid rapid obsolescence.
- We will proactively engage with trade unions to ensure that they are fully consulted on the deployment of new solutions with safety as our key priority.

£ £41m

"We're using technology to turn data into intelligent information so front line and supporting teams can work safely, smarter, and seamlessly."

Case Study

Citadel

The Challenge

As part of the II programme we were challenged with developing a user friendly digital tool to efficiently manage operating property.

It was important that the tool could effectively arrange and harness the wealth of asset information at hand to the benefit of our operations

Our Approach

We worked to redesign the standard S&C design, creating Citadel was developed to manage our operational property portfolio both on the ground and 'in the books' using the most up to date digital and technical approaches.

Citadel incorporates AI-enabled risk identification, 3D augmented reality views, geo-location and portfolio inventory system interfaces with a user friendly platform to make monitoring asset condition easier and more accurate.

Research, Development and Innovation (RD&I)

Overview

Our RD&I Portfolio is already driving savings for rail users, with CP6 projects already deployed across the industry ranging from using deep learning algorithms to predict false positives in rail clamp inspections, to miniaturised stop lights and cost efficient electrification.

To ensure RD&I can continue to provide world-leading technologies in CP7 we will:

- Work across Network Rail to expedite the roll-out and regional uptake of RD&I projects to fully realise benefits
- Be responsive to critical needs of front-line workers with a commitment to meeting the technological challenges rather than to impose developments on them.
- Create common requirements across the industry to facilitate RD&I's impact and to adoption.

Customer Benefits

- A more efficient, technologically advanced railway which is able to continuously improve is better able to serve its customers through a more reliable service.
- Reducing BAU costs to allow investment to be directed to other critical areas, improving service quality and network performance for customers.
- Improving safety for workers through reducing time on track completing surveys of the infrastructure.

Key Success Factors

- Driving Adoption across the Industry – Our portfolio can only drive efficiencies if it is used, and we will work across the industry to ensure our designs meet requirements and their benefits are fully realised.
- Providing the resources needed to our central RD&I teams to sufficiently engage with Regional teams – ensuring that our teams have the resources necessary to keep innovating.
- We will proactively engage with trade unions to ensure that they are fully consulted on the deployment of new solutions with safety as our key priority.

£ £34m

"RD&I is critical to the future of rail and we are building long-term solutions in areas such as environmental sustainability, affordability, reliability and safety."

Case Study

Plain Line Pattern Recognition (PLPR) Deep Learning

The Challenge

Every year there are over 130,000 rail clamp inspections where damage is suspected. Of these, nearly 50% are false positives, caused by debris. This results unnecessary time of boots on ballast, causing delays and safety risk.

Our Approach

Through a novel, performance-based supplier contract (with RD&I funding) we developed an AI deep learning algorithm to better detect false positives.

The use of the algorithm ultimately resulted in a 98% reduction of false positives which has significantly increased the efficiency of Plain Line Pattern Recognition inspections freeing up both time and capital for alternative projects.

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Electrical Safety Delivery (ESD)

Overview

The ESD programme underlines our relentless focus on workers' safety – ESD will implement new technologies and processes to ensure frontline workers can work efficiently and safely.

ESD will roll out innovative technologies to allow for 'safer, faster isolations', through remote securing, earthing and shorting to enable greater safety and a more efficient, reliable network. To do this we will:

- Finalise deployment of ways of working structures to increase electrical safety competence
- Deploy remote securing on overhead line equipment, digitising the process by which electrical isolations are made.
- Complete the rollout of the new remote earthing process
- Deploy local securing technology for conductor rail locations and deploy remote shorting.

Customer Benefits

- A safer more reliable network, driven through safer, more efficient isolations, reducing delays and operating costs
- We will complete more maintenance work and reduce the risk of possession overruns via simplifying and accelerating the electrical isolation process.
- Savings on compensation paid to operators for line overruns, delivering better value for money.

Key Success Factors

- **Stakeholder buy-in** - Engaging with various stakeholders to maximise the uptake of ESD, facilitating efficiency and safety enhancements throughout the network.
- **Trade unions** - We will engage with Trade Unions to ensure the impacts of ESD changes are understood, particularly how the solution will work and guarantee continued safety levels.
- **Transparent advanced planning** – It will be critical that we have the access required to install the new equipment agreed to ensure timely delivery. We will build these into our Regional cross-asset access plans at an early stage to ensure transparency.

£ 38m

"Network Rail is relentless in the pursuit of safety from electrical danger – everyone home safe, every day"

Case Study

Single Approach to Isolation (SAI procedure)

The Challenge

The legacy process to undertake isolations is a labour-intensive, manual process. Automation could unlock benefits, notably in terms of safety and speed at which a compliant isolation can be implemented.

Our Approach

Through the SAI, a risk-based methodology approach, we are enabling electrical safety improvements associated with planning and implementation of isolations of the traction power supply via:

- Improved processes for electrical risk assessments
- New competencies for risk assessor/approver roles
- Enhanced electrical control measures and training

The above are expected to improve safety overall and provide a uniform approach while driving efficiencies

Infrastructure Monitoring (IM)

Overview

We will use IM to leverage real-time asset condition data to more accurately gauge when and what type of maintenance works our assets require.

We are committed to cross-industry collaboration and greater use of data allowing our staff to spend less time on the network. This will result in fewer delays through the use of dedicated digital inspection teams.

To deliver better generation and use of asset data to drive efficiencies we will:

- Better exploit in-service trains and support with dedicated digital inspection units to collate more complete data sets
- Replacing the life expired IM fleet and monitoring equipment.
- Integrate the Industry's expertise as one service provider
- Delivering significantly more monitored miles changing from 4-8 weekly monitoring to daily exceedance alerts

Customer Benefits

Transforming to how we monitor infrastructure will:

- Reduce delay minutes by allowing our engineers to focus on fixing faults (instead of finding them) resulting in quicker issue resolution and better performance.
- Increased safety by ensuring that our workers spend as little time in potentially dangerous work as possible.
- Lower operational costs through less time needed to find and fix faults

Key Success Factors

- It will be important to secure cross industry agreement to ensure that the new technologies targeted are agreed as key priorities.
- It will be essential that we provide the required resources to maximise benefits of II – ultimately we aim to lower boots on ballast by 500k hours pa and drive improved safety metrics
- We will engage with our Trade Unions to ensure that the impact of this change is understood, particularly how new solutions will work in practice. We will guarantee continued levels of safety using an agreed training programme.

£ 21m

"Our Infrastructure Monitoring programme is essential for us to drive a more efficient railway – from trains that use ultrasound to find faults within the rails, to those that monitor and record track geometry."

Case Study

Asset data as a service

The Challenge

We have traditionally relied on computer-driven hardware/equipment to collect and gather data relating to the condition of our asset base. This approach is both expensive and prone to technical obsolescence

Our Approach

We will be adopting a selective approach of buying data as a service to support our infrastructure monitoring programme.

Purchasing data as a service, instead of purchasing equipment to collect this data, will allow us to collect, analyse and communicate information on Network Rail's infrastructure with informed decisions to be made in a way that enhances safety and better balances cost, risk, performance and impact on project delivery.

Digital Factory

Overview

We require a 21st Century approach to harnessing digital solutions to solve problems and transform our business – Our Digital Factory initiative aims to do this.

Digital Factory services aim to accelerate digital adoption across Network Rail and the industry by adopting digital services and approaches.

We initiated Digital Factory in CP6 and it will be scaled up in CP7 to embed technology including:

- Application development services delivering coding, networking and mobile solutions to digitally equip our workforce.
- An Application Programme Interface (API) platform which enables syncing of data between services, apps and devices.
- Automation services developing robotic tools, utilising AI and machine learning saving time and resources.

Customer Benefits

Our Digital Factory aims to reduce the amount of time taken to complete essential business activities by:

- Optimising operational performance across our internal IT estate through the rationalisation of legacy services
- Creating a digitally equipped workforce to drive faster and more informed decision-making and resource allocations
- Drive cheaper and more reliable data services increasing network reliability while reducing costs.

Key Success Factors

- We will use Digital Factory as a catalyst for the digital transformation of the industry, driving digitisation
- Working collaboratively across Regions to identify issues in need of digital solutions.
- Knowledge sharing - to prevent skills which we have built up over time disappearing from the business.
- We will work closely with partners and our trade unions to develop solutions and agree any changes to standards required to formally rely on digital information.

£ 9m

"We will be nimble in our development and delivery of targeted new digital products and services to support our business in driving savings in CP7 and beyond"

Case Study

Safer, Faster Isolations – Remote Securing App

The Challenge

The process for securing the network is costly in terms of time and resource required - a digital solution is required.

Our Approach

Digital Factory has been supporting the development of an app ('App' and 'App2i') which will assist front line staff in carrying out 'Remote Securing' from their handheld devices as part of isolations for maintenance or upgrade works.

A world-leading technology, the UK will be the first railway worldwide to use an app to remotely secure and short/earth an isolation

The ability for frontline staff to process key securing data on handheld devices is expected to unlock significant benefits, notably in terms of the safety and speed at which a compliant isolation can be undertaken.

Regional Highlights

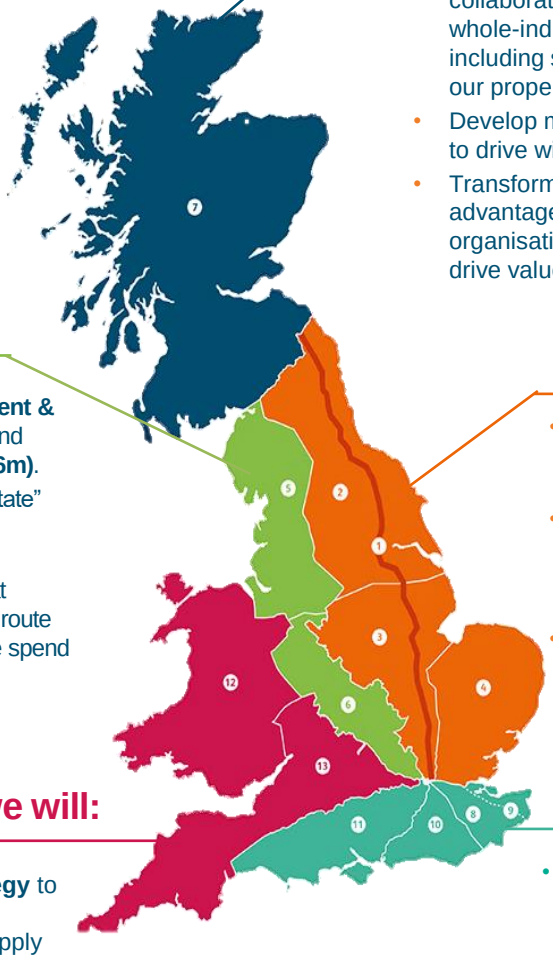
Our devolved railways

CP7 represents the continued move towards a devolved railway – regions operating under a common framework and with national support but delivering individual strategies tailored to their local needs. Combining devolved approaches with an increased focus on benchmarking allows us to be more agile in identifying areas of best practice and then share these across the business.

Our efficiency plans reflect our most diverse approach to date in delivering cost savings. The below sets out a selection of large value efficiencies that each region will be targeting in CP7.

In Scotland we will:

- Support the creation of a more unified industry through collaborative working, improving our understanding of whole-industry costs to make more efficient decisions, including smarter access decisions and through our property portfolio **(£77m).**
- Develop more agile client models and deeper alliances to drive win-win commercial relationships **(£16m).**
- Transform our delivery capability by leveraging the advantages of industry reform and our devolved organisation to provide the right tools and mindset to drive value **(£120m).**



In NW&C we will:

- Build a more agile **Capital Investment & Delivery model** to promote scale and agility in resource deployment (**£226m)**.
- Implement a cross-industry "one estate" approach to **property** sharing key offices/operational spaces (**£80m)**
- Deploy **Value of Service,** a tool that assesses the relative value of each route to maximise value on everything we spend (**£62m)**.

In Eastern we will:

- Build on CP6 Enhancements successes by evolving the principles of **MVP** across CP7 (**£55m)**.
- Apply **SPEED** to improve access/possession management, upskill our capability base and cement a cost-conscious culture (**£54m)**.
- Use **PACE** to reduce the major project delivery time, while still ensuring high standards of safety, quality, and cost control (**£50m)**.

In Wales & Western we will:

- Use our **Intelligent Client strategy** to shape a leaner and more agile organisation and diversify our supply chain to drive innovation, safety and agility in our projects (**£82m)**.
- Improve how we **prepare and plan** work including possessions and automate planning and admin processes (**£45m)**.
- Work with GWR to create an **Integrated Station Plan** for more informed and joint decision making at stations (**£8m)**.

In Southern we will:

- Use our new integrated operating model - **Southern Integrated Delivery (SID)** as the foundation of our renewals efficiencies (**£378m).**
- Introduce an additional **Mobile Maintenance Train** to deliver higher standards of maintenance in a safer and more efficient manner (**£9m)**.
- Utilise new signalling software to support our control centres and reduce workloads via automation (**£4m)**.

Intelligent Client

Wales and Western

Overview

Wales and Western's flagship efficiency initiative for CP7 is the implementation of a fundamentally revised approach to delivery of our capital works portfolio.

The way we renew and enhance our railway needs to transform to meet the changing needs of our industry. We must deliver projects more efficiently, quickly and safely. We also want to offer rewarding careers for our people with clear purpose, removing duplication and frustrations with existing ways of working.

Our Intelligent Client strategy will achieve these ambitions and will be the foundation of Capital Delivery projects in CP7 and onwards.

Customer Benefits

We will maximise every penny of our CP7 settlement to provide value for money delivering four key outcomes:

1. **Safety –** We will maintain and improve on our safety record for project delivery
2. **Efficiency –** Our more agile, leaner organisation will relentlessly focus on delivering value for money via partnership with our supply chain, which we will diversify with new suppliers to deliver innovation
3. **Culture –** Creating a highly skilled, empowered and diverse workforce
4. **Sustainability –** Designing and constructing our infrastructure sustainably

Key Success Factors

We have carried out a procurement exercise to identify, assess and select our supply chain partners who we will work with throughout CP7. These contracts establish how we will work together and will be key to our success in CP7.

This means Network Rail, as an Intelligent Client, can be less prescriptive in our specifications to our supply chain and focus on management and assurance of project delivery.

We will engage with our respective Trade Unions to ensure that the impact of this change is understood and can be implemented in a controlled way with safety as our highest priority.

£ 82m

'The way we renew and enhance our railway needs to transform to meet the changing needs of our industry's funders, passengers and customers. We must deliver projects more efficiently, quicker and safer.'

Intelligent Client Consists of:

- Optimising how we package and deliver work
- Being more flexible in how we specify and design infrastructure, with a focus on designing to the MVP
- Being more flexible in how we build infrastructure, including using modern methods like pre-fabrication
- Strategically reducing our tender activity by 1% to reduce the administrative burden
- Using different contracting approaches to effectively incentivise the supply chain
- Using innovation and technology improvements to reduce the whole life costs of assets

SPEED

EASTERN

Overview

In Eastern, we will implement SPEED, which is the One Team approach between route and deliverer, for our renewals and maintenance work.

SPEED is a fundamental change to the way in which we approach delivery which focuses on streamlining processes with the ambition to 'halve the time and reduce the cost' of delivering our capital projects.

We are confident that SPEED will help us to create a 'One Team' culture whilst improving our access and possession management to allow us to work more collaboratively and reduce our overall costs.

Customer Benefits

- **Value for money** - We will be able to reduce infrastructure delivery times by cutting unnecessary red tape allowing us to be more efficient in our planning and delivery and maximising the value of our taxpayer settlement.
- **Performance improvement -** We can deliver our projects quicker, helping to reduce disruption to our customers.
- **Service quality –** Our 'One Team' culture we will create conditions for further efficiencies and enable us to focus on delivering a high-quality service for our customers.

Key Success Factors

- Eastern is one of the early adopters of SPEED, and Our Agile Client (ACE) model enables our people to demonstrate SPEED behaviours – its uptake will be key to our success
- Our SPEED Benchmarking KPIs measure the challenging target rates that project teams must achieve and will be key to gauging the relative success of the initiative.
- Collaboration and knowledge sharing – Our integrated approach involving assessment, planning, implementation, monitoring and sharing best practices is key ensuring a tailored approach for our region, while still leveraging the benefits of the overall SPEED programme.

£ 54m

"SPEED is a call to arms to cut unnecessary red tape, be bold and purposeful, and empower the railway to be radical in its thinking to halve the time and reduce the cost of delivering infrastructure projects"

Southern Integrated Delivery (SID)

SOUTHERN

Overview

In Southern, drawn from lessons taken from many industry sectors, we are creating a renewals Enterprise based on 'Project 13' principles and recent government initiatives including TiP 2030 and The Construction Playbook.

Four Tier 1 supply-chain partners, along with the Network Rail Works Delivery partner, will form an innovative performance-based alliance to deliver the Southern Region's renewals portfolio for the next ten years. The Enterprise seeks to make a transformational step change in how renewals work is delivered by merging the capabilities of both Network Rail and the supply chain to develop an integrated and coordinated approach to delivery.

Efficiencies have been mapped against the fishbone categories, and are grouped as follows:

- **Efficient Contracting** – Creating a common contracting approach to both incentivise suppliers and align delivery
- **Standardisation** – Increasing repeatability of work through implementation of MVP and smarter surveys.
- **Multi-Skilled Structure and Streamlined assurance** – Leveraging the combined skills base of Network Rail and our supply chain and taking a risk-based approach.
- **Digitisation & Innovation** – Creating a common data environment between ourselves and our Supply Chain
- **Integrated Planning & Site Productivity** – Creation of an Integration Access Plan to optimise access

Customer Benefits

The model will make the best use of resources and maximise efficiencies, with partners collectively incentivised to deliver value for our taxpayers and the right outcomes for passengers and freight

Key Success Factors

To be a successful enterprise we have identified 9 principles which describe our approach, our ethos and our culture

The 9 principles were collaboratively developed with Network Rail colleagues as well as the supply chain

£ 378m

'Southern Integrated Delivery will be a fully integrated team that will bring together the strengths, capabilities and knowledge of the Supply Chain and Network Rail.'

SID 9 Principles for success

How we work:

1. **Collaborative** – we work together to become much more than the sum of the parts
2. **Aligned** – we understand each other's perspectives and work as one team
3. **Agile** – we are able to respond to changing needs as and when required

How we will develop:

1. **Innovate** – we will innovate to add value
2. **Digitalise** – we will use digital technology to join things up
3. **Learn** – we will pro-actively learn together and work with other industry leaders to improve

How we will succeed:

1. **People focused** – we will be inclusive and value the views, knowledge and expertise of all contributors
2. **Incentivised** – we will reward our partners and people for the value they collectively create
3. **Outcome-based** – we will deliver affordable solutions that achieve best whole life outcomes

Capital Delivery Transformation

North West & Central

Overview

In North West and Central, we are fundamentally transforming the way we deliver capital projects given our current one-size fits all approach has resulted in inefficient methods of allocating capital works.

Our current approach limits incentive to challenge on scope and cost and we are limited in our ability to re-allocate resources presenting barriers to delivery.

Delivering this transformation will involve three phases:

- **Phase 1** – Intelligent Client Operating Model (ICOM) – Optimising capital delivery to create a more efficient organisation.
- **Phase 2** – One System and Total Cost Stack Reduction – Embedding the principles of SPEED and MVP to maximise value from existing delivery routes and implement cost reduction interventions.
- **Phase 3** – CP7 Contracting Strategy – Fully aligning with the new operating model, greater flexibility in supplier contracting, taking a portfolio management approach and focussing on investment outcomes.

These measures will enable us to transform the structure of our business, making it more agile and efficient to maximise our taxpayer settlement for CP7.

Customer Benefits

This transformation will maximise the benefit of every penny of taxpayers' money and deliver tangible savings by:

- Delivering a sustainable railway that is safe for everyone
- Making informed decisions to benefit customers
- Empowering our teams to make informed decisions by creating a positive working environment.

Key Success Factors

We will engage early in the process with our trade unions to ensure that the impact of this transformation is understood, with safety remaining our priority.

We will also help colleagues in NW&C Capital Delivery and the wider industry supply chain understand the reasons for change and the benefits that it will bring.

We have already implemented a wide-ranging programme of stakeholder engagement of the Transformation programme which will continue throughout the implementation phase.

£ 226m

'In CP7, we will transform the way in which capital projects are developed and delivered, making our business more agile and efficient to maximise our taxpayer settlement for CP7.'

Market-led Approach

SCOTLAND

Overview

In Scotland, we are revising our approach to investment decision making by taking a whole system view that considers the wider market context alongside our commitment to provide a safe and reliable service for our customers.

This is being applied through a multidisciplinary approach to business planning, which enables better integration across our engineering, operations, maintenance and delivery teams. CP7 planning has started on this market-led approach journey, which enables investment to be aligned to corridor specific strategic ambitions.

Corridors have been collaboratively developed with the rail industry across Scotland, including representatives from ScotRail, cross-border passenger operators and freight operators, culminating in the Scottish rail network being segmented into eight discrete corridors (heavily influenced by the markets they serve and the geography of the network).

We have developed strategies for each corridor to enable whole system planning. When designing our corridors, we have taken into account:

- Changes in passenger demand patterns.
- Rail's contribution to decarbonising transport
- Opportunities for freight modal shift to rail
- Demographic drivers (e.g. age, population)
- Economic drivers (e.g. productivity, earnings)
- Societal drivers (e.g. tourism, modal shift)

Customer Benefits

Our corridor approach will enable Scotland's Railway to transition into a business that is focused on:

• **Reducing** net cost and ensuring value for money for the taxpayer;

• **Delivering** against the Scottish Government's net zero commitments over the next fifteen to twenty years

• **Developing** key freight markets

• **Filling** more seats on passenger trains

£ 20m

"Introducing a market-led approach allows us to prioritise investment through making more objective and outcome-based business decisions"

Key Success Factors

Establishing strategic corridors across Scotland through market-led drivers (e.g. socioeconomic, commercial, sustainability).

Utilising market-led drivers to support and inform all investment decisions across our assets

Developing collaborative, integrated plans across our business functions and with the wider rail business in Scotland.

Headwinds/Challenges

Headwinds

Through our fishbone framework, we recognise not only the efficiencies we plan to deliver, but also the cost factors that work against them, in the form of headwinds. By improving our insight into uncontrollable cost drivers and categorising these within the fishbone framework, we can, wherever possible, seek to develop mitigating efficiency strategies to combat these.

Given their unforeseen nature and the inherent difficulty in identifying potential headwinds in advance, we have used our CP6 experience to inform our CP7 planning assumptions with regions and functions primarily using a consistent set of modelled headwinds applying these at asset level.

In CP6, we faced a number of significant headwinds, which were not reflected in pre-control period plans including:

- Costs for investment in safety processes and technology to support the Track Worker Safety programme (£200m).
- Access constraints or reductions mainly relating to Crossrail enhancement prioritisation (£75m).
- The impact of Covid-19, (£275m - partially offset by reduced travel-related costs).
- A revised fatigue risk management standard aimed to reduce the risk of fatigue-related incidents (£50m).

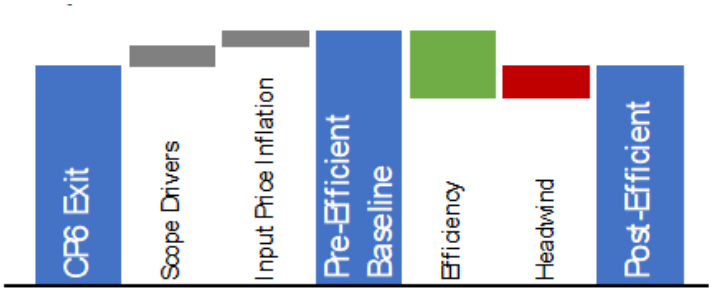
Whilst we are not assuming that all of the headwinds we experienced in CP6 will necessarily occur again in CP7, we do expect there to be headwinds in certain areas such as safety, additional taxes, or other unforeseen legislative/standards changes.

Inflation and Input Price Challenges

The recent high levels of general price inflation have raised challenges in forecasting how our own costs will respond, for example, how we estimate the speed and extent to which recent high inflation will feed through into costs in CP7.

The basket of goods and services that Network Rail buys is not well reflected by general price inflation indices (e.g. CPI or RPI). However, we assess input price inflation by analysing our different cost lines and then applying specific indices to each of these using historic data to understand how indices have previously moved with CPI to inform likely future input prices movements.

Our CP7 plan includes the impact changes in input prices – where our cost base is expected to change at a rate that varies from our CPI-based funding. Our efficiencies look to mitigate the impact of these factors, as we seek to continue the de-linking of annual pay awards from RPI inflation and better managing inflationary risk with our supply chain through commercial partnerships.



Delivering Value for Money

Governance

We are committed to delivering an efficient railway that delivery value for money to our train and freight users.

Our efficiency plans for CP7 will continue to be planned and managed through our fishbone framework, clearly communicating where the opportunities for efficiency will be found (e.g. Access, Commercial, Technology) as well as making clear where we expect to see uncontrollable headwinds impact on our cost base.

In addition, local/ regional governance will be place to track, monitor and deliver the efficiencies

We will continue to track our progress against our post-efficient plan using the Financial Performance Measure (FPM), as an assessment of how we have performed compared to the financial targets set out in the CP7 business plan.

We will continue to build on the successful launch of cross-industry regional efficiency boards (REBs) to identify and set in motion whole industry efficiency initiatives, ensuring we can clearly track our commitment to industry reform as a subset of our CP7 efficiencies.

Definitions & Acronyms

Term	Definitions
Business Decision	This is an action or decision taken by the business to increase spend, time or the amount of work required to achieve the same outcome which is not an inefficiency.
Efficiency	An efficiency is a positive management action which has reduced the cost of delivery or has reduced the amount of work required to achieve the same outcome, compared with the methods/practices that were in place in the baseline year. It is imperative that for any efficiency declared, there is a clear and positive management action behind it.
Headwind	A headwind is a factor which increases the cost of delivery, compared with the costs that were experienced in the baseline year, over which the business has no control.
Inefficiency	An inefficiency is an increase in cost or work required to achieve the same outcome, as a result of a management action, compared with methods/practices that were in place in the baseline year. The counterfactual to efficiency.
Input Prices	Input prices are financial pressures on cost that are driven by market prices or prevailing inflation (such as CPI, RPI or TPI) which manifest in higher spend. We model these across different cost types and capture these separately within fishbone reporting rather than treating these as a Headwind.
Pre-efficient baseline	The pre-efficient baseline is a financial measurement of the amount of money it would have cost to deliver the activity in question, in the baseline year; in the case of CP7 the baseline year is the final year of CP6.
Scope Driver	Sometimes we need to do more, less, or different types of work compared to our baseline year, for example an increase in the number of volumes requiring renewal. This could be for a variety of reasons, and we capture these within our scope driver category, which is considered neutral for efficiency purposes.
Tailwind	A tailwind is a factor which reduces the cost of delivery, compared with the costs that were experienced in the baseline year, over which our business has no control, or is a choice that is associated with a wider business dis-benefit.

Price bases

Figures presented in this document are at 23/24 constant price base, unless otherwise stated

Definitions & Acronyms

ACE	Agile Client Eastern
AI	Artificial Intelligent
BAU	Business As Usual
CAPEX	Capital Expenditure
CEFA	Civils Examination Framework Agreement
CD	Capital Delivery
CP6	Control Period 6, in effect between April 2019 and March 2024
CP7	Control Period 7, in effect between April 2024 and March 2029
CPI	Consumer Price Index
C&C	Control and Command
C&P	Commercial & Procurement
DEAM	Director of Engineering and Asset Management
DU	Delivery Unit
DWWP	Delivering Work Within Possessions
ECDP	East Coast Digital Programme
ELR	Engineer's Line Reference
ESD	Electrical Safety Delivery
ESI	Freight Operating Companies
FOCs	Freight Operating Companies
FPM	Finance Performance Measures
FTN	Fixed Telecoms Network
GBR	Great British Railways
GRIP	Governance for Railway Investment Projects
GWR	Great Western Railway
HS1	High Speed One
ICE	Institution of Civil Engineers
/OMSL	Interface or Overlay Miniature Stop Lights
II	Intelligent Infrastructure
ITT	Invitation to tender
KPI	Key Performance Indicator
MDU	Maintenance Delivery Unit
MOM	Mobile Operations Manager
MVP	Minimal Viable Product
Network RailDD	Network Rail Design & Delivery
Network RailHS	Network Rail High Speed
Network RailMI	Network Rail Managed Infrastructure
OLE	Overhead Line Equipment
OMSR	Operating, Maintenance, Safety and Renewals expenditure
ORR	Office of Rail and Road
OTM	On Track Machines
PACE	Project Acceleration in a Controlled Environment
PICOP	Person in Charge of Possession
PPE	Personal Protective Equipment
PRF	Permanent Rail Fastening
RAMP	Route Asset Management Plan
RDC	Regional Distribution Centre
RD&I	Research, Development and Infrastructure
RDC	Regional Distribution Centre
RIBA	Royal Institute of British Architects
RPI	Retail Price Index
RRV	Rapid Response Vehicle
RS	Route Services
RD&I	Research & Development
SBP	Strategic Business Plan
SCO	Supply Chain Operations
SID	Southern Integrated Delivery
SPEED	Swift, Pragmatic and Efficient Enhancement Delivery
SSG	Standards Steering Group
TA	Technical Authority (providing technical leadership including on health and safety, sustainability and managing quality and information. Leading campaigns to channel the energy from across the business to change our culture as well as our knowledge)
TOCs	Train Operating Companies
TRU	Transpennine Route Upgrade
WCML	West Coast Main Line
WD	Works Delivery
W&W	Wales & Western

Tell us what you think

If you have any questions about our plans, or to request an accessible version of this document you can:

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You can also visit our contact us page for other ways you can get in touch