

Wales & Western Region Performance Improvement Plan

Network Rail's Response to the ORR
Investigation Report and Final Order
(10 July 2024)

August 2024

Simpler,
Better,
Greener



Wales and
Western

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Abbreviations

7Rs	reliability, research, resilience, repetition, resource, restrictions, risk	P5, P6 . . .	4 week cycle in a calendar year (13 periods in a year)
ARS	automatic route setting	PBR	periodic business review
COLA	Control Operations Leadership Academy	PIMS	Performance Improvement Management System
CP6/7	Control Period 6/7	PRP	performance recovery plan
CRI	Composite Reliability Index	QBR	Quarterly Business Review
DfT	Department for Transport	QRR	Quarterly Regional Review
DPI	delay per incident	RAPT	Reliability and Performance Tool
DU	Delivery Unit	RCM	Route Control Manager
ESG	Event Steering Group	RDD	remote disconnection device
F-CAL	freight cancellations	RM3P	Risk Management Maturity Model - performance
FMS	Fault Management System	RMD	Regional Managing Director
FOC	freight operating company	ROC	rail operating centre
FRACAS	failure reporting analysis and corrective action system	SIP	Strategic Improvement Platform
GBR	Great British Railways	SNDM	Senior Network Delivery Manager
GUSTO	gales: use of speed restrictions targeted to operational risk	SPIR	significant performance incident review
GWEP	Great Western Electrification Programme	SRT	sectional running time
GWML	Great Western Mainline	TfL	Transport for London
GWR	Great Western Railways	TfW	Transport for Wales
HILDA	historical incident log data analysis	TMS	traffic management system
HS2	High Speed 2	TOC	train operating company
ILR	incident learning review	TRSC	train running support control
IM	Infrastructure Manager	TRUST	train running under system TOPS
KPI	key performance indicator	TSR	temporary speed restriction
MAA	moving annual average	TU	Trade Union
MTBF	mean time between failures	TVSC	Thames Valley Signalling Centre
MTREL	MTR Elizabeth Line	W&W	Wales and Western Region
NPB	Network Performance Board		
NR	Network Rail		
OLE	overhead line equipment		
ORR	Office of Rail and Road		
On Time	Train punctuality to the minute (three minutes in Wales & Borders) at every recorded stop		

1. Foreword





Our purpose is to deliver the best and safest performing railway to our passengers, freight, local communities and stakeholders. During Control Period 6 (CP6), Wales & Western Region delivered significant transformation to support this. In Western, the Great Western Electrification Programme and introduction of the full Elizabeth Line service have been delivered. In Wales & Borders, the Core Valley Lines were upgraded and in partnership with Transport for Wales a new fleet of Class 197s were introduced. In the same timeframe, train service delivery was impacted by an unprecedented level of external change, in particular COVID-19, extreme weather and industrial action. Whilst these factors are mainly outside of our direct control, there are several areas where we need to be better.

The cumulative impact of these changes on train service performance was underestimated. As a result, regrettably our delivery of train services has not met the expectations we set for ourselves or the promises we made to our passengers, with On Time performance of 58.6% at the end of CP6. Improving train service performance is a core objective of our Control Period 7 (CP7) business delivery plan and is a priority across our Region. Today, five periods into that new Control Period, performance across the Region continues to show an upward trajectory, with the regional **On Time moving annual average (MAA) ahead of target at 59.8%**. In Western, On Time MAA is on target at 61.5%, with Thames Valley performance beginning to stabilise as shown by Network Rail-caused delay minutes being ahead of target at the end of period 5. In Wales & Borders, On Time MAA is 56.3% against a target of 55.7%, whilst Network Rail delay per 1,000 miles MAA has improved in each of the first five periods in CP7.

The improvement is due to a better understanding of the root causes of our performance. A suite of initiatives have been designed, using evidence-based principles and a whole system view on performance improvement, by applying the Performance Improvement Management System (PIMS). For instance, we have:

- Altered principles of our Thames Valley track access strategy migrating away from the “mains/relief” approach previously adopted. This improves access for maintenance, supporting performance improvements.
- Revised our operating model, devolving asset management accountability to Route Directors. This enables swifter risk-based decision making so we continue to improve performance.
- Re-prioritised critical inspections and made interventions on the assets most likely to impact performance.
- Reset our maintenance strategy for specific assets that are required to operate to a performance level greater than the originally intended design life.
- Taken steps to grow and upskill our control and incident response to better manage high impact service failures and address maintenance skills shortages, particularly for overhead line equipment and signal & telecoms.
- Committed to continue in partnership with operators and other industry partners to resolve known challenges. Focus areas include sustainability of the base timetable plan – how the timetable is constructed, operated and crewed, including reliable running on rest days – and fleet, to drive down cancellations.

Going forward, Our Plan, detailed in this response and summarised at Figure 1, includes further work to respond to our passengers’ number one concern of trains running on time. We have learned our own lessons, and implemented best practice from other Routes, Regions and industry; we continue to do so. Our Plan also integrates existing plans where there is evidence that they are delivering success, such as Project Brunel and our points resilience programme.

We know that maintaining momentum is important and several new actions to drive improvement and deliver sustained performance have been identified, such as working with System Operator to plan additional freight paths at Port Talbot, removing vegetation to reduce OLE trips and developing our approach to taking access. Part of this means investing in technology such as decision-making tools for train running controllers across the Region. But success will only be delivered if our people are invested and driving improvement initiatives with us. Our Plan upskills our leaders, clarifies accountabilities, empowers our people to act and gives them tools and training to excel.

I am confident that by driving a stronger performance culture, building on progress we have already made, our plans are right and will deliver a better train service to our passengers.

- Rob Cairns, Regional Managing Director

Figure 1 below shows how our commitments align to the PIMS Whole System Model for Performance referenced above.

Figure 1: Commitments in Our Plan aligned to the PIMS Whole System Model for Performance

Commitment in Our Plan	PIMS Whole System Performance Model Element						
	External Factors	Fixed Infrastructure	Fleet	People	Operating Plan	Recovery	Performance & Change Management
1. We will complete our review of timetable modelling undertaken for the Elizabeth Line by May 2025 and apply learnings to our modelling of future major projects							
2. We are applying broader lessons from the Elizabeth Line timetable change to in-flight and future changes in W&W							
3. We are working with the industry to improve processes for the introduction of major changes							
4. We are working with industry to review and clarify responsibilities and accountabilities of the ESG and related specification processes to help drive improvements in oversight of, and planning for, major change							
5. We are improving our understanding of the impacts of incidents and reviewing our plans so that we have the right measures in place to improve factors within our control, including operational response							
6. We are reviewing and optimising our access for delivering inspection, maintenance, renewals and repair works, drawing on lessons learned from Project Brunel and best practice from other heavy trafficked routes							
7. We are delivering on our plan to upgrade overhead line headspans from Paddington to Heathrow							
8. We are maximising timetable resilience within the possibilities of the current specification							
9. We are improving our operational capability and developing ways of working focused on performance, including targeted recruitment and upskilling programmes in the Thames Valley							
10. We are improving the ways we learn lessons from incidents, including by taking a lead on reviewing complex multilateral delay incidents and fully embedding their recommendations							
11. We are tackling the known root causes of asset performance risk and will continue to develop tools that enable us to reduce performance risks before they occur							
12. We are delivering on Project Brunel's timebound plan, rolling out its holistic approach and learning to other performance improvement activity across the Region							
13. We are improving our performance leadership and culture by mobilising a Region-wide leadership and culture change plan							
14. We are maturing our governance over performance by refreshing and reviewing effectiveness of our regional governance and assurance model							
15. We are delivering our transformation programme to ensure our structure, including how infrastructure is delivered within our organisation, drives effective performance management							
16. We are reviewing effectiveness of our Region's senior cross-industry engagement on delivering system wide performance, including how well this engagement informs regional governance and decision making							
17. We are working with industry to refresh the Network Performance Board including how it supports W&W on delivery of joint performance strategies							

2. Introduction



2.1 Purpose of this document

- 2.1.1 This document includes Network Rail's (NR) response to the Office of Rail and Road's (ORR) Final Order of 10 July 2024 made under section 55 of the Railways Act 1993 and a supporting investigation into train service delivery in the Region.
- 2.1.2 The ORR's Final Order states that NR is contravening condition 1 of its Network Licence (paragraphs 1.1 – 1.4 and 1.9) and requires NR to:
- “Produce a robust and evidenced plan identifying those further activities that Network Rail will undertake to secure the operation and maintenance of the network in accordance with best practice to meet the reasonable requirements of persons providing services relating to railways in respect of the facilitation of railway service performance to the greatest extent reasonably practicable”.
- 2.1.3 We recognise that our train service performance delivery has not been at the standard we or our customers expect. This response therefore sets out our plans and actions (“Our Plan”) to deliver and sustain improved train service performance in line with our Network Licence conditions.

2.2 Context of Our Plan

- 2.2.1 The ORR wrote to NR on 29th November 2023 to notify us of the intent to initiate a formal investigation into NR's contribution to the delivery of train service performance in W&W Region. The ORR published their findings from the investigation in their Wales & Western Region Investigation Report (“The Investigation Report”) together with a proposed Final Order on 28th May 2024.
- 2.2.2 The Investigation Report sets out fourteen recommendations: eleven for NR and three for industry. As agreed with the ORR, NR has focused this response (and Our Plan) on the recommendations from The Investigation Report. Whilst NR has no formal ability to address industry recommendations, this response demonstrates our commitment to contribute to taking these forward. We understand these recommendations are to be shared with the Network Performance Board who will consider how they may be taken forward.
- 2.2.3 There are four areas in the proposed Final Order which set out the overarching themes where the ORR believe that NR is in contravention of the Network Licence:
- Sufficient Planning for Cumulative Change (Theme 1): NR has failed to plan sufficiently for cumulative changes on the network, including as a result of Great Western Electrification Project (GWEP) and Crossrail, and its plans to address this must be developed further.
 - Understanding Operational Factors Driving Increased Delay (Theme 2): NR does not fully understand the extent to which different operational factors are driving increased delay, which hampers its ability to target improvement effectively.
 - Learning Lessons from Incidents (Theme 3): NR has weaknesses in its process for learning lessons from incidents.
 - Leadership Structure & Governance (Theme 4): NR has weaknesses in its leadership structures and governance, and it is not currently set up to drive optimised train performance outcomes.

- 2.2.4 Since November 2023, we have provided responses to the ORR in January, April and May of 2024. Noting that there is a time lag between implementation of improvement activity and resulting benefits, whilst this response dated 30 August 2024 sets out our timebound actions and outcomes to respond to the recommendations of The Investigation Report, it also references committed activity from previous responses and provides an update on our progress and benefits that have been realised.
- 2.2.5 Performance improvement planning and delivery is evolving. This response is therefore a detailed reflection of where we are today, and we will continue to refine and amend our plans over time through application of Our Plan's governance and assurance process set out in Section 9.
- 2.2.6 NR is committed to working collaboratively with the ORR and all stakeholders to improve the safety and performance of the railways by ensuring that they are operated, maintained, renewed and enhanced in accordance with best practice and in a timely, efficient and economical manner. Throughout this process, NR has openly and fully co-operated with the ORR in respect of the Wales & Western (W&W) Region.

2.3 Our approach to developing Our Plan

- 2.3.1 We developed Our Plan as a Region-wide sprint during June and August 2024. We used a range of information sources and subject matter experts to build a holistic plan that drives benefits. For example, we:
- **Held nine workshops to identify activities underway and planned:** We facilitated workshops with colleagues across the Region, Route and System Operator teams. These workshops focused on each of the four strategic themes of the investigation to identify activity already underway and initiatives planned to improve performance.
 - **Undertook analysis of our performance data and impact of activities to date:** We identified our performance trends and what activities are improving performance, in order to develop an evidence base for what activities are included in Our Plan.
 - **Identified best practice from across the network:** Working with System Operator and Route and Region executives, we identified areas of best practice from across NR (such as Anglia Route, Southern Region and the System Operator itself) and built activities into Our Plan to apply these learnings.
 - **Aligned activities to our existing performance recovery plans (PRPs):** We identified where relevant activities are being delivered through one of our existing PRPs – examples such as the Wales & Borders Route 7Rs plan, Project Brunel, and joint performance strategies between Western Route and Great Western Railway (GWR) and Wales & Borders Route with Transport for Wales (TfW) and Amey Infrastructure Wales (see Section 8 for details). We have mapped activities in Our Plan to their sources so they remain managed at a local level, but with regional oversight of benefit delivery.
 - **Received executive and independent steer and review:** We ran a weekly executive steering group with representatives from the Region, Route and System Operator to critically assess inputs into Our Plan. We also received 'critical friend' feedback from Southern Region and independent experts, including L&B Executive Ltd and VA Rail.

2.3.2 We also engaged with the ORR and Transport Focus to gain feedback on the draft Plan. We are grateful to everyone who has contributed to its development. Our constructive engagement with the ORR has included sharing extensive details on our improvement plans, being open as to the additional challenges we have faced, the investigations we have undertaken, and the actions taken or plans to address them. Additionally, we have worked, and continue to work, together with our train operator partners and other stakeholders.

2.4 Structure of this document

2.4.1 The ORR’s investigation and Final Order are clear that our plan must be robust, evidence based, time-bound and must have clear ownership and accountability for actions and outcomes. We provide the context for that plan in Section 3, before summarising Our Plan in Section 4. Further detail on Our Plan is provided in Appendix 1.

2.4.2 Sections 5 to 8 provide an accompanying narrative to Our Plan, organised by the four strategic themes identified in the investigation, and include how our activities address recommendations of The Investigation Report (see Table 1 below).

Table 1: Recommendations aligned to the ORR themes

Theme	Recommendation	
1. Sufficient Planning for Cumulative Change	NR4	Network Rail must carry out an ex-post review of its timetable modelling carried out for the introduction of Elizabeth Line services, to ensure it learns lessons and applies these in planning for future major changes – such as the introduction of HS2. Network Rail should consider whether its timetable modelling capability should be augmented to take better account of the change’s impact on asset condition, reliability and resilience – and therefore train performance – rather than core performance of the timetable alone.
	IN1	Industry should review how it can ensure processes for planning major service upgrades fully consider the cumulative impact of successive major changes, including on asset condition and reliability, when identifying the supporting work required.
	IN2	Industry should consider how to provide greater clarity about the roles, responsibilities and accountabilities of the Event Steering Group (ESG). And related specification processes to help drive improvements in oversight of, and planning for, major change.
2. Understanding Operational Factors Driving Increased Delay	NR1	Network Rail must improve its understanding of why the impacts of incidents are increasing (with more delay per incident) and then review its plans to ensure they target relevant factors within its control. To improve primary delay and overall performance outcomes, it should measure, report and manage quantifiable elements of operational response that are within its control across the Wales & Western Region.

Theme	Recommendation	
<p>2. Understanding Operational Factors Driving Increased Delay (Cont'd)</p>	<p>NR11</p>	<p>Network Rail should continue to deliver improved operational and signalling capability, establishing and delivering against a clear timebound plan and developing a suite of indicators to measure capability. To support development of its operational capability. Network Rail should ensure that future significant operational changes – such as the adoption of new decision support technologies – have appropriate business change programmes (including consideration of human factors) to support their introduction.</p>
	<p>NR6</p>	<p>Network Rail must review its ongoing access requirements and arrangements for delivering inspection, maintenance, renewal and repair works (building on the approach being developed for Project Brunel) to ensure it can manage its assets in a sustainable way while meeting the needs of its customers. This should include looking at best practice being adopted in other routes which are similarly heavily-trafficked and assessing the scope for better use of tools and technology.</p>
	<p>NR9</p>	<p>Network Rail should continue to focus on ways to maximise timetable resilience to basic perturbation within the possibilities of the existing specification, learning from best practice in other routes.</p>
	<p>NR8</p>	<p>In support of its strategic plan to improve asset reliability and sustainability on the Western route out of Paddington (Project Brunel), Network Rail must provide a clear, timebound plan for renewing the overhead line headspans from Paddington to Heathrow Airport Junction and a mitigation plan to ensure reliability until that work is complete.</p>
<p>3. Learning Lessons from Incidents</p>	<p>NR7</p>	<p>Network Rail should deliver on its plans to minimise causes of delay arising from poor asset reliability. This should include continuing to target the root causes that lead to temporary speed restrictions on any line of route and to ensure it is maximising its use of leading indicators of future problems.</p>
	<p>NR10</p>	<p>Network Rail must review how it leads learning from complex and multilateral delay incidents to make sure that recommendations are fully and effectively implemented, and knowledge is shared across the industry. The process must include reviewing common themes across the portfolio of incident reviews.</p>
<p>4. Leadership Structures & Governance</p>	<p>NR2</p>	<p>Network Rail must establish clear timebound milestones for its plan to sustainably improve asset reliability and sustainability on the Western route out of Paddington (Project Brunel) and must track and report delivery against these. It must incorporate the more holistic approach being proposed for Project Brunel into its Performance Recovery Plan to deliver sustainable improvements across the Region.</p>

Theme	Recommendation	
4. Leadership Structures & Governance (Cont'd)	NR3	Wales & Western's leadership must focus on strong performance governance and accountability to drive a performance-led culture. In particular, it must review whether its current structure, with infrastructure management separated from route accountability, supports effective decision making and performance management. In the past, Western has primarily been focused on long distance passenger and freight flows – in recognition that there are now more stakeholders with different priorities (including metro-style services), Wales & Western should drive an organisational and cultural change programme to ensure it better manages its stakeholders' varied and potentially competing needs.
	NR5	Network Rail should consider how best to drive greater cross-industry engagement on delivering system-wide performance, including consideration of a cross-industry senior governance forum to improve alignment on desired industry outcomes and resolve disputes.
	IN3	Industry should consider how to drive forwards improvements to train performance in Wales & Western which rely on cross-industry collaboration. This should include securing greater strategic alignment and shared objectives that can be cascaded to those delivering day-to-day service,

2.4.3 In Section 9 we demonstrate that Our Plan has the supporting governance and management structure in place to ensure it is delivered effectively and that outcomes are realised. This is also where we describe how we intend to operate together as a regional team and collaborate with the wider NR community and industry partners to deliver.

2.5 How to read this document

2.5.1 This document adopts the following approach to cross referencing.

Table 2: Activity and Recommendation referencing key

Reference	Description
NR#	Recommendation in The Investigation Report to Network Rail
IN#	Recommendation in The Investigation Report to the Industry
WE#	Western Route Workshop Performance Improvement Activity
WA#	Wales & Borders Route Workshop Performance Improvement Activity
D#	Asset Management & Engineering Workshop Performance Improvement Activity
G#	Region Governance Workshop Performance Improvement Activity

3. Context to our performance



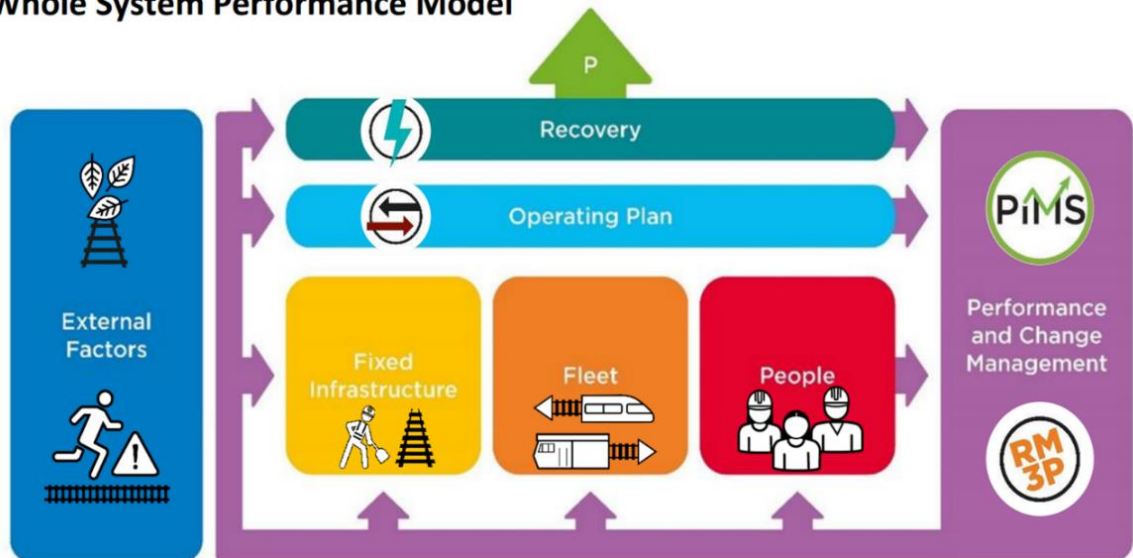
3.1 Our performance framework

3.1.1 We agree with the ORR that whole industry collaboration and alignment is required to deliver effective train service outcomes, and that good operational performance comes from effective working between all stakeholders at Route, Region and Network level. The Performance Improvement Management System (PIMS), co-developed between NR and the rail industry, is our system for collaborating on system-wide performance. The PIMS is also used as the basis for developing, delivering and managing our PRPs, joint performance strategies and Our Plan.

3.1.2 The aims of the PIMS include setting out the necessary leadership, behaviours, plans, metrics and governance to drive performance improvement; providing the structure to support effective performance management using frameworks and tools; and leveraging good practice to support day-to-day performance management. One of the models within the PIMS is the Whole System Model for Performance shown in Figure 2 below. In recognition of the need for whole industry collaboration, activities in Our Plan, and the outcomes they will deliver are aligned to this model.

Figure 2: The PIMS Whole System Model for Performance

Whole System Performance Model



3.1.3 The core elements of the Whole System Model for Performance are:

- **Fixed Infrastructure:** refers to reliability of our assets. We are taking action through areas like our Project Brunel asset upgrades and through our timebound plan to renew overhead line headspans out of Paddington.
- **People:** refers to our skills, training capabilities (our ability to deliver), processes, organisational structure and ways of working. We are taking action through areas like additional signaller and operator training, collaborative work with System Operator to build our operational capability and investments in decision-making support tools such as Failure Reporting Analysis and Corrective Action System (FRACAS) and our traffic management system (TMS), which enable us to make better decisions to prevent and mitigate the impact of incidents.

- **Fleet:** refers to rolling stock and operator activity. Whilst our activities do not directly contribute to this element, we indirectly contribute by working with train operating companies (TOCs) and freight operating companies (FOCs).
- **Operating plan:** ensures that the plan is resilient to the day-to-day perturbation of the core pillars of railway performance.
- **Recovery plan:** supports recovering the service when things go wrong, and draws on lessons learned from previous incidents, continuous improvement and how we respond to operational factors that drive delay.

3.1.4 Feeding into the model are **external factors** outside of industry control such as climate risk and trespass which require the industry to work together to develop mitigation plans for. **Performance and Change Management** focuses on our organisational processes and governance required to ensure we have the capacity and capability to work with the industry to drive continuous improvement.

3.1.5 This model works best when we work together with our partners. In our response, we describe different ways we are working with partners like train and freight operators to take a whole industry approach to performance improvement.

3.2 Our regional performance commitments

3.2.1 We are fully committed to delivering a safe, efficient, timely and reliable railway on which our passengers and freight can depend, and we recognise that our train service performance has not been where we and our customers expect.

3.2.2 Delivering good train service performance is a challenge for the whole industry and the issues affecting train performance are complex, interlinked and require whole industry collaboration and alignment. For these reasons, we use the PIMS and its tools to develop, deliver and manage performance activity.

3.2.3 Whilst base train performance is higher than prior to the introduction of a number of new fleets across the Region, the cumulative impacts of a more intensive and complex timetable, faster journey times, more connectivity and the introduction of the Elizabeth Line, resulting in significant passenger growth, our CP6 exit for train performance was not in line with the expectations we set for ourselves or that our customers and stakeholders expect. We have therefore developed a suite of evidence-based initiatives to recover our performance in CP7 and are continuing to develop further performance improvement activities and plans. At the end of period 5 regional performance is tracking at 59.8% which is just ahead of target.

3.2.4 By the end of the control period, we have the following delivery commitments:

1. Increasing On Time performance from 58.6% to 63.4%¹ (representing a 4% improvement on a CP6 exit forecast) and reducing cancellations from 4.4% to 3.3%².
2. Reducing freight cancellations to 1.6% by the end of the Control Period.
3. Delivering Project Brunel to improve our train service performance to meet our regulatory targets.

¹ Noting ORR regulatory reset of passenger train performance metrics and targets for years 3-5 of CP7

² See footnote above

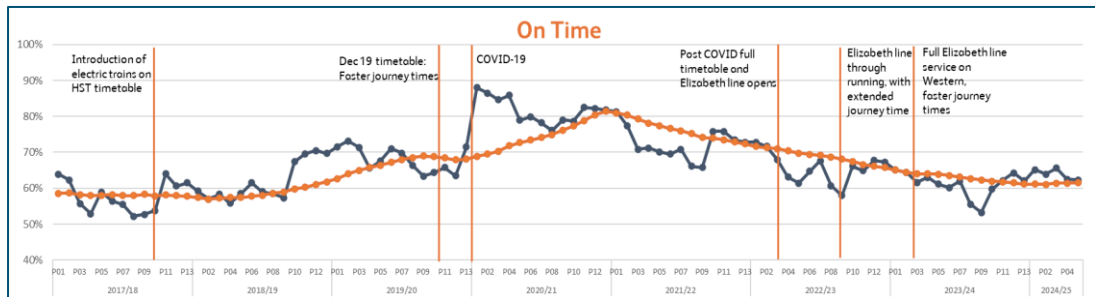
4. Improving our timetabling, enhancing our operations capability, and working more closely with our industry partners.
5. Delivering a more reliable metro-style turn up and go service between Reading and London.
6. Improving our asset resilience and responding safely to extreme and unpredictable weather.
7. Enhancing traffic management, incident management and driver advisory systems so our signallers can drive better, safer performance.
8. Investing to make our overhead line system more resilient.
9. Responding to incidents faster, with joint asset response teams.

3.3 Western Route performance

Context to performance in Western

3.3.1 It is important to consider the impact of infrastructure transformation, and the subsequent change to the nature and volume of services we are running, when analysing train service performance in the Western Route. As shown in Figure 3, the introduction of electrification and the resulting change on the timetable, as well as the post-COVID timetable and full introduction of the Elizabeth Line, have had a significant impact. However, despite these changes to our operating context in the Western Route we have increased train services by 10.6% and improved On Time from 57.8% to 61.5%, when comparing performance to that of 2017/18.

Figure 3: How Western Route On Time performance has been impacted by significant events



3.3.2 The introduction of the Elizabeth Line connected our Route to new Transport for London (TfL) infrastructure and has significantly changed our operating conditions between Paddington and Heathrow. However, this is only one example of the industry changes that we need to ensure are factored into our PRPs and forward performance strategies. Other examples include:

- Programme rescoping of GWEP and the impact on the reliability of the overhead line equipment (OLE) between Paddington and Airport Junction.
- Timetable changes and reduced journey times as a result of GWEP on the Great Western Mainline (GWML).
- Shenfield / Abbey Wood to Heathrow service (previously a Paddington to Heathrow service) now has far more complex driver diagramming and unit diagramming, which is increasing the ability for reactionary delay spread to occur.

- 3.3.3 Moving forward, we have additional changes to the infrastructure, namely the connection to Old Oak Common and High Speed 2 (HS2) Services to the north of England, that we will prepare for.
- 3.3.4 These challenges, along with the condition of our infrastructure and resourcing challenges across the industry, are a number of examples as to why we recognise we must, and will, continue to work with our industry partners and deliver our plans to return train performance to the levels that our passengers and freight expect.

Current performance position in Western

- 3.3.5 Despite our challenging operating context, we are beginning to see an upwards trajectory in the level of train service performance in the Western Route. As set out in Figure 4, we are forecasting achievement of our full year analytical target for On Time of 62.7% and as of period 5, Route On Time moving annual average (MAA) stands at 61.5% against a period target of 61.5%. Delay per 1000 miles is improving, with the MAA at 45.86 down from 48.29 at CP6 exit and four of the first five periods delivering results better than the best period of 2023/24. In addition, Freight Cancellations MAA of 2% is outperforming against a target of 2.3%.

Figure 4: Western Route On Time and On Time Moving Annual Average (23/24 and 24/25 incl. forecast)

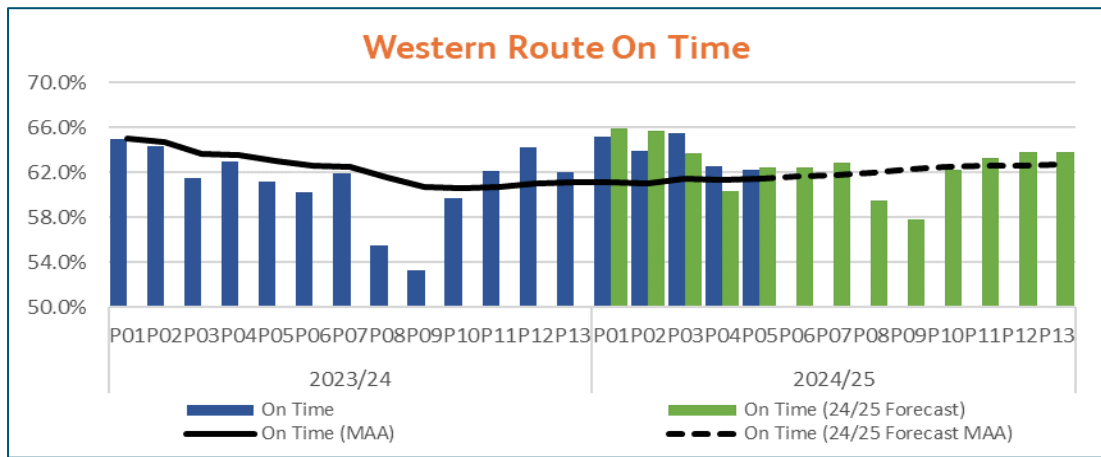


Figure 5: Western Route Delay per 1,000 miles and Moving Annual Average (23/24 and 24/25)

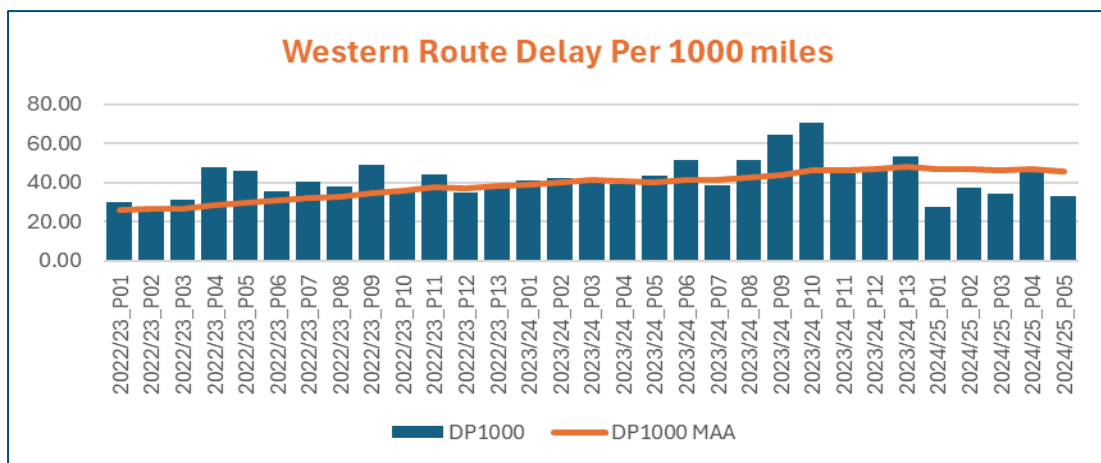
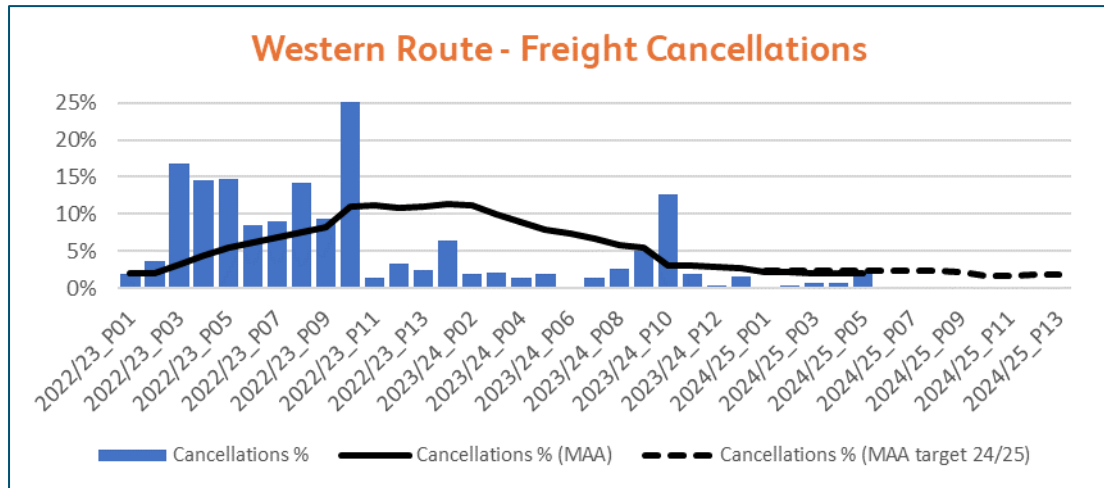


Figure 6: Western Route Freight Cancellations and Moving Annual Average (22/23-24/25 incl. forecast)



3.3.6 With the Route currently aligned to the MAA target for both On Time and Cancellation metrics we are forecast to achieve year-end targets. These upwards trends in performance improvement are reflective of the plans we already have in place and the fact that we are beginning to realise the benefits of those plans. We recognise there is more we need to do and this is set out in the remainder of this response. However, key performance improvement highlights include:

- Delivery against our joint performance strategies with GWR and delivery against recommendations from the ORR to improve our full performance governance, including cross-industry.
- Delivery of Project Brunel to address the bottom-up causes of performance decline in the Thames Valley, which is one of the key locations and contributors to sub-threshold delay. Better performance in Thames Valley benefits the whole Route.
- Our implementation of a traffic management system which remains on target, with signaller training at Gloucester and Westbury nearing completion.

3.4 Wales & Borders Route performance

Context to performance in Wales & Borders

3.4.1 In the Wales & Borders Route there are a number of different factors that need to be considered in context with train service performance, and we are also looking ahead to major infrastructure transformation in the near future.

3.4.2 At present, some of the key challenges that we are navigating as a Route include:

- The ongoing transformation of the Core Valley Lines, and the introduction of metro-style services around Cardiff to improve passenger connectivity. We have stood up taskforce teams to understand and prepare for the impact of these changes on the timetable.

- The complete renewal of TfW fleet, with almost all legacy rolling stock being replaced with new build, including a large fleet of tram trains for the Core Valley Lines services. As a result of late delivery we are experiencing fleet shortages, leading to cancellations, short forms and some services being operated by life expired rolling stock, but we continue to work with our operator partner to mitigate the impacts on performance.
- We are working hard to navigate the impact of climate change and have delivered a number of key improvement schemes such as Welshpool washouts (see **Case Study 1**) and Conwy Valley flood resilience to improve how we manage a seasonal railway.

3.4.3 Looking ahead we are committed to working with our partners, through key initiatives such as our Wales & Borders Tripartite performance strategy with TfW and Amey Infrastructure Wales, to maintain our improvements to the train service.

Current performance position in Wales & Borders

3.4.4 At present, we are continuing to demonstrate that we are on an upwards trend with train service performance and have been for some months. As demonstrated in Figure 7 below, we have seen stabilisation and consistent improvement to On Time MAA since period 9 last year.

Figure 7: Wales & Borders Route On Time and On Time Moving Annual Average (23/24 and 24/25 incl. forecast)

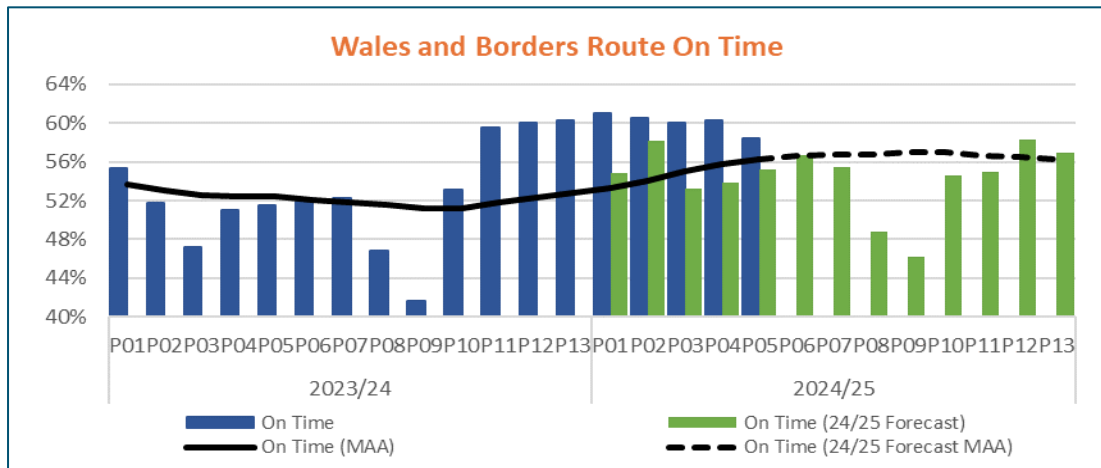


Figure 8: Wales & Borders Route Delay per 1,000 miles and Moving Annual Average (23/24 and 24/25)

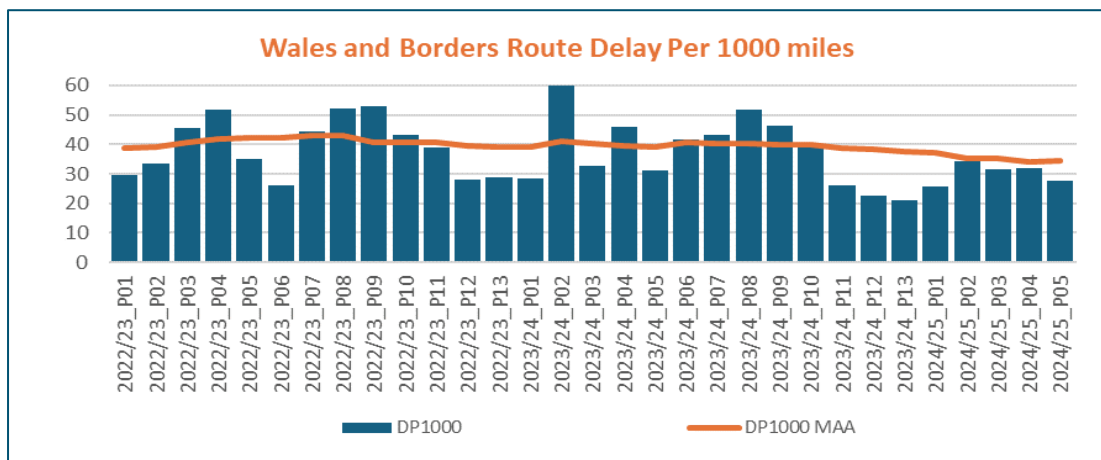
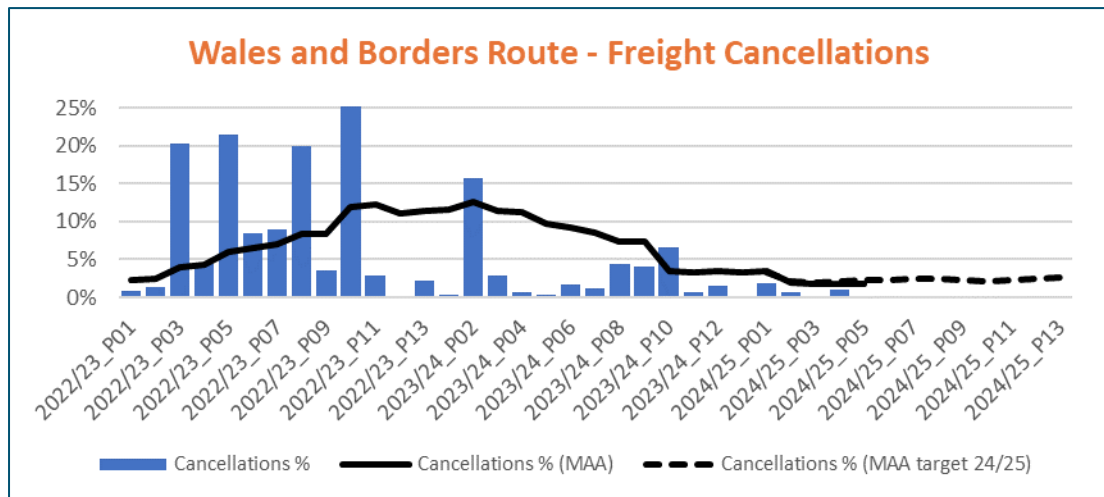


Figure 9: Wales & Borders Route Freight Cancellations and Moving Annual Average (22/23-24/25 incl. forecast)



3.4.5 In Wales & Borders our On Time performance of 58.4% for period 5 exceeded our target of 55.3% which demonstrates continued upward trajectory in MAA for On Time in the Route. It is also important to note, as well as improving performance for our passengers, as a Route we continue to see significant improvements in freight performance, with an upward trend since period 1 of 2023-24. As a result of work across the Route the MAA for freight cancellations (F-CAL has improved significantly. Despite our period 5 F-CAL figure sitting at 6.5% versus an 8.63% target, and the MAA showing 8.2% versus an 8.7% forecast, the latter number represents our sixth consecutive period of MAA improvement. Our period 5 cancellations were 1.6% against a 2.2% target.

3.4.6 Moving forward we have plans in place to tackle our key challenges, with some of the key highlights including:

- Ongoing work with the British Transport Police and ring-fenced funding to tackle trespass (described in Section 6) which is our biggest cause of train delay in Wales & Borders (12.5% of all delay minutes).
- Project Dragon, which is a group of cross-industry experts evaluating the impact of the June timetable change at Cardiff Central station on baseline service delivery and sub-threshold delay.
- Our Wales & Borders 7Rs plan, where an example of work we are delivering is focused on the reduction of temporary speed restrictions (TSRs), and where we have already reduced TSR delay minutes by 75% since November 2023.
- Establishment of local railways, by driving empowerment as low as possible to the frontline leadership team, to deliver better outcomes for customers.

3.4.7 We recognise that we need to sustain this curve and our plans to do so are set out in this response.

4. Our Plan and its benefits



4.1 Our Plan

- 4.1.1 Our Plan, summarised in Table 3, contains the actions we will take to meet the requirements of us as set out in The Investigation Report and Final Order. Further detail on Our Plan is provided in Appendix 1.
- 4.1.2 Our Plan is not an exhaustive list of actions we are taking across W&W to improve our performance and should be read in conjunction with our PRPs (including the Wales & Borders Route's 7Rs and the Western Route's Project Brunel), joint performance strategies with operators (Joint Performance Strategy 2024-2029 with GWR and "One Railway" for Wales & Borders Performance Strategy 2024/25) and our CP7 Strategic Business Plan.
- 4.1.3 Collectively, Our Plan and the existing activities we are delivering across the Region (described in Sections 5 – 8) will support our delivery of CP7 performance commitments set out in Section 3. In conjunction with other projects and performance activities in our CP7 delivery plan, Our Plan will help us to achieve our goal of achieving two primary performance outcomes:
- **On Time** – improvement in On Time performance to 63.4% over the course of CP7.
 - **Cancellations** – reduction in passenger train cancellations to 3.3% and reduction in freight cancellations to 1.6% over the course of CP7.
- 4.1.4 In Year 1 of CP7 (FY25), we are targeting an increase in On Time performance to 60.4% and reduction in cancellations to 3.8%. Our Plan will play a key role in helping us to deliver these targets. Of the 57 activities in Our Plan, 19 have direct impact on train performance, with the remaining 38 either having an indirect impact or being enablers to delivering train performance.
- 4.1.5 Those that have a direct impact on improved train performance include activities like the headspan renewal along the 0-12 mile from Paddington, Phase 5 of our points resilience programme and our weather resilience programme. These activities refer predominantly to improvements to the fixed infrastructure, making the assets more reliable and resilient, as well as some activities to allow the Region to recover more quickly from incidents and mitigate the impacts from external factors.
- 4.1.6 Those that have an indirect impact on or enable improved train performance include activities like the Wales & Western competence interventions to train our colleagues, RM3P maturity assessments to support us to mature our performance management capability and upskilling our operational colleagues through the Thames Valley Signalling Centre (TVSC) signaller resilience programme. These activities will improve our Region's knowledge, insight and understanding; develop our organisational capability; and strengthen our leadership structures, culture and governance.

Table 3: Activities in Our Plan (by theme, ORR recommendation, completion date, scope, SRO, PIMS element, improvement category and outcome)

Theme	ORR Rec	ID	Activity	Completion date	Scope	Activity SRO	PIMS element	Improvement category	Outcome
1	NR04	S01	Old Oak Common INITIAL December 2026 timetable modelling	28/02/2025	Western	Industry Programme Director [HS2]	Operating Plan	Timetable resilience	INITIAL OOC Dec 2026 timetable performance modelling completed
1	NR04	S02	Capacity Planning team's review of Elizabeth Line modelling	31/05/2025	Western	Capacity Planning Director	Operating Plan	Learning, knowledge & insight	Review complete and findings shared
1	NR04	S20	System Operator timetable modelling capability and tools improvements	1. 30/06/25 2. 30/09/25	Region	Capacity Planning Director	Operating Plan	Organisational capability	1. v.14 operational 2. National Infrastructure Model operational
1	NR04	WA73	Port Talbot freight growth - readiness programme	31/12/2024	Wales & Borders	Programme Director [P&T]	Operating Plan	System resilience	Readiness works completed
1	NR04	WE04	Capacity Planning - accelerated training programme	1. 31/10/24 2. 31/12/24	Region	Timetable Production Manager [W&W]	People	People development	1. All vacancies filled 2. Training programme delivered
1	NR04	WE07	Old Oak Common - sponsorship and delivery model	31/10/2024	Western	Chief of Staff [W&W]	Performance & Change Management	Industry collaboration	Revised operating model operational
2	NR01	WA89	Trespass and Route Crime projects (Wales & Borders)	31/03/2025	Wales & Borders	Operations Director [W&B]	External Factors	Network availability	Planned interventions completed
2	NR01	WA91	Stranded Train simulation exercises - Wales & Borders	30/09/2024	Wales & Borders	Operations Director [W&B]	Recovery	Service recovery	Exercise completed with Avanti
2	NR01	WE110	Stranded Train simulation exercises - Western	31/10/2024	Western	Operations Director [Western]	Recovery	Service recovery	Programme of exercises commenced
2	NR01	WE28	Train detection insights monitoring tool - implementation	31/10/2024	Western	Project Director [Brunel]	Fixed Infrastructure	Asset reliability & performance	Trial complete, embedded as BAU process
2	NR01	WE43	HILDA (implementation)	30/09/2024	Western	Operations Director [Western]	Recovery	Service recovery	Implementation complete
2	NR01	WE45	RAPPORT (trial)	31/12/2024	Western	Operations Director [Western]	Recovery	Service recovery	Implementation and post trial assessment complete
2	NR01	WE60	Operational Performance Insight Tool	31/12/2024	Region	Head of Performance [Western]	Performance & Change Management	Learning, knowledge & insight	Insight tool implemented and fully operational

Theme	ORR Rec	ID	Activity	Completion date	Scope	Activity SRO	PIMS element	Improvement category	Outcome
2	NR04, (NR09)	WE55	December 2026 Timetable Planning Rules and sectional running time review	31/10/2025	Western	Head of Performance [Western]	Operating Plan	Timetable resilience	Review complete and findings published
2	NR06	D14	Wales & Western competence intervention	30/04/2025	Region	Regional Engineer [TV]	People	People development	Phase 1 Trial completed
2	NR06	WE106	Optimised earthing	TBC (subject to TU consultation)	Western	Regional Head of E&WM [E&P]	Fixed Infrastructure	Network availability	Implementation of magnetic earthing
2	NR06	WE107	Maintenance timetable impact assessment process (Western Route)	31/05/2026	Western	Western Route Infrastructure Director	Operating Plan	Network availability	Impact Assessment process implemented
2	NR06	WE42	Maintenance timetable impact assessment process (Brunel)	30/06/2025	Western	Project Director [Brunel]	Operating Plan	Timetable resilience	Impact Assessment process implemented
2	NR07	D09	Points resilience (Phase 5)	31/12/2025	Western	Project Director [Brunel]	Fixed Infrastructure	Asset reliability & performance	Heavy maintenance works completed on 25 point ends in scope of Phase 5
2	NR10	WA50	FRACAS - review potential application in Wales & Borders	04/10/2024	Wales & Borders	Infrastructure Director [W&B]	Performance & Change Management	Learning, knowledge & insight	Complete review of outputs of FRACAS from Western and assessment of additional benefits that can be delivered - decision to be made by the Reliability Governance Board
2	NR10	WE47	FRACAS - implementation (Western - Phase 2)	30/06/2025	Western	Project Director [Brunel]	Performance & Change Management	Learning, knowledge & insight	Process and systems in place for whole of East DU
2	NR09	D42	Dawlish protocol	30/09/2024	Western	Senior Programme Manager [CCTF]	External Factors	Network availability	Review completed and revised arrangements implemented
2	NR08	D05	Headspan renewal project	31/03/2029	Western	Project Director [S,CS&T]	Fixed Infrastructure	Asset reliability & performance	All headspans removed between Paddington and Heathrow Junction
2	NR08	D22	OLE resilience - hook and eye inspections	31/08/2025	Western	Project Director [Brunel]	Fixed Infrastructure	Asset reliability & performance	Completion of inspections and resultant repairs (0-12 mile)
2	NR09	D26	Weather resilience programme	1. 31/03/2025 2. 30/11/2028	Region	Senior Programme Manager [CCTF]	External Factors	System resilience	1. Desktop development 2. Full work scope completed for 6 priority sites

Theme	ORR Rec	ID	Activity	Completion date	Scope	Activity SRO	PIMS element	Improvement category	Outcome
2	NR09	D41	Convective Alert Tool (CAT)	31/08/2024	Region	Senior Programme Manager [CCTF]	External Factors	Network availability	ORS review complete, low risk sections removed from tool
2	NR09	WA29	December 2025 Timetable Taskforce	31/12/2026	Wales & Borders	Programme Director [P&T]	Operating Plan	Learning, knowledge & insight	Targeted reduction in sub-threshold delay realised
2	NR09	WE103	Seasonal preparedness review	31/03/2025	Western	Operations Director [Western]	Performance & Change Management	Organisational capability	Implement revised seasonal preparedness plans, processes and operational response arrangements
2	NR07	D25	Flood resilience - Chipping Sodbury	1. 31/10/2025 2. 30/11/2026	Western	Senior Programme Manager [CCTF]	External Factors	System resilience	1. Phase 1 (modelling and consents) completed 2. Resilience works completed
2	NR11	S04	Control Operations Leadership Academy (COLA)	1. 02/09/24 2. 14/10/24 3. 02/05/25	Region	Operations Director [Western]	People	People development	All SNDMs and RCMs completed programme: 1. Complete recruitment 2. First course goes live 3. Project close
2	NR11	S05	Operational capability (12 strategic priorities)	31/12/2024	Region	Director, Operational Capability	People	People development	Recruitment of Standards & Competence Manager posts completed
2	NR11	WA46	Introduction of a Traffic Management System	30/04/2025	Wales & Borders	Operations Director [W&B]	Recovery	Service recovery	TMS implemented and operational
2	NR11	WA88	GWR Train Running Support Control Desk (Wales WROC)	30/09/2024	Wales & Borders	Operations Director [W&B]	People	Industry collaboration	TRSC resource in post and operational
2	NR11	WE111	MTR Train Running Support Control Desk (Swindon Control)	31/03/2025	Western	Head of Network Delivery [Western]	People	Industry collaboration	TRSC resource in post and operational
2	NR11	WE38	TVSC signaller resilience programme	1. 04/01/2025 2. 31/10/2025	Western	Operations Director [Western]	People	Organisational capability	TVSC signaller posts: 1. New starters onboarded 2. New starter cohort assessed as Competent
2	NR11	WE70	Strategic Workforce Planning	31/12/2024	Region	Regional Head of Human Resources	People	Organisational capability	Test framework launched for business testing
3	NR01	WE81	CRISIS / Exec on call review	31/10/2024	Region	Regional Infrastructure Director	Recovery	Service recovery	Review completed, revised arrangements implemented

Theme	ORR Rec	ID	Activity	Completion date	Scope	Activity SRO	PIMS element	Improvement category	Outcome
3	NR07	D29	Rectification of defective OLE switches	31/03/2025	Western	Project Director [Brunel]	Fixed Infrastructure	Asset reliability & performance	24 defective switches repaired
3	NR07	D31	W63 point machine conversions	31/03/2027	Western	Project Director [Brunel]	Fixed Infrastructure	Asset reliability & performance	All W63 points replaced in East DU area
3	NR07	D33	Accelerated vegetation removal project	31/03/2025	Region	Project Director [Brunel]	Fixed Infrastructure	Asset reliability & performance	Work packages 23 and 24 complete
3	NR07	D38	Single control demesh facility	31/03/2025	Western	Regional Head of E&WM [E&P]	Recovery	Network availability	Demesh functionality implemented for 0-12 mile out of Paddington
3	NR07	WA17	Remote Condition Monitoring	31/03/2026	Wales & Borders	Infrastructure Director [W&B]	Fixed Infrastructure	Asset reliability & performance	Roll-out of digital track circuits complete
3	NR07	WA18	North Wales cable replacement	31/03/2025	Wales & Borders	Infrastructure Director [W&B]	Fixed Infrastructure	Asset reliability & performance	FY25 committed interventions complete
3	NR07	WE83	Track Quality Reporting Form	1. TBC (subject to TU consultation) 2. 31/03/25	Region	Operations Director [Western]/ Programme Director [P&T]	Performance & Change Management	Service recovery	Reporting Form use expanded to: 1. MTR 2. TfW (trial depot)
3	NR09	D54	GUSTO tool - permanent implementation	30/09/2024	Region	Senior Programme Manager [CCTF]	External Factors	Network availability	Review completed and revised arrangements implemented
3	NR10	S08	National ILR database	31/03/2025	Region	Director, Operational Delivery	Performance & Change Management	Learning, knowledge & insight	National ILR database launched
3	NR10	WE89	Incident Learning Review (ILR) implementation of best practice	31/12/2024	Western	Head of Performance [Western]	Performance & Change Management	Learning, knowledge & insight	Revised ILR process implemented and PIR complete
3	NR10	WE94	Immediate learning from incidents	31/12/2024	Western	Operations Director [Western]	Performance & Change Management	Learning, knowledge & insight	Process established and embedded
4	NR03	G22	Strategic Improvement Platform (SIP 2.0) expansion	31/12/2024	Region	Value Management Director	Performance & Change Management	Learning, knowledge & insight	All Regional business change / performance improvement activities migrated to SIP 2.0
4	NR03	G03	RM3P maturity assessments	1. 31/10/24 2. 31/03/25	Region	Heads of Performance [Wes/W&B]	Performance & Change Management	Organisational capability	Maturity assessments complete for 1. Wales & Borders and 2. Western

Theme	ORR Rec	ID	Activity	Completion date	Scope	Activity SRO	PIMS element	Improvement category	Outcome
4	NR03	G15	Regional Operating Model change programme	Phase 1A - 01/07/24 Phase 1B - 30/09/24 Phase 1C - 30/03/25 Phase 2A - 31/10/24 Phase 2B - 30/09/25	Region	Chief of Staff [W&W]	People	Performance culture	1A - ID shadow mode 1B - Asset Mgmt. devolved to Routes 1C - Investment, Sponsorship and CD (part) devolved 2A - Phase 2 design complete 2B - Decisions taken on further devolution
4	NR03	G19	Governance effectiveness reviews	31/03/2025	Region	Head of Governance, Risk & Assurance	Performance & Change Management	Learning, knowledge & insight	Review completed and recommendations implemented
4	NR03	G21	Regional governance model	30/09/2024	Region	Chief of Staff [W&W]	Performance & Change Management	Organisational capability	Design review completed and revised model implemented
4	NR03	G25	Executive-sponsored leadership and culture improvement plan	1. 30/09/2024 2. 31/10/2024	Region	Regional Head of Human Resources	People	Performance culture	Phase 1 - Strategic review completed of Region's culture and leadership development. Phase 2 - Development of roadmap with timings and milestones
4	NR03	G26	Cultural Insights tool	1. 31/10/24 2. 31/10/24 3. 30/11/24	Region	Regional Head of Human Resources	People	People development	1. Soft launch of tool to leadership teams 2. Priority focus areas identified 3. Action plans and interventions agreed
4	NR03	G16	Local railways - new units created	1. 09/11/24 2. 07/12/24 3. 31/03/25	Region	Value Management Director	Performance & Change Management	Industry collaboration	1. New unit in W&B (P8) 2. New unit in Western (P9) 3. New unit TBC (P13)
4	NR05	G27	Regional Whole Industry Performance Board	31/12/2024	Region	Chief of Staff [W&W]	Performance & Change Management	Industry collaboration	Cross-industry performance board is established

4.2 Benefits of Our Plan

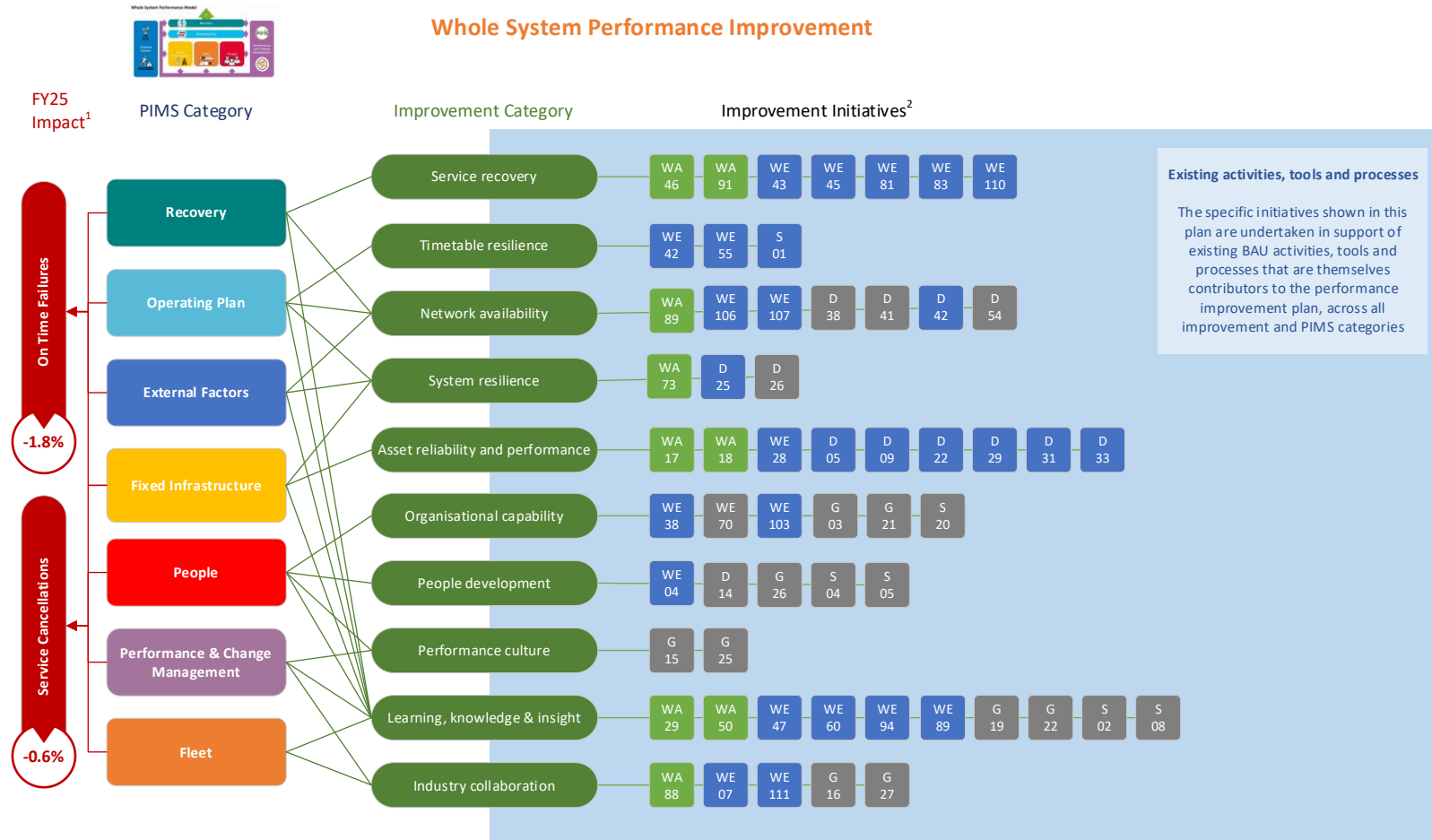
4.2.1 By taking a multidisciplinary, whole system approach using the PIMS, we are confident Our Plan consists of the right activities to deliver our targets. However, the benefits associated with Our Plan can be impacted by instability within the base train plan, leading to larger reactionary delay from both NR and operators. We are working as one industry to review resilience within that base plan, along with the resilience of train crew and fleet diagramming and resourcing as set out in Sections 5 and 6.

4.2.2 A high-level view of benefits (both direct and indirect / enablers to delivering our performance targets) to be delivered from Our Plan is shown in Figure 10. Benefits are described in the following ten improvement categories:

- **Service recovery** – Contributing to more effective service restorations after incidents.
- **Timetable resilience** – Developing a robust timetable.
- **Network availability** – Minimising closures and restrictions on the network to maximise access for services.
- **System resilience** – Improved forecasting of the impact of extreme weather and making specific parts of the network more resilient to extreme weather events across asset types.
- **Asset reliability and performance** – Investing in specific assets to improve their reliability and performance, e.g. enhanced maintenance and renewals.
- **Organisational capability** – Maximising our organisational set up, team capacity, governance, structure, processes, and ways of working to deliver improved performance.
- **People development** – Developing our people to think and act in a way that supports a performance mindset.
- **Performance culture** – Improving performance leadership, behaviours, and accountability across the organisation.
- **Learning, knowledge & insight** – Learning from data and insight on past or future events to inform and improve our wider performance plan and activities.
- **Industry collaboration** – Working more closely with our partners to enable enhanced performance for the whole system.

4.2.3 Figure 10 also includes how improvement categories are aligned to the PIMS Whole System Model for Performance.

Figure 10: How Activities in our Plan deliver benefits by Improvement Category



Note¹ – Reduction reflects delta between FY24 exit and FY25 target (as published in the Wales & Western Region CP7 Delivery Plan).

Note² - Activities shown are either direct or enabling contributors to the performance target, along with other 'BAU' activities that are not specifically shown.

■ Wales & Borders Route
 ■ Western Route
 ■ Region wide

5. Our response: Sufficient Planning for Cumulative Change (Theme 1)



5.1 Background and context (“Why”)

5.1.1 W&W has seen some of the largest major network transformations in recent years and we are planning for further change during CP7 and beyond. We are planning for the next by learning from the previous, applying lessons learned from those past changes – including GWEP, the Elizabeth Line and the rebuilding of Reading station – to future confirmed or anticipated changes such as:

- GWML expansion of HS2 and construction of Old Oak Common station.
- Core Valley Lines Transformation in Wales & Borders to create a metro-style system around Cardiff.
- The North Wales electrification programme (unconfirmed).
- Freight growth, which is essential for critical national infrastructure, such as at Port Talbot Steel Works as the result of a change to Tata Steel’s supply chain, and an increase in the supply of aggregate from quarries across the Western Route to support, among other projects, the construction of Sizewell C.
- Expansion of open-access operators on our infrastructure such as the proposed Grand Union service between Carmarthen and London.

5.1.2 Lessons we have learned and taken action on include:

- Strengthening how we collaborate on major timetable changes with industry partners. For example, the December 2019 timetable change saw a reduction in resilience of the timetable as the result of reduced journey times, which followed an artificial performance improvement as new faster trains ran in old rolling stock timings. We learned from this by improving robustness of the modelling we did for the Elizabeth Line by including data from operators on driver behaviour (using on-train data recorder information) and running times. We feel this improvement in collaboration worked well, and we need to continue to refine our approach in preparation for HS2.
- Continuing to invest in asset renewals during times of major change, drawing on lessons from GWEP, by planning investment in maintenance and renewals ahead of HS2.
- Maturing our capability around modelling performance impacts, drawing on lessons from the Elizabeth Line. This includes assuring ourselves of the scope and applicability of the modelling systems and approaches we use, and by introducing new tools, technologies and training to strengthen the modelling we do, so we will better prepare for future changes in the Region.
- Working closely with System Operator, Routes and operators to make timetable changes over time that reflect changing demand patterns and protect performance outcomes. For example, using learning from the Mendip freight timetable changes in Western, we are working collaboratively with System Operator and freight operators to make timetable changes for planned freight increases at Port Talbot in Wales.

5.1.3 By collaborating across the two Routes within the Region (e.g. through technical expert attendance at each other’s timetable risk management meetings), and by analysing evidence for how effective our interventions have been by tracking outcomes and the benefits of these, we are getting better at sharing and applying these learnings.

- 5.1.4 We must also consider how we work together as an industry to bring forward change. In W&W, this framework is made more complex with stakeholders across nations, including Department for Transport (DfT) and TfW, involved in the specification and management of change. We must therefore continue to co-develop solutions on how we work together with our partners. For example, we must continue to learn lessons on how we develop a base operating plan with operators (considering fleet and crew diagramming and resource availability) to understand the resilience with any major change governance.
- 5.1.5 Our Plan is informed by our understanding of the performance risks that have crystallised over the last three years but will be shaped by the funding envelope for CP7. We will therefore need to factor the impact of cumulative change into our plans, in order to build a market-led asset management plan, and to deliver value for money and performance outcomes that are right for our customers. As we move through this period of performance recovery, our plans will therefore be kept under review.

5.2 Outcomes we will deliver (“What”)

- 5.2.1 The planned and ongoing activities described in this section will enable us to maintain performance levels during and after the introduction of major network changes. Specifically, the plans support delivery of the following improvement areas, which contribute to our targets for On Time and cancellations:
- **Learning, knowledge and insight:** through learning lessons from major changes such as the introduction of the Elizabeth Line, including timetable and performance modelling so that we can apply them to future network change across W&W (**S02**).
 - **Timetable resilience:** through building more robust modelling capability and collaboration with industry to support the timetable to withstand perturbation, and therefore minimise delays for passengers and freight customers (**S01, WE55**).
 - **People Development:** by investing in new tools and training to improve our capabilities to model timetable and performance impacts from cumulative changes (**WE04, S20**).
 - **System Resilience:** by working with industry to make areas of the Wales & Borders Route resilient to increased demand on the network from potential freight services (**WA73**).
- 5.2.2 Relating to the PIMS framework, the activities described in this section primarily focus on:
- Building robust operating plans in collaboration with System Operator and our operator partners (including through ESGs) that focus on whole system performance when there is major cumulative change.
 - Making fleet changes, e.g. through increases in tonnage, rolling stock changes and driver behaviours when making decisions about infrastructure investment.
 - Developing our people and capabilities e.g. through building our modelling capability, technologies and tools so our colleagues are better equipped to better prepare for major changes.

5.3 Plans and actions we are taking (“How”)

Commitment 1

We will complete our review of timetable modelling undertaken for the Elizabeth Line by May 2025 and apply learnings to our modelling of future major projects (*addresses NR4*)

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- 5.3.1 Modelling of the Elizabeth Line during programme definition and access planning was governed by director-level groups (e.g. Elizabeth Line Stage 5 Oversight Group). From 2019, once infrastructure and service specification were defined, modelling of the Elizabeth Line was governed through the cross-industry Western Event Steering Group (ESG).
- 5.3.2 The ESG procured performance modelling between 2020 and 2022, which was considered best practice. ESG's modelling considered the relative performance of timetable options on typical days for performance with a post-modelling overlay to consider the impact of major failures on overall performance.
- 5.3.3 NR led the whole system modelling (covering junction margins and headways, performance of the timetable and the impact of the timetable on infrastructure) from 2008 to 2018 using the Crossrail Railway System Model. 94 run cases were carried out, and the final run achieved the threshold of predicted performance required (94.6% achieved vs 92% target threshold Objective Performance Measure required for access rights to be drawn down from the Track Access Option).
- 5.3.4 Whilst it is our belief that timetable modelling undertaken for the introduction of the Elizabeth Line was extensive and applied standard industry tools, we agree with the ORR that a review of this modelling would be helpful to ensure lessons can be applied to future service changes across W&W.
- 5.3.5 We will build on our expanded capability and capacity by undertaking a detailed, retrospective review of Elizabeth Line modelling (**S02**). The remit is being developed in August and the work will be undertaken between October 2024 and May 2025. This review will be led independently by the System Operator Capacity Planning Timetable Performance & Simulation Team. It intends to give assurance (or otherwise) to the modelling work and to provide observations and recommendations about how the work could be improved, and whether we should augment our modelling capabilities further. The review will look at three areas:
- **Approach and processes of the modelling:** including methodology, standards and quality checks.
 - **Modelling outputs:** ensuring outputs answered remitted aims and were not misleading, vague or failed to answer the aims, and whether the aims were suitable for their use for the customer (i.e. Western ESG).
 - **Model risks and limitations:** and if they were clearly conveyed to the customer and stakeholders, and understood this on the basis of what the outputs could be used for.
- 5.3.6 The review will also check the model made no unreasonable assumptions, settings, or decisions and will compare the assumptions used to actuals today. Learnings from the review will be applied to timetable modelling we are doing on other major changes like HS2 at Old Oak Common. Modelling for Old Oak Common is being governed by the HS2 ESG and will run until December 2026. Lessons from the review will be fed into the ESG to support Old Oak Common timetable modelling in early 2025 (**S01**).
- 5.3.7 We are already making changes to the way we undertake modelling for Old Oak Common, drawing on evidence and lessons from Elizabeth Line and the December 2024 timetable in Wales. For example, to support the December 2026 timetable change, we are introducing new timetable planning rules (TPRs) (**WE55**) to ensure sectional running times (SRTs) and TPRs take into account the changes caused by the construction of the station – changes such as speed or route restrictions. We are also expanding the approach to review timetable rules

across the Paddington planning area. The intended benefit of this activity is that the December 2026 timetable will be built on more robust assumptions. However, there is a risk that more accurate TPRs could result in timetable outcomes that reduce available capacity (for example due to constraints accessing high-numbered platforms at Paddington) which must be considered by the ESG alongside other considerations for the service change.

5.3.8 Noting the extent of future changes we will experience in CP7, we have also already begun to take action to ensure we have sufficient modelling capability and capacity, for example by:

- **Building capacity and competence within the timetable production team (WE04)** – By end of December 2024, we will have recruited and trained thirteen additional W&W-dedicated Operational Planners to our System Operator team since the start of 2023. The planners will be using a Chartered Institute of Railway Operators accredited training pathway for timetable development created by System Operator.
- **Encouraging collaborative learning on modelling and its application** – NR continues to offer an Industry Developed Training to enable collaborative learning between TOCs, FOCs and NR on areas like Engineering Access & Timetable Planning and Operational Planning. This supports our colleagues to collaborate with industry and understand modelling at a holistic level. Feedback from the courses has highlighted that attendees feel more aware of cross-industry issues and are more likely to consider impact on operators during the timetable development process.
- **Classifying timetable modelling tool as a Business-Critical Model** – in line with DfT-specified best practice, this activity will increase assurance of modelling outputs from this increasingly common modelling methodology. We feel this is an important step in building our capabilities as an industry to plan for major changes across the W&W Region and wider network.

5.3.9 We are also building NR’s modelling capability by updating our tools to better consider asset condition, reliability, and resilience (**S20**). For example, as part of our CP7 plans, we are:

- **Renewing the timetable modelling system** from v11 to v14 so that it better considers infrastructure condition and changes. Due to be operational in Q1 2025, the model will be applied to projects like HS2.
- **Developing a UK-wide National Infrastructure Model (NIM)** to allow modelling teams to draw down network information like physical properties of the track (i.e. gradients, points, track lengths), signalling set ups (i.e. signal placement, overlaps and sighting distances), routing features (i.e. Route codes and platform numbers) and line speeds. Due to be complete in Q2 2025, the model will support teams to better understand how a proposed timetable could impact asset condition and reliability. So far, this work has reduced the project time required to deliver modelling outputs in relation to the December 2025 ECML advanced timetable work.
- **Scoping a “perpetual model” with W&W** to understand the impact of timetable changes on performance and other factors throughout the major change planning process. While we are in the early stages of understanding the feasibility of this kind of tool, we feel it could be of considerable benefit for major projects like HS2 that require regular “check ins” when assumptions change or when other considerations (e.g. impact on sustainability) need to be considered. Agreeing a formal position on next steps is planned for Q3 2025.

- **Creating a tool to digest train running data alongside planning values** to support industry to have a system wide understanding of how achievable, resilient, and appropriate current train planning rules are. This tool should be available in full in 2026, with iterations in 2025. We envisage the benefit of such a system would be more accurate data on which to base timetable assumptions.

5.3.10 Where tools are being scoped and piloted, before wider roll out, we will use an evidence-based approach to assess their effectiveness and consider feasibility of their implementation (including training requirements and ongoing costs).

Commitment 2

We are applying broader lessons from the Elizabeth Line timetable change to in-flight and future changes in W&W (*addresses NR4*)

5.3.11 We have also applied lessons from the Elizabeth Line timetable changes to the way we manage major change as an organisation. For example, at Old Oak Common we evolved our model for delivery to apply the following lessons:

- Early and integrated governance between planning, asset management and operations.
- Requirement for stronger NR sponsorship to interface with the funder.
- Clear accountability for integration and delivery of rail systems, asset management and other projects (renewals and enhancements).

5.3.12 We are currently transitioning Old Oak Common sponsors from North West & Central Region to W&W Region, creating an integrated sponsor team for the Thames Valley with aligned leadership, including direct reporting to the Regional Managing Director (“RMD”) (**WE07**). The benefit of the change is a clear interface and integration with HS2 Ltd as well as the Western Route becoming a more active client of the project. The work is being completed by October 2024 (dependent on Safety Validation and Consultation). Overall, the new model will create a more integrated approach to delivery, focused on passenger and freight outcomes.

5.3.13 In Wales & Borders Route, we are applying lessons from the introduction of the Elizabeth Line to better plan for and manage cumulative change earlier and more closely between sponsors and the Route, ensuring operations and asset management plans are taken into account when planning for major changes. For example, at Port Talbot Steel Works, in the event of significant freight expansion as the result of blast furnace closures (**WA73**), we are preparing by:

- Working with our Short-Term Planning team in System Operator and the W&W Senior Regional Freight Manager to proactively manage assets in light of this significant potential uplift in freight traffic, including by providing robust freight paths and running test trains. These will inform the assumptions we make by gathering information to inform our asset management and maintenance plans, including access requirements. We plan to complete this in December 2024.
- Holding signaller and controller briefings to create awareness of the criticality of freight flows (including through specific head codes on trains). As well as contributing to operations of the Port Talbot facility, this activity supports delivery of the timetable.
- Improving the way we plan for and record actual tonnage, drawing on learnings from the Elizabeth Line. We recently created a track category generator tool to review planned and actual tonnage, improving visibility and understanding of where

incremental changes have a significant effect in the short term, for example new freight traffic flows for HS2 and Port Talbot Steel Works.

- Improving risk assessments for cumulative change if a certain threshold of change is proposed as part of timetable planning, e.g. by undertaking enterprise risk reviews using a risk bowtie approach. We will work with System Operator to consider impacts, consequences and mitigations of such changes more fully.

Commitment 3

We are working with the industry to improve processes for the introduction of major changes (*addresses IN1*)

5.3.14 Whilst we will deliver our plans to improve our internal management of major change, we know the wider industry has more to do to improve processes around major change and to ensure these fully consider the impact on the rail network and its operations (*see IN1*).

5.3.15 We are already proactively working with partners to ensure we plan in good time for potential future major changes, including for:

- **Core Valley Lines and Cardiff Metro** – We have been meeting periodically for over two years with DfT, TfW and Amey Infrastructure Wales as part of our Route Integration Group to plan the Core Valley lines change across areas including timetable, construction, rolling stock and capability. Through this engagement, we have already started to develop plans for how existing lines used primarily for freight may need to be upgraded to accommodate new stations and passenger services.
- **New Open-Access Operators** – In Wales & Borders, we have started early engagement with Grand Union Trains (GUT) to model their proposed Carmarthen to London service. We are awaiting confirmation of the final rolling stock choice, and the proposed service includes stopping at Cardiff Parkway, a potential new station near junction 46 of the M4 which does not yet have funding or approval. There is a potential further consideration on the performance of GUT services if TfW Burns commission proposals (five new stations on the South Wales Main line, currently unfunded) were to be funded. In Western, we await the ORR decision for applications by GO-OP Co-operative for Taunton – Swindon services which, if approved, would increase utilisation of single line sections through the Route leading to the requirement for a potential performance intervention. Additionally, Alliance Rail have an application for Cardiff to Edinburgh services via Gloucester.
- **Potential and planned freight growth across the Region** – Including by setting up freight performance boards and the Regional Freight Growth Board.
- **Potential North Wales electrification programme** – where we began early and proactive engagement in April 2024 with sponsors to prepare for possible timetable changes, noting we have not yet received formal instruction from the project sponsor (DfT).

5.3.16 A more joined-up approach will enable greater focus on customer outcomes. As part of Great British Railways (GBR) there are new proposals for delivering “output change”. Output change refers to the outputs (e.g. the benefits) rather than inputs of the system. Proposals include development of a regional and network-level change portfolio and a new framework with clear accountabilities for sponsors, infrastructure managers and operators. This framework will clarify inputs into a planned change, including capacity allocation, timetable change, rolling stock, operations and operator contracts to ensure they are defined and

managed. Going forward, W&W will contribute to industry improvement on planning for cumulative change by:

- Contributing to development of the output change accountability framework by feeding in lessons learned and evidence from major changes in W&W, like our delivery approach for Old Oak Common.
- Piloting changes early where practicable, to build the right capabilities required by the industry in the future.

Commitment 4

We are working with industry to review and clarify responsibilities and accountabilities of the ESG and related specification processes to help drive improvements in oversight of, and planning for, major change (*addresses IN2*)

- 5.3.17 Another area of focus for the industry will be on better defining the roles of parties involved in a major change. This will include the role of Event Steering Groups (ESG) (**see IN2**), which are a Network Code condition. ESGs are convened when a timetable change impacts multiple operators and / or multiple NR Regions. ESGs include NR (including W&W and System Operator), TOCs and / or FOCs to:
- Implement a plan to transition to the timetable change.
 - Oversee and facilitate delivery of the project.
 - Carry out appropriate consultation with stakeholders including Transport Focus, London Travel Watch, Rail Freight Group, Freight Transport Association and other infrastructure managers during the course of the project.
- 5.3.18 Specification for train services is constantly evolving and requires early and consistent inputs from Routes, System Operator and operators. Some of the challenges around ESGs include late submissions from bidders or decisions taken outside of the ESG (including by the ORR) which can change the specification being considered. As a result, complex decisions are required but cannot always be taken before the plan is validated.
- 5.3.19 For these reasons, there is a need to improve industry-wide governance for introducing major changes. We have taken a series of actions to support this, including by improving the effectiveness and clarity of roles involved in ESGs. For example, the ESG set up for the timetable re-cast in Wales & Borders (now December 2024) has driven much closer working relationships between the Route, System Operator and operators. This was reflected positively through the interventions made in December 2023, particularly on the Wrexham to Bidston section. We also recently updated the ESG Framework (governance documentation for ESGs) in March 2024 to clarify the roles of NR (including the role of the ESG Chair, Capacity Planning, Advanced Timetable, Performance and Simulation, Economic Analysis and Route Performance teams) and external partners in the ESG process. This updated framework is being used by the Old Oak Common ESG.
- 5.3.20 Going forward, we will collaborate with industry to do more to improve ESGs and other industry governance forums, and their related specification processes more effective, for planning for major change, including through:
- **Education around the role and importance of ESGs** – Continuing to clarify and update NR and external stakeholders on what the ESG is for, roles and responsibilities, how it works and useful resources, including ESG template documents.

- **Improved governance through our HS2 / Old Oak Common delivery model** – The improved governance structures we are creating as part of our delivery model will support better alignment between the timetable development and modelling process, governed by the HS2 ESG, and wider strategic discussions around the planning of infrastructure interventions, access availability or emerging changes requested by key stakeholders. This is a key lesson from the Elizabeth Line and delayed December 2024 timetable change in Wales & Borders where there was a need for closer alignment between the ESG and supporting processes. These changes will ensure the ESG is aware of emerging requirements including from the Route(s) and can seek to accommodate changes, or identify mitigations, if possible, within the HS2 timetable planning process.
- **Supporting development of a new or updated specification process and related governance as part of rail reform** – Drawing on future learnings from changes like the December 2024 timetable change in Wales & Borders, construction of Old Oak Common and wider network changes like the East Coast timetable change, we will work with industry to develop a process that has clear go / no go stage gates to limit late timetable changes that are not fully assessed and considered (see also Commitment 3). Moving forward, we would welcome future reforms to consider how external partners, including funders and the ORR, can become more involved within the ESG process as early as possible.
- **Development of a ‘trade off’ framework** – Post-reform, this framework could be used by ESGs to make decisions around the high-level plan and timetable before D-40. It would consider what trade-offs we will need to make as an industry and how we may decide these (for example, performance vs. capacity). By agreeing criteria in advance, an ESG could use this to support indicative discussions before D-40.
- **Work as an industry to identify opportunities to improve how we share information across industry partners** – At present the timetable modelling process includes assumptions such as driver diagramming and fleet information, but if those assumptions change, for example due to a reduction in driver availability, industry partners are under no obligation to share this information with NR who may be leading the modelling. In the future, we have an opportunity to create a process where information can be shared more effectively across industry partners, and stakeholders can be held to account, to ensure assumptions remain as accurate as possible and mitigations can be applied where needed.

5.3.21 To make these improvements, we will require active participation by stakeholders across industry including the ORR, operators and sponsors / funders. We propose industry come together to agree how to take forward proposed actions set out above.

5.4 Future considerations

5.4.1 When planning for a change, the impact on infrastructure assets is only one consideration by funders and ultimately trade-offs must be made. The new output change model proposed as part of GBR will go some way to balance these trade-offs.

5.4.2 We welcome the opportunity to improve how industry works together to plan for major change, including through ESGs and related timetable specification processes. However, we must continue to manage challenges and mitigate risks associated with current industry processes we feel require improvement. In addition to what is set out above, we will take

action to manage some of these challenges and risks, such as those related to funding and timetable planning processes.

- 5.4.3 The current enhancements funding model remains a real challenge in planning for major change. STAR funding by operators does not fully cover the long-term costs to maintenance and renewal of railways assets the changes require. These costs are instead assumed to be captured in our funding settlement – which for CP7 is 0.3% lower than CP6, and therefore reflects real-terms reductions in asset renewals, scheme deferrals, changes to refurbishment and partial vice full renewals. It does, however, assume that we will deliver efficiencies year on year to negate some of this challenge. In future, we welcome the opportunity to help industry to develop a funding model that is more suitable, brings clarity to the true costs of change, and the infrastructure investments required to fully enable that change, and how these requirements are funded across partners.
- 5.4.4 The alignment of processes that make up a timetable change (including sale of access rights, access planning and timetable development processes) and their timescales also present challenges and risks to bringing forward that change. We have already taken action to mitigate these risks and will continue to do so with some notable examples including:
- Ahead of the December 2024 timetable change, we worked more proactively with partners in System Operator, ORR and TfW to consider the real impact of the modelled timetable change on performance. As a result, we had constructive conversations which resulted in a delayed decision on the change and resulting sale of access right to ensure whole industry outcomes (including performance impact) were fully understood and mitigated where possible.
 - Ahead of the opening of Old Oak Common, which will significantly uplift service levels between Westbourne Park and Old Oak Common station, we have taken action to agree funding with TfL for new renewals to ready the infrastructure for 18 trains per hour. There will also be a cap on the number of trains, and 24 trains per hour will only be allowed if Communications-Based Train Control is introduced.
- 5.4.5 Whilst we will continue to work proactively and collaboratively with partners within the limitations of the current process, we will also progress our work with the System Operator to develop ideas for actions that industry could take to improve the process. For example, we proposed in *Transport for Wales Rail Limited and Network Rail timetable bid and access rights process review in January 2023* (letter to ORR) that the industry work together to:
- Review the timetable development process and consider if train performance is sufficiently considered.
 - Consider if the current timescales allow sufficient time for performance impact mitigations to be planned and implemented once a timetable is agreed.

6. Our response: Understanding Operational Factors Driving Increased Delay (Theme 2)



6.1 Background and context (“Why”)

6.1.1 There are a variety of factors that contribute to the impact of incidents on the train service, ranging from the nature and severity of the incident, the location of the incident, and availability and timing of resources from NR and operators to respond. However, we recognise the requirement to improve our understanding of the relationship between primary and reactionary delay and how our operational response may lead to an increase in delay per incident (DPI). As a result, we continue to evaluate the causes and impacts of incidents across the Region, in conjunction with our operators, with a focus on learning and designing interventions that both reduce the occurrence of incidents and minimise their impacts.

6.1.2 We have previously set out some of the well-understood drivers of performance challenges and increased operational delays. In the main, these are linked to the significant infrastructure transformation across the Region and the impact of the post-COVID-19 timetable change. These changes have had a significant impact on both the structure and nature of operations in the Region and include:

- A reduction in timetable resilience and a higher volume of trains as a result of the introduction of a metro-style railway and Elizabeth Line operations in the Thames Valley.
- Significant patronage growth, impacting the ability to use traditional recovery methods such as running trains fast and turning short, with increases in dwell times further increasing reactionary delay.
- Challenges aligning TOC available crew with service recovery, operating contingency plans and stepping up train crew to enable right time starts. All of which require sufficient train crew, with appropriate Route and diversionary knowledge and suitable Terms and Conditions to support operational challenges.
- Timetable changes post electrification and the introduction of shorter journey times across the GWML.
- Rolling stock challenges such as the delays to the introduction of new TfW rolling stock and availability of trains to recover the service.

6.1.3 Whilst we have managed to stabilise primary delay to a level that is showing consistency to pre-May 2023 timetable changes, our reactionary delay has increased almost 78%.

6.1.4 Our plans to reduce operational delay are informed by our improved understanding of operational delay through Route analysis, working with our operators to understand incidents, and supporting analysis from the System Operator. For instance, the Network Performance Analysis team in System Operator has recently conducted analysis into the common causes of delay across the network. The analysis finds that at a network level, the biggest contributors to increases in primary delay include severe weather, network management and non-track asset faults. The key factors that are indicating incidents take longer to fix and for services to recover include:

- Availability of response teams and mobile operation managers to respond to incidents, especially when teams are already engaged in an incident elsewhere.
- Train crew resourcing, both in terms of availability and whether or not drivers and guards have been signed up to diversionary routes.

- Access to the track following cessation of working under warning and the requirement to take line blockages to diagnose faults. Gaining agreement from operators for access is difficult, and so often results in faults being deferred to overnight repair.

6.1.5 Despite us improving our understanding of these factors, we must operate within the financial and resource constraints of our organisation and industry. Our plans therefore include understanding how we can prioritise investment towards interventions with the most impact.

6.2 Outcomes we will deliver (“What”)

6.2.1 The planned and ongoing activities described in this section support us to improve the tools, systems and processes we use to ensure we are better placed to understand the impact of incidents on the railway. It also sets out the steps we are taking to ensure we can address the elements of operational incidents within our control.

6.2.2 Specifically, the activities described in this section support delivery of the following improvement areas that address primary and reactionary delay, sub-threshold delay, and delay per incident. These contribute to On Time and cancellations improvements:

- **Asset Reliability and Performance:** Including completing our headspan renewal project (D05), points resilience (D09), OLE hook and eye inspections (D22), rectification of defective OLE switches (D29) and implementation of our train detection insights monitoring tool (WE28). We will also continue to deliver on Project Brunel’s timebound plan to improve performance and roll out its holistic approach across the Region.
- **People Development:** Including through Wales & Western competence intervention (D14), Control Operations Leadership Academy (COLA) (S04), and Operational capability - 12 strategic priorities (S05).
- **Industry Collaboration:** Including GWR Train Running Support Control (TRSC) Desk (Wales Rail Operation Centre (WROC)) (WA88) and MTR Train Running Support Control Desk (Swindon Control) (WE111).
- **Learning, Knowledge and Insight:** Including from our competence management system reporting, December 2025 Timetable Taskforce (WA29), Western - Phase 2 FRACAS implementation (WE47), reviewing potential application of FRACAS in Wales & Borders (WA50), and implementing the Operational Performance Insight Tool (WE60).
- **Network Availability:** Use of the Convective Alert Tool (D41), through reviewing our ongoing access requirements and improving our approach to understanding the impact of timetable change on maintenance capacity (WE107), use of the Dawlish Protocol for weather-related delays (D42), trespass and route crime projects (WA89) and permanently implementing our GUSTO tool to minimise closures to the network (D54).
- **Organisational capability:** Including our TVSC signaller resilience programme (WE38).
- **Service recovery:** Including the introduction of a traffic management system (WA46) and Historic Incident Log Delay Analysis (HILDA) (WE43) to make improvements to operational response, and running stranded train simulation exercises in Western (WE110) and Wales & Borders (WA91).
- **System resilience:** Including introducing further flood resilience measures at Chipping Sodbury (D25) and our weather resilience programme (D26).

- **Timetable resilience:** Including through review of SRTs as part of the December 2026 TPRs (**WE55**) and Project Brunel’s maintenance timetable impact assessment process (**WE42**).

6.2.3 Relating to the PIMS framework, the activities described in this section primarily focus on:

- Building the right operational capability in the organisation, ensuring we have the right capacity in critical signalling and control centres, and ensuring our people are supported with the right training and tools.
- Establishing the right governance and processes with our operators to ensure we understand the impact of incidents and learnings, and interventions are implemented.
- Investing in fixed infrastructure and making use of technology to remote monitor asset performance to make sure we make the right interventions.
- Working with our operators to ensure that we make improvements to the base timetable and that service recovery plans improve resilience to disruption when it does occur.

6.3 Actions and plans we are taking (“How”)

Commitment 5

We are improving our understanding of the impacts of incidents and reviewing our plans so that we have the right measures in place to improve factors within our control, including operational response (*addresses NR1*)

- 6.3.1 Our Plan sets out steps we have taken to improve our own capabilities within the Region to improve our understanding of what is driving delays. This means investing in tools and working closely with partners so we can make targeted interventions into factors within our control to reduce DPI.
- 6.3.2 For instance, we are working with the National Performance Analysis Team in System Operator to use analytical capabilities through the Insight Tool (**WE60**). Outputs of the Insight Tool allow us to analyse trends at a local and national level that are driving increased operational delay and allow us to target specific sections. As an example, the Insight Tool is already being used in our Devon and Cornwall Local Railway. As demonstrated in Figure 11, we are able to look into specific SRTs and target specific sections for improvement, driving improved performance outcomes around Barnstaple. We are continuing to work with colleagues in System Operator to have our Insight Tool dashboard fully implemented in the Region by the end of the year.
- 6.3.3 In addition to working with System Operator, we continue to work with train and freight operators to understand lessons learned from incidents and the remedial steps we can take to improve performance. The improvements we are making to Incident Learning Reviews (ILRs) are detailed in Section 7.

Figure 11: Sectional running times from Western Route via System Operator Insight Tool

Period & Week Leg Name	2413 Week 1		2413 Week 2		2413 Week 3		2413 Week 4		2501 Week 1		2501 Week 2		2501 Week 3		2501 Week 4		2502 Week 1		2502 Week 2		Total	
	% Met SRT	Qty	% Met SRT	Qty	% Met SRT	Qty	% Met SRT	Qty	% Met SRT	Qty	% Met SRT	Qty	% Met SRT	Qty	% Met SRT	Qty	% Met SRT	Qty	% Met SRT	Qty	% Met SRT	Qty
Barnstaple (S) to Umberleigh (S)	74.1%	58	78.3%	60	80.0%	60	88.4%	43	88.5%	52	83.6%	61	86.0%	57	84.2%	57	83.1%	59	76.6%	47	82.1%	554
Copplestone (S) to Yeoford (S)	96.3%	54	98.3%	60	95.3%	64	97.4%	38	100.0%	50	100.0%	59	98.1%	54	98.3%	59	96.6%	59	100.0%	39	97.9%	536
Cowley Bridge Jn (P) to Crediton (S)	23.3%	30	34.5%	29	36.7%	30	43.5%	23	50.0%	26	46.2%	26	35.7%	28	39.3%	28	50.0%	28	56.5%	23	41.0%	271
Cowley Bridge Jn (P) to Exeter St Davids (S)	64.8%	128	71.2%	132	64.8%	142	77.4%	93	70.7%	123	70.9%	110	64.7%	119	63.0%	135	77.2%	123	73.7%	99	69.4%	1,204
Crediton (S) to Cowley Bridge Jn (P)	70.0%	80	71.3%	80	78.2%	87	67.3%	55	85.2%	74	76.4%	72	68.9%	74	81.9%	83	75.0%	72	81.3%	64	76.1%	741
Eggesford (S) to Lapford (S)	100.0%	28	100.0%	22	100.0%	21	100.0%	15	100.0%	18	100.0%	27	100.0%	22	96.6%	29	95.7%	23	94.4%	18	98.7%	223
Exeter St Davids (S) to Cowley Bridge Jn (P)	90.6%	32	93.9%	33	100.0%	35	92.0%	25	96.8%	31	88.9%	27	93.3%	30	100.0%	31	90.3%	31	79.2%	24	93.0%	299
Exeter St Davids (S) to Exeter Central (S)	99.1%	106	99.1%	113	99.2%	121	97.5%	79	96.0%	101	97.1%	104	98.0%	98	96.6%	117	99.1%	110	98.7%	76	98.0%	1,025
Lapford (S) to Marchard Road (S)	68.0%	25	63.6%	22	90.9%	20	53.8%	13	68.8%	16	66.7%	21	75.0%	20	76.9%	26	72.7%	22	72.2%	18	71.4%	203
Marchard Road (P) to Copplestone (S)	99.9%	22	97.7%	24	86.2%	29	100.0%	19	97.5%	18	95.8%	24	96.4%	22	93.8%	22	100.0%	24	88.2%	17	89.0%	219
Marchard Road (S) to Copplestone (S)	100.0%	51	100.0%	51	100.0%	49	100.0%	34	100.0%	45	100.0%	45	100.0%	47	100.0%	52	95.9%	49	97.4%	38	99.3%	461
Newton St Cyres (P) to Cowley Bridge Jn (P)	81.8%	33	91.3%	23	82.8%	29	90.5%	21	90.6%	30	87.5%	24	89.7%	29	80.6%	31	82.8%	29	88.2%	17	86.1%	266
Okehampton (S) to Crediton (S)	56.5%	62	61.5%	65	57.5%	73	50.0%	50	76.1%	71	77.8%	54	89.1%	55	53.3%	75	55.0%	60	66.0%	50	63.9%	615
Umberleigh (S) to Eggesford (S)	83.3%	42	88.6%	44	85.7%	42	87.5%	32	83.3%	36	80.5%	41	92.9%	42	82.5%	40	84.1%	44	84.4%	32	85.3%	395
Yeoford (S) to Crediton (S)	83.3%	54	83.3%	60	82.5%	63	83.8%	37	83.7%	49	86.2%	58	96.1%	51	84.7%	59	87.5%	56	81.8%	38	85.3%	525
Total	78.6%	805	81.8%	818	81.2%	865	81.8%	577	85.2%	738	84.3%	753	84.2%	748	80.1%	844	83.4%	789	82.5%	600	82.2%	7,537

6.3.4 We are learning from incidents and taking actions, within our direct and indirect areas of control, to minimise the impact of those incidents. One example is our ability to respond to incidents and fix faults. In the Western Route, we are moving to the implementation phase of HILDA (**WE43**). HILDA is supporting our understanding of factors that contribute to our response times, using data logged in the Fault Management System (FMS). Since commencing a trial in January 2024, we have developed insights into what causes increased response times, such as distances from the depot, availability of access routes and traffic congestion, and have been using these to make targeted improvements, including:

- Improvements to mobile operation manager locations across the network and the commencement of establishing joint response within the East Delivery Unit (DU).
- Confirmation of headspan locations in the 0-12 mile post area for our electrical incidents, reducing their impact.
- Clarification of Automatic Train Protection rules, confirming no initial requirement to caution trains where conventional speed boards are in place.
- Empowering frontline colleagues to make performance-based decisions, as evidenced during the recent fatality at Hayes and Harlington (on 29th July). Previously all lines would have been closed by default, however lines were left open to continue the service.
- Rewrite of the electrical control room instructions to allow more targeted emergency switch offs of the OLE.

6.3.5 During the period we have been using HILDA, we have seen reductions in our average “time to site” metric due to more accurate information on location of incidents. We plan to have HILDA embedded as part of business as usual operating plans by September 2024 and we have commenced training of control staff to use HILDA in real time. As well as improving overall incident response times, HILDA will enable us to provide customers with better information on the status of incidents and timing of planned resumption of normal service during times of perturbation.

6.3.6 In Wales & Borders, we continue to monitor and review operational response metrics (time to site and time to fix) through our weekly management team meeting, focusing on learning lessons from the top three incidents that influence those two key metrics. To improve operational response in Wales & Borders, we have increased our mobile operation manager establishment to bolster response cover and increased the number of Senior Network Delivery Managers (SNDMs) to provide cover at weekends and extended daytime support. We have supported this with an increase in the number of Tactical Incident Commander / Railway Incident Controller competent staff, and we have established mentoring workshops to ensure those competences are practiced and retained.

- 6.3.7 We have been investing in more remote condition monitoring across the network to improve our understanding of the likelihood of incidents occurring and to minimise their impact. For example, since June 2024 we have been trialling the use of a train detection monitoring and diagnostics tool (**WE28**) to monitor axle counters and diagnose faults remotely. This means we do not need to take possession of the railway for fault diagnostics, improving our overall response and repair times. We are forecasting a 24,000 delay minute improvement as a result of this roll out. We expect the tool to be in place fully by October 2024.
- 6.3.8 Our Plan also sets out initiatives we are delivering to target known operational factors that have driven an increase in delay. Examples that relate to network management include:
- In Wales & Borders, we have identified route crime as a primary contributor to increased operational delay – this cause makes up 12.5% of all delay minutes. As a result, we have set aside investment in improvements to our infrastructure in CP7, such as targeting hotspots and increased security patrols. We will have a costed delivery plan for these measures in place by the end of the financial year. Where it is practicable to do so, we will front end load the activities in order to maximise the benefits, including starting delivery of the plan within 2024/25 (**WA89**).
 - In Western, we continue to roll out asset interventions across the Route to prevent route crime and trespass. For example, we have installed hardening measures at Jacobs Ladder Bridge where we had three trespass incidents in February 2024 causing nearly 16,300 delay minutes in total. Similarly, we have installed additional fencing and palisades at Dawley Road Bridge, in collaboration with a third party, to prevent trespass.
 - We have developed frameworks and plans for improving our response to stranded train events (as set out in a letter sent to the ORR on 31st July 2024). For example, we are undertaking stranded train exercises on both Wales & Borders and Western Routes (**WA91, WE110**). These allow us to test our operational response to high impact incidents and to identify process improvements ahead of a live event.
- 6.3.9 Further, we are building our operational capability to respond during incidents by conducting a trial of Real-time, Accelerated Position and Protection of Rail Transport (RAPPORT) in the Western Route (**WE45**). The tool supports the pinpointing of trains on the network during a delay or failure and includes a map with information on access points and the type of access available at that location. The tool's benefits were evidenced on 27th July 2024, when our Western Route control team could identify exactly where the emergency brake was applied during an incident involving GWR service 2U20 (Control Centre Incident Log Ref 2898686 train delay attributor 669094). We also identified another train on the adjacent line, 2C77, and determined the nearest access point for quick response deployment. Doing so improved response times by around ten minutes on average and was aligned with JESIP principles (which outline how multiple agencies work together on incidents). Previously we would locate stranded trains using line side features like signals, along with track diagrams to identify access points, without assurance of proximity to the stranded train. RAPPORT is also being used during our stranded train exercises to normalise its use.

Commitment 6

We are reviewing and optimising our access for delivering inspection, maintenance, renewals and repair works, drawing on lessons learned from Project Brunel and best practice from other heavy trafficked routes (*addresses NR6*)

- 6.3.10 Delivering our obligations to maintain, renew and repair the infrastructure requires regular access to the railway delivered around the train service. Our plans include how we will continue to review the amount of access we require and how we will use innovative approaches to maximise the access time we have available.
- 6.3.11 Through Project Brunel in the Western Route (described in Commitment 12), we have created an integrated planning office where we work with the operator to identify and secure extended access windows to improve “time on tools” (time taken actually undertaking work). We are already seeing a performance benefit from this work, with maintenance backlog reduced to and sustained at approximately 3%. We are now developing a maintenance timetable impact assessment (**WE42**) to improve how we understand the impact of future timetable changes on our ability to access and maintain the railway to an acceptable performance level. This will support us to develop new robust timetables that deliver train performance. The process will be developed by June 2025, with plans to roll it out across the wider Western Route in 2026 (**WE107**).
- 6.3.12 The vast majority of Wales & Borders Route is covered by cyclical disruptive possession access. As part of the engineering access process, we have successfully addressed our current and future access requirements with operators, by undertaking a full review of track access between Cardiff and Swansea following the Margam fatalities and making alterations to North Wales coast. We are also working with TfW on developing blockade strategies to make track access more efficient for maintenance. Some recent examples of week-long blockades include on the Pembroke branch, the Central Wales line and the Fishguard branch. We are also working on a blockade strategy for the Cambrian lines, which is planned to start in March 2025.
- 6.3.13 In addition, availability of daylight track access, through line blockages, remains a risk due to the impact of timetable changes and signaller workload considerations. In the Route, we have developed a risk assessment process that allows the impacts of proposed timetable changes to be evaluated and understood. This provides data to inform the decision on whether changes can be agreed or not. Signaller workload impact assessments are carried out in line with existing process, and risks to compliant maintenance delivery are raised and discussed at weekly management team meetings, where maintenance backlog and compliance are core discussion items. Wales & Borders maintenance routinely have zero non-compliances and backlog is broadly in line with our Modernising Maintenance trajectory.
- 6.3.14 We are using technology and innovation to improve the way we take possession of the railway and deliver interventions, both in terms of time taken to take possessions and the requirements to deploy our staff on the ground. Examples of this include:
- We have commenced the early roll out of Remote Disconnection Devices (RDDs) across the Wales and Borders Route (ahead of a wider and more extensive regional deployment). RDDs enable us to reduce the time taken to set up possessions, providing a greater proportion of productive working time when trains are planned to be stopped. We will also use RDDs to provide additional protection for planned line blockages, resulting in safer access for track workers and increased working times between planned train movements. The outline plan in Wales & Borders will comprise 400 installations by June 2026. The Western Route deployment plan will follow the Wales and Borders plan but have the early deployment lessons integrated from conception.

- Across our Region, we are also exploring opportunities to use drone technology to reduce the requirement for staff to access the railway to undertake inspections. There are currently a number of opportunities where we see benefit to delivering inspections through the use of drones, including points heating, track circuits and Critical Rail Temperature management. It should be noted however that any use of drones would be subject to successful pilots, Trade Union (TU) agreement, System Review Panel approval and training of staff.

6.3.15 Finally, drawing on good practice developed as part of Project Brunel, we are currently delivering the Wales & Western Competence Intervention for frontline maintenance teams (**D14**) to improve maintenance performance across the Region. The trial is being monitored through Project Brunel and focuses on a new way of delivering training following a systems-thinking study. It includes regular practice of routine and non-routine skills through “sandpit training”. The intended outcome of the training is better right-first-time fix rates, better failure diagnostics and improved overall maintenance standards. It has been developed as a collaboration across W&W, Human Resources, Route Services Training and Technical Authority. The trial is to be completed in April 2025, where we will assess its impact to consider wider rollout across the Region. Learning is also being shared nationally.

Commitment 7

We are delivering on our plan to upgrade overhead line headspans from Paddington to Heathrow (*addresses NR8*)

- 6.3.16 In support of our strategic plan to improve asset reliability and sustainability in the Western Route out of Paddington (Project Brunel – see Section 7), we have developed a timebound plan for renewing the overhead line headspans from Paddington to Heathrow Airport Junction and an accompanying mitigation plan to ensure reliability until that work is complete. The headspan project will deliver an outcome of mechanically independent registration in the Thames Valley area with planned substantial completion in March 2029 (**D05**).
- 6.3.17 Through GWEP, all of the GWML was designed to be mechanically independent, however the 0-12 mile area was descoped following a design review in 2010. While overall reliability has been good, the lack of mechanical independence has compromised our resilience to incidents, leading to two nationally significant failures with severe impacts for all affected.
- 6.3.18 The 0-12 mile area of the Great Western has headspans and span wires that require replacement to increase the reliability of the OLE system. The intended outcomes of the project are:
- Mechanically independent registration – reducing the impact of a dewirement.
 - Removal of headspans, reducing the risk of headspan failure and in turn dewirement.

- 6.3.19 These works require multi-track access, and consequently access integration across the 0-12 mile area for all works is a key requirement to maintain the programme. The ability to use the planned access currently represents the most significant risk to the timebound plan. In order to mitigate this risk, a dedicated programme team will be stood up as a single accountable group for access integration and sustainable delivery of performance improvement works.
- 6.3.20 In addition, the following mitigation works are taking place, managed within Project Brunel:
- **Completion of a series of B10 inspections (D22):** Including noted repair works associated with all wire runs from Paddington to Airport Junction (0-12 mile). The inspection programme is 64% complete. The progress is reviewed and tracked weekly at our Project Brunel programme visualisation meeting.
 - **Installation of line-guards where crossover contact wires are within 75mm of each other:** The line-guard is a modification to the OLE infrastructure; a supplier has been selected and is now moving into contract. Progress is reviewed and monitored at the weekly visualisation meeting.
 - **Repair of out of use OLE switches in the Thames Valley area (D29):** The OLE switch repairs are being delivered around existing access arrangements. We have completed several to date and work continues with the supplier to develop an integrated delivery plan by the end of August 2024 for the remainder. Progress is reviewed at the weekly programme visualisation meeting.
- 6.3.21 We are also applying lessons learned from across the network to Project Brunel, for example by feeding in lessons from North West & Central Region's Project Alpha on challenges faced, delivery and cost.

Commitment 8

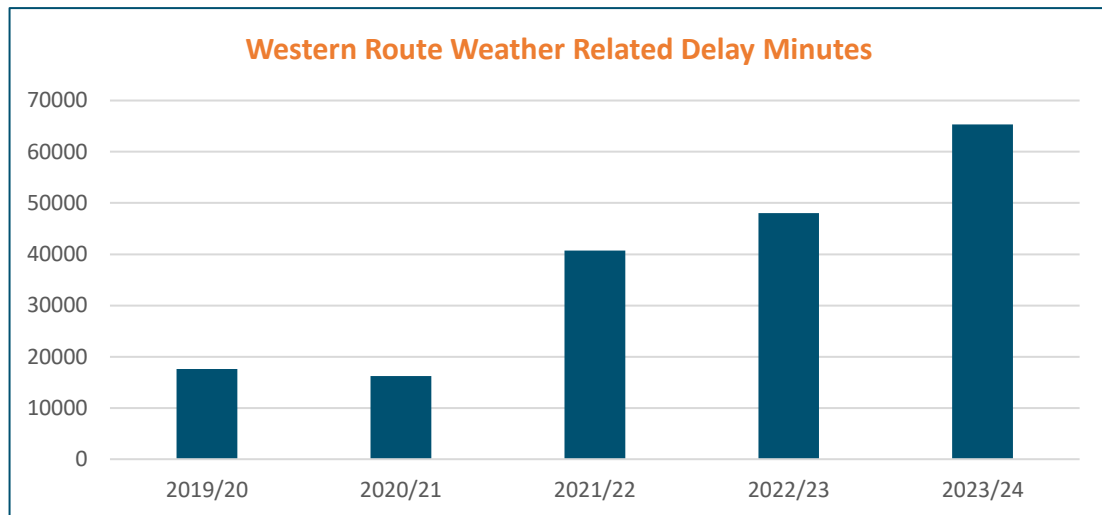
We are maximising timetable resilience within the possibilities of the current specification (addresses **NR9**)

- 6.3.22 We have already highlighted a number of challenges regarding the suitability of the base timetable across the Region and the impact of infrastructure and timetable changes on basic resilience to perturbation.
- 6.3.23 However, we recognise the role we play in working with industry to make the necessary improvements and adjustments to the timetable to improve resilience. Examples of where we are already doing this include:
- Implementation of changes to SRTs through amendments to dwell and pathing times on the Severn Beach branch and between Newbury and Taunton. These SRTs have been developed as part of the December 2024 timetable change.
 - Improving contingency plans, with external expertise engaged, to test plans for their ability to deliver reliable performance recovery during disruption. Outputs of this work are expected in October 2024 and will be included in the December 2024 timetable change.
 - A review of train crew diagrams in response to one of our core challenges with service recovery, to reduce complexity and improve resilience.

- 6.3.24 We have already been working with System Operator to establish Right Time Railway groups, where we work collaboratively with colleagues to identify incremental timetable changes that will improve On Time performance. In addition, we have already described the On Time To 3 working groups that were established at a local level to identify opportunities to take trains out of the timetable. This involves working collaboratively across track and train to understand performance at a granular level and reduce sub-threshold delay. A great example of this is the Cambrian Local Railway where we worked with train drivers to deliver short-term timetable changes resulting in circa 75% improvement in On Time on some specific train services.
- 6.3.25 Additionally, as part of our increased focus on the whole system model approach for understanding and addressing the train performance challenge across passenger and freight, System Operator and Western Route are working together to better understand the operating plan element of the whole system model in Western and where we could make improvements. Work is underway to address priority actions through addendums and future refreshes of the joint performance strategies. As part of this programme, we will consider best practice from other Route and operator timetable principles (such as the recent Southeastern timetable work) to see what can be applied in Western.
- 6.3.26 In 5.3.7 we described the process we have put in place to plan for the timetable changes as a result of the Old Oak Common station project, that will ensure the timetable is built on more robust assumptions. In the Wales & Borders Route we have taken a similar action to stand up a timetable taskforce in preparation for the December 2025 timetable change (**WA29**), which is part of our Wales & Borders Tripartite performance strategy. This is a formal workstream to capture and correct all known timetable deficiencies, including sub-threshold impacts, ahead of the timetable going live. Our ambition is to use this process to drive a reduction in sub-threshold delay. As a result of a number of interventions including the work of the taskforce and On Time To 3 groups, timetable changes in December 2023 and June 2024, and TSR removals, Wales & Borders is seeing a downward trend of sub-threshold delay from circa 19% during most of 2023/24 and first few periods of 2024/25 to 16.3% in P4 2024/25.
- 6.3.27 In order to increase resilience in the timetable we are also taking steps to minimise the likelihood and impact of external factors. This includes preventative measures in place to ensure our Routes are less susceptible to route crime and trespass, and interventions to ensure that our railway is more resilient to unpredictable severe weather.
- 6.3.28 In 6.3.8 we set out the works we have underway in Wales & Borders to improve Network Management and reduce delays as a result of trespass. However, reflecting on analysis from the National Performance Analysis Team, we recognise that one of our most significant challenges moving forward for timetable resilience is the impact of extreme weather.

6.3.29 Improving the level of resilience to extreme weather conditions has always been a key part of our performance improvement and recovery plans. Over the last year the level of extreme weather events has increased with a large number of named storms having a severe impact on the network, notably Storms Babet and Ciaran. Whilst Storm Babet was forecast with weather warnings in place, the impact of the storm was a lot more disruptive across the whole network than was anticipated. The weather forecasts for the recent Storm Henk were less accurate, leading to disruption in areas that were not expected to be affected. This has contributed to a continuing rise in the amount of weather-related delays, as illustrated in Figure 12.

Figure 12: Western Route Weather Related Delay Minutes (19/20 – 23/24)



6.3.30 To tackle this challenge, we have established a weather resilience programme to address weather resilience risk across eleven prioritised sites (**D26**). The work will focus on earthworks and drainage assets to improve resilience to intense rainfall events.

6.3.31 Wales & Borders have also adopted the revised Western approach to assessing slopes and embankments that are vulnerable to excessive rainfall. This led to a 90% decrease in the number of sites that required emergency speed restrictions at trigger levels. The newly created water management task force meets periodically to assure the Route that targeted interventions at known risk sites are prioritised and delivered as quickly as possible. A water management task force is already in place in the Western Route.

6.3.32 An improved understanding of weather risk across the Region is enabling us to make a number of interventions that are reducing the severity of the impact of severe weather on operations. **Case Study 1** includes detail of works undertaken at Welshpool to provide flood resilience, however other interventions include:

- Initiation of the Dawlish Protocol review (**D42**) following the investment in the Dawlish seawall that was completed in CP6. With the new seawall in place, we are reviewing the circumstances in which we will need to place speed restrictions on the service during high seas or storms, which will have a subsequent benefit to train delay.
- At Hinksey, south of Oxford, we have delivered a scheme to raise the track over a 400m section, raising signalling equipment, installing two large box culverts and widening an underbridge to improve wet weather resilience. Since completion of the works, no closures because of flooding have occurred.

- At Cowley Bridge Junction, east of Exeter, we installed new enlarged culverts under the railway line to allow greater volumes of water to pass underneath. Works at Cowley Bridge also featured a new demountable barrier that could be deployed across the track when flood water did overwhelm the railway. The scheme has enabled us to reduce the frequency of flooding events whilst also – and potentially more critically given this particular flood catchment – enabling us to reopen the railway faster with minimal damage to the railway assets when flooding does occur.

Case Study 1: Welshpool washouts

In Wales & Borders, we took a decision to close the Welshpool area in February 2022 to undertake six weeks of recovery and resilience works as a result of extreme weather.

The repair works included:

- 4000 tons of materials replaced and 3000 tons of additional debris material removed.
- ½ mile of double track replaced.
- Cables renewed and fencing replaced.
- 11 culverts and four underbridges cleared.
- 3 tamping shifts to realign and level the track.

The resilience works included:

- 800 yards of rock armour added.
- Remote Condition Monitoring installed.
- No disruptive access.

After the works, the area returned to operational use at full line speed with no speed restrictions or delays.

6.3.33 Finally, we are implementing new tools across the Region that will allow us to make better informed decisions during serious weather events. These include:

- Our investment in the Convective Alert Tool (**D41**) which was rolled out following learnings from Carmont. We have used the tool across all of our Operational Route Sections to conduct a detailed examination of the risk of washout during periods of high rainfall. We have seen immediate benefits from this work, identifying 16 ORS that will no longer require speed restrictions to 40mph during heavy rain due to the ORS either being in an urban area, surrounded by flat land or the topography meaning there is a relatively low risk of run off on to the railway.
- A new wind risk assessment tool called GUSTO (**D54**) which has helped reduce the number of emergency speed restrictions required during heavy winds. GUSTO has enabled us to review the use of blanket speed restrictions during periods of high winds by targeting areas of high-risk during gusts. During Storm Isha, the delay minutes incurred were around 10% of the estimated total if the pre-GUSTO processes had been used and speed restrictions were only applied to 3% of route infrastructure instead of the blanket restrictions we have used in the past.

Commitment 9

We are improving our operational capability and developing ways of working focused on performance, including targeted recruitment and upskilling programmes in the Thames Valley (*addresses NR11*)

- 6.3.34 Ensuring we have the right numbers of signalling staff is essential to run a good railway. Historically we have had gaps in this space, but have made improvements, which we plan to build on in the next 12 months. By year end, we will have sustained the improvement in recruitment numbers to frontline signaller roles so that we have the right number of people to signal the railway and help with providing ongoing development for signallers in the Region. In Wales & Borders, we have reduced our vacancy gap to circa 4% (down from 12% 24 months previous). We plan to recruit 22 signallers by year end (March 2025) which will add further resilience to the signaller establishment. In Western Route, the vacancy gap is at 8.8%. However, there is a change being completed in the system due to a re-org of relief roles, once complete the true vacancy gap is 5.9% (down from 7.1% 24 months previous). We have 8 new starters in the next 3 months and forecasted to recruit a further 19 signallers by year end (March 2025) and are currently reviewing age profile data to keep this under review as part of our engagement of a strategic workforce planning consultant. Alongside this, we are operating a candidate pooling process such that we identify suitable external candidates ready for any vacancies at TVSC and are looking at expanding this across the Route; thus, speeding up the recruitment process.
- 6.3.35 At the TVSC, our vacancy gap is 7.0% (compared to 9.9% 24 months ago). We have a small org change in progress meaning the true vacancy gap is 6.4%. We have increased the number of resilience posts in the last 24 months, adding 6 new posts. We have installed a purpose-built training facility and created new Training & Development roles to help deliver tailored training for staff using local scenarios to help build capability. As our resource levels stabilise further, we will be able to exploit the benefits of this investment by facilitating more colleagues coming off booked shifts and onto dedicated development sessions.
- 6.3.36 Through launching our TVSC Signaller Resilience Programme, we have been able to address capability and capacity gaps in one of our most critical operational centres (**WE38**). As well as increasing our establishment to bolster base resilience, this programme has already helped us to significantly reduce our vacancy gap and minimise fatigue, with a candidate identified to every signaller role and a pool of candidates in reserve for future turnover. We recognise that individuals will be new in role and will require support on their journey to competency. To aid this, we have reorganised our training organisation to better deliver initial training and ongoing competence development, which is reflected in our competence management system.
- 6.3.37 Our pooling approach is being used on both Routes to support the ability to rotate colleagues on shift through on-the-job development and dedicated training, as well as reducing fatigue.
- 6.3.38 As well as improving signaller capacity in core locations, we are establishing TRSC desks at Wales Rail Operating Centre (ROC) (**WA88**). In Western, we are reviewing our operating structure to move to 'pod working', which could move a TRSC into TVSC for the Paddington to Reading corridor (**WE111**). Establishing these in the Routes will benefit our operating plans and recovery plans, as we will be able to work more closely with operators during times of perturbation and make joint decisions more efficiently.

- 6.3.39 To further support our operations teams, we continue to identify and utilise decision-making support tools to aid professional expertise in managing the train service. Examples of these tools include RAPPOR and our new Traffic Management System (**WA46**).
- 6.3.40 Our TMS supports operators in control and in signalling centres to make quick decisions to re-route trains into available train paths during times of disruption, minimising the impacts of incidents, as well as enabling identification of re-platforming opportunities to ease congestion at stations. We have already applied this in a number of instances. Some examples of its impact include:
- Twyford landslide, blocking a portion of the mainline between Reading and Twyford. The signaller used our TMS to amend services to use the relief line at Kennet Bridge Junction, as well as terminating services short at Reading to resolve platforming issues using the 'live edit' feature. The use of our TMS allowed the signaller to keep all services in automatic route setting (ARS) in both directions, reducing the need for manual routing which can lead to an increase in DPI.
 - Heathrow Tunnel Junction, where a signal failure required a signaller to talk drivers past the signal. Control and the signaller collaborated to create and implement a scenario to route services in the down direction on the up airport line, and services in the up direction on the down airport line, negating the need for the failed signal to be passed. Using our TMS avoided cancellations and delays through contingency plans, and Heathrow Express and MTREL PPM went from 58% to 92% and 90% to 93% respectively.
- 6.3.41 **Case Study 2** below provides a more in-depth analysis of the benefits of using a traffic management system during incidents, including how we are using people centred change to deliver the benefits of the change.

Case Study 2: Traffic Management System - Track Quality at Paddington

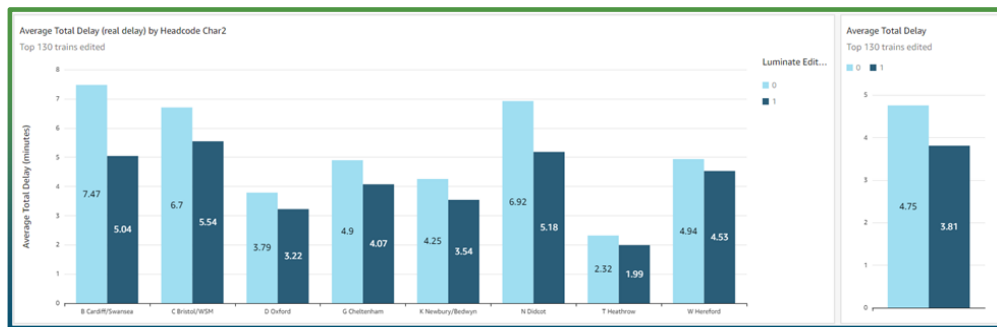
Heavy rain during October and November 2023 caused wet bed issues on Line 2 outside Paddington. This resulted in a portion of the main line being taken for possession for an extended period of time.

Our TMS was used to re-route services from Line 2 to other lines. Changes were made via a group-edit in the system, meaning it could be amended many hours ahead with ARS then routing services in the new paths.

Use of this functionality allowed users to edit multiple services together, removing the need to manually signal around the possession, reducing work repetition and reducing overall workload at a busy time. On average, trains were edited 184 minutes ahead. Users were able to efficiently plan service recovery around the possession without incurring further delays. All TMS users in signalling locations, control and at stations were aware of the changes and knock-on impacts. An average of almost 1 minute per train was saved, equating to a 19% delay reduction.

This incident lasted several months. The graph below shows a comparison between days when our TMS was used (dark blue) and days prior to its introduction (light blue), showing an average 20% delay reduction per train when it was used.

It is now embedded in Thames Valley as part of Project Brunel. We are rolling it out as a business change programme across the West Country whilst continuing to develop the capability of the software platform. The business change programme includes our training programme, the use of local champions at our signal boxes and creating additional system functionality in terms of scenario and contingency modelling and system change capability.



6.3.42 We will also invest in a system within our Train Delay Attribution team to better track reactionary delay to and from the central operating section of the Elizabeth Line, which does not use the national rail network’s delay attribution system TRUST (Train Running Under System TOPS). This will help provide a better picture of how delay is tracking from one Infrastructure Manager (IM) area to another, which is important for end-to-end customer journeys. We aim to undertake this by March 2025, subject to internal approvals and IT solution design.

6.3.43 Decision making support tools are only one example of where we are enhancing operational capability and we ensure that operation change programmes also focus on people elements such as leadership and culture. Our “people centred change” approach includes training,

assessments and coaching to ensure the change is effective, including at reinforcing skill development, cultural alignment, performance improvement, adaptability and overall organisational success. Working with System Operator, we are:

- Applying our people centred change approach to create the Control Operations Leadership Academy (COLA) programme. This is being led by W&W and represents one of the most significant investments into the training and development of control staff and management for many years. COLA will look to develop confident decision-makers who inspire trust within their teams, especially during critical incidents, and is dedicated to equipping Senior Network Delivery Managers and Route Control Managers (RCMs) with not only comprehensive training but also invaluable industry insights. Candidates will not only enhance their technical skills but also cultivate the leadership qualities necessary to navigate complex operational challenges with composure and efficacy. The programme will support our operational leaders to understand control as a whole system and use decision making tools to lead and influence their teams during incidents. By November 2024, we will have rolled out the first of these eight-week courses and plan to have completed three courses by June 2025. We are working with the national 21st Century Operations programme during implementation so that we can easily share the benefits and learning to the rest of the network (S04) and embed System Operator's 12 strategic priorities for operational capability across the Region (S05). These include signaller training, assessor capability, controller development, and resourcing and workforce planning. This builds on System Operator's framework to improve network-wide operational capability with the priorities being developed in collaboration with Route teams, whilst also taking the best elements from the Professional Operators Development framework of the Chartered Institute of Railway Operators. To support the delivery of the 12 strategic priorities, the System Operator operations capability team is introducing a number of regionally-aligned Standards & Competence Manager posts. These roles will partner with the Route and Region teams to ensure the outputs of the 12 priorities work (whether they are standards, tools, training and / or competency frameworks) are fit for purpose, understood and embedded. Recruitment is underway for these newly created posts, with the organisation anticipated to be fully staffed by the end of the calendar year.
- By April 2025, we will have implemented 'Controller Learning Journeys' as a structured approach to managing ongoing development for control staff. This places more emphasis on the individual to take personal responsibility for their ongoing professional development – an approach used by other transport professionals.
- In conjunction, we will also undertake a review of our overall control operating model to satisfy ourselves that the structure, ways of working and levels of collaboration are optimised to manage our railway. We will complete this by the end of April 2025.

6.3.44 In addition to the additional Competency Managers that will be introduced, we will use a competency management system, that will enable us to track the competency of our operational teams and make more informed decisions about where we need to invest in training and capability. This system takes the learning from our assurance processes to help identify trends and, in turn, build in tailored training to close out skill gaps amongst our operations teams.

6.3.45 The network operations team in System Operator also regularly undertake quality assurance reviews of the controls and systems in place to manage operational risk and support improved performance within the Route. The System Operator team is currently

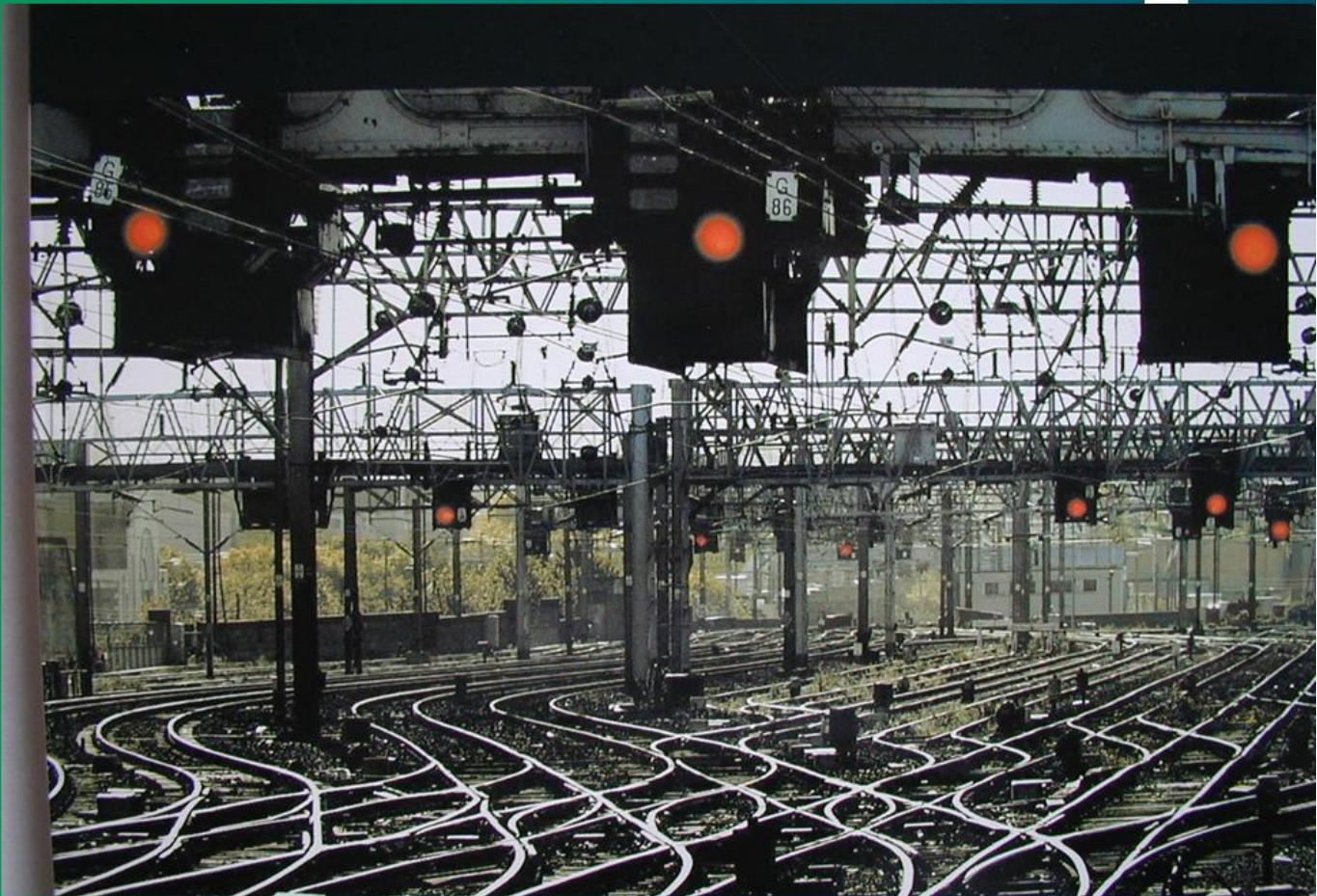
undertaking quality assurance reviews in Western Route, focusing on service recovery and operational risk, which will be shared with the Route team by the end of September for review and action planning. The team also has a structured 2025-2026 assurance programme in place, including level 1 and 2 assurance activity, for control to check that the appropriate controls are in place to manage operational incidents, enabling them to share objectively with the Route where operational delivery is falling short of expected levels and what should be done to recover. By working across the network, System Operator can share best practices as well as identify trends and emerging themes.

- 6.3.46 The learning we have made from several incidents on the network shows the benefit of using structured process flows and checklists for ensuring we have made the correct escalations and have the right management structure in place for managing incidents. We have implemented a 'Pit-Stop' process which helps our operations staff ensure they have followed the process. We are regularly checking that this is being carried out during incidents and that each Pit-Stop plan is suitable and sufficient. We will use our daily operational reviews and (where necessary) ILRs to satisfy ourselves that this is being done routinely. We will also explore the opportunities to digitise these Pit-Stop plans, so that we can make the process efficient and build in trending / learning capability.
- 6.3.47 When it comes to incident management, we are regularly reviewing the process for creating optimum response, fix and recovery. We will continue embedding our 'Triage' process to allow optimum response to faults for maintenance teams – improving the speed at which they can gain access to either fix assets or get trains moving quickly.

6.4 Future considerations

- 6.4.1 We have set out in our response that there are a number of wide-ranging factors that contribute to operational delay and that we must address the whole system performance model in its entirety if we are to sustain our performance improvement trajectory.
- 6.4.2 Whilst we have set out factors in our plans to address elements that are in our control, such as upgrades to infrastructure monitoring, implementation of new tools to measure the impact of delays such as Insight and HILDA, and ensuring we have the right signalling capacity in place, we recognise that we will need to continue to work with the industry to improve performance.
- 6.4.3 As we set out in Section 5, learning lessons from cumulative change is the first step in ensuring that future changes we have coming, such as December timetable change and the introduction of Old Oak Common, are done with resilience to the base timetable in mind. We will continue to work with the industry in order to ensure that future timetables are fit for purpose and have resilience built in.
- 6.4.4 We also note the reset of the Network Performance Board, which moving forward will have greater focus on holding NR and operators to account for delivery of performance initiatives aligned to the Secretary of State's performance priorities. W&W will work with Network Performance Board as required in the future to support its activity.
- 6.4.5 Finally, we recognise that there will continue to be incidents on the railway due to asset performance and external factors, such as trespass and the growing risk of severe weather incidents. We will continue to work collaboratively with our partners and ensure that we have joint performance strategies in place, such as our Western Route / GWR Joint Performance Strategy and Tripartite performance strategy in Wales & Borders, and also the right operating plans and service recovery plans.

7. Our response: Learning Lessons from Incidents (Theme 3)



7.1 Background and context (“Why”)

- 7.1.1 Infrastructure transformation, increased timetable density and the introduction of additional operators such as MTR Elizabeth Line have meant that incidents across our Region have the potential to be much more complex than before. With the future integration of HS2 at Old Oak Common, and the pending upgrades to infrastructure in Wales & Borders, we recognise that it is more important than ever to ensure we learn lessons from incidents and that remedial actions are fully embedded.
- 7.1.2 To achieve this, we require robust processes that enable us to understand the root causes of incidents on our network and provide assurance that learnings have been applied and embedded. Processes should also identify trends, supported by learning from other Routes that are similarly heavily trafficked, so that we can proactively address root causes to deliver the train services passengers expect.
- 7.1.3 We have established ILR and Significant Performance Incident Review (SPIR) processes which we deliver in collaboration with our operators following an incident. ILRs are completed after incidents and SPIRs are delivered where required or when triggered by specific events. The outputs of these reviews are fed into risk management systems and the generated learning supports us to make changes to how we manage the network during incidents, and in turn, minimise impact on our customers.
- 7.1.4 In February 2024, we identified a requirement to mature our ILR processes across both Routes as a result of a joint RM3P assessment. We have also undertaken reviews into incidents which have had a significant impact on our passengers, including the 7th December Ladbroke Grove dewirement, to ensure we capture more complex, multilateral incidents as part of our review. Common themes identified and that will be addressed as part of our plans include:
- Improving the overall quality of information generated from an incident to better inform the ILR process, helping to identify trends and common themes across incidents
 - Ensuring that our ILRs are both backward looking and forward looking so that we understand what caused an incident and how effectively we managed it, as well as having assurances in place that remedial actions are being tracked and monitored to ensure they are fully implemented.
 - Improving how we work with operators and bring them into the ILR process, particularly when incidents are multi-lateral and complex, to ensure that we work together as an industry to learn from these incidents and fully implement lessons learned.
- 7.1.5 We must ensure the processes in place to capture and address root cause of asset reliability failures across the network. Improving the processes and data we use to inform these decisions will allow us to make reliability and performance focused investments in the infrastructure moving forward.
- 7.1.6 Delivering on these improvements will allow us to develop more effective processes to support our operational teams to learn from incidents and ensure recommendations are embedded, preventing future incidents, and improving decision making when they occur. The outputs from reviews will also allow us to make informed adjustments to our asset management plans and risk based maintenance approach to ensure we allocate funding and resources to the right interventions across our network.

7.2 Outcomes we will deliver (“What”)

- 7.2.1 Planned and ongoing actions set out in this section focus on improving our approach to learning lessons from incidents and demonstrating how we are applying these learnings to improve how we manage the service during incidents and overall asset availability and reliability.
- 7.2.2 Specifically, the activities described in this section support delivery of the following improvement areas, which contribute to us being able to deliver our targets for On Time and cancellations:
- **Learning, knowledge and insight:** Including improving our National ILR database (**S08**), and building in ways to build in best practice and apply immediate learnings from incidents in frontline teams.
 - **Asset Reliability and Performance:** Including through upgrades to our infrastructure as the result of data and insights we have gathered including accelerated vegetation removal (**D33**) or to improve the data and insights we use including remote condition monitoring (**WA17**).
 - **Network Availability:** Including using our single control demesh facility (**D38**).
- 7.2.3 Relating to the PIMS framework, we recognise that investment in fixed infrastructure alone, will not be sufficient to drive improved reliability in the long term. To make “market led” decisions, that factor asset performance into the investments we make, we also need to invest in our people and decision-making support tools to make asset management decisions. As a result, the key outcomes of our activities include:
- Driving demonstrable performance-based improvements to our infrastructure to improve asset reliability and availability.
 - Embedding the right tools and governance processes to ensure we learn lessons from incidents and improve our processes based on the findings. Better asset insights also support us to be agile with our planned investments.
 - Embedding the tools and behaviours in the business that demonstrate we are proactively learning and have measures in place to prevent performance issues, such as Temporary Speed Restrictions (TSRs), before they occur.

7.3 Plans and actions we are taking (“How”)

Commitment 10

We are improving the ways we learn lessons from incidents, including by taking a lead on reviewing complex multilateral delay incidents and fully embedding their recommendations (*addresses NR10*)

- 7.3.1 As set out in 7.1, we undertook an RM3P review of the maturity of our ILR processes across the Region in February 2024. We have also reflected on significant incidents which have occurred across the Region and the lessons we can learn from them. Our Plan includes some of the actions we are taking to address improvement areas we have identified.

- 7.3.2 In the Western Route, one of our key findings was that ILRs are currently too focused on what went wrong, rather than assurance that actions as a result of incidents were being effectively implemented and embedded. One of the immediate actions we have taken has been the establishment of our Wednesday meeting. The meeting is used as a governance checkpoint to ensure recommended actions from ILRs are implemented. One of the emerging benefits of this checkpoint is that it allows us to focus more on common themes and root causes from incidents and ensure they are addressed across the Route.
- 7.3.3 An example of where this is working in action is a review held into a trespass incident at Wantage Road, near Swindon, on 20th June. The incident caused 2,886 minutes of delay, of which 852 were primary delay minutes, and 35 cancellations. Our immediate learning was the timeliness of calling a police negotiator; local police were left to call for a negotiator and this was not actioned until 40 minutes into the incident. As a result, we have worked with the British Transport Police to ensure the negotiator be called immediately. This has proved beneficial. During a similar incident at Barnwood, near Gloucester on August 5th, a negotiator was called immediately and the incident resulted in 1,082 delay minutes (200 primary and 6 cancellations). Our response received positive feedback from CrossCountry.
- 7.3.4 The Wednesday meeting covers incidents and learning at a local level and provides local ownership and assurance that we are proactively embedding learning. However, recognising that significant, multi-lateral performance incidents will still occur, moving forward, actions to embed learnings will be managed as part of our Western Route Performance Oversight Group (part of our performance governance). This will ensure learnings from more significant incidents have the necessary senior oversight and ownership. For example, the Western Performance Oversight Group has taken on board learnings from the 7th December 2023 dewirement following a NR-led SPIR, with actions and recommendations being signed off by the Route Director and Managing Directors of the TOCs and FOCs. Actions include:
- Focus on management of stranded trains which has been greatly enhanced and described in a recent letter to the ORR.
 - Improved understanding of ranking of all access points for potential evacuations, covering local amenities, road access and local transport options.
 - Testing of scenarios through tabletops utilising View 360.
- 7.3.5 Additionally, as part of our ongoing review, we recognised the opportunity to improve the quality of information captured as we manage incidents. We have since commissioned our internal business change team to conduct an end-to-end review of the incident management process to identify opportunities to improve information flows and quality of information fed into ILRs.
- 7.3.6 In Wales & Borders Route, we have just commenced a review of our ILR process to identify opportunities for improvement. One of the early actions we've taken includes putting ownership of ILR actions with our local railway groups. This creates ownership and delivery of actions in a forum where we already work closely with our operators and is improving end-to-end ownership on lessons learned.
- 7.3.7 A recent example of improved ILR outcomes is the remedial work undertaken at Bishton between Severn Tunnel Junction and Newport on the South Wales mainline, where we had repeat issues of bridge strikes leading to around 4,000 minutes of train delay. Through the ILR process, and working locally with the council, we funded crash protection equipment which has since been installed to prevent repeat events.

- 7.3.8 In addition, as a part of our Tripartite performance strategy we have implemented Tripartite ILRs with TfW and Amey Infrastructure Wales. This is creating a more consistent approach to ILRs, in agreement with our partners, and we continue to review and make improvements through our Tripartite governance boards. We have led practice on the implementation of these ILRs using best practice from the Industry Knowledge Hub (see 8.3).
- 7.3.9 Similar to the Western Route 11 o'clock governance meeting, on Wales & Borders Route we hold a weekly call to review all actions on Friday. The session is led by the Performance Improvement Coordinator team, who manage the action tracker. This is in the process of being updated and the tracker of actions will no longer be used as we transition them over into Strategic Improvement Platform (SIP) which is used to track and manage actions in our plans. Action owners will then be notified through SIP, as to the status of their ILR actions.
- 7.3.10 Across the Region, we have also incorporated learning from recent stranded train events into how we plan and prepare our operational teams for significant incidents. As we highlighted in our letter in response to the stranded train review in July 2024 (see 6.3.8), we are planning to hold regular real life and tabletop simulation exercises as part of our emergency planning processes. These exercises will each have defined objectives and scenarios and will provide the opportunity for both NR and operator colleagues to incorporate any recent learning from significant incidents (not just stranded trains) into a structured learning activity. We see these exercises as an opportunity to learn from previous incidents, implement learnings and explore how we can work more effectively together in the future.
- 7.3.11 System Operator are prioritising processes to support Routes and Regions to access ILRs from other Routes and Regions. At an organisational level, System Operator recognise the importance of continuing to share learning across the organisation. Nationally, the three areas of focus are a) How ILRs are conducted, b) How learning points are tracked and shared across Routes and c) How learning points are merged into testing and exercising opportunities. As the first step, System Operator have dedicated resources to build on the existing ILR process and develop a national governance structure and ILR SharePoint database by March 2025 (**S08**) to support the gathering and sharing of effective incident learning and review outputs. During development of this governance structure, W&W will work closely with System Operator as the regional champion, initially through several development workshops in Autumn 2024, to ensure that the structure aligns to the Route ILR processes being developed.
- 7.3.12 Alongside this work, System Operator is committed to supporting the ongoing engagement and adoption of the outputs from ILRs across Routes and Regions. To enable this, wider governance forums (such as the Operations Director forums) provide opportunities for operational leaders to share their learning, monitor progress and continue to engage hearts and minds across the Routes. As an example, System Operator is engaging actively with the Operations Director forum in introducing a new process for tracking lessons learned related to preparedness for stranded passenger events. Going forward, both Routes will contribute to this slot when appropriate to share knowledge and learning with colleagues across the network.
- 7.3.13 Additionally, as was shared in the response to the stranded trains review letter, System Operator is undertaking a review of two key standards to ensure they are fit for purpose, NOP 4.15 and NOP 4.10. This process will fully reflect learning from stranded train events across the network in 2023 and is an example of how our lessons learned processes are contributing to a national review of standards to see how they can be improved in the future.

- 7.3.14 To improve our capability and support our people to learn lessons from incidents we continue to invest in new tools, technology and processes. For example, we have rolled out and embedded our Reliability and Performance Tool (RAPT) to support all regional colleagues to track and access Mean Time Between Failure (MTBF) and MTBSAF data in an accessible form. RAPT provides a dashboard and an enhanced level of analytical data, providing insights into trends in failure rates, repeat failures, hot spot locations and root causes of failure. The outputs of RAPT are reviewed periodically and leading indicators are used to assure our reliability improvement plans.
- 7.3.15 In addition, as part of Project Brunel, we are rolling out the Failure Reporting Analysis and Corrective Action System (FRACAS) (**WE47**). The FRACAS tool has been developed using industry best practice from TfL. The tool allows teams to review and learn lessons from failure data in a structured way and has enabled asset management decisions informed by trends. The FRACAS approach will be implemented across the Western Route (subject to IT solutions and internal processes). In Wales & Borders, outputs of FRACAS are being reviewed (**WA50**) and an assessment will be made regarding additional benefits that can be delivered beyond the current 7R workstreams. A decision will be made by the Reliability Governance Board by 04/10/2024.

Case Study 3: Failure Reporting Analysis and Corrective Action System

Project Brunel has been implementing and piloting FRACAS.

FRACAS is not just a new tool for managing data; it focusses on improved collaborative working between teams and improved processes to capture good failure record data and make full use of it. It is a system that helps us to capture, analyse and address problems so they don't happen again. The main headlines of our implementation of FRACAS include:

- **Daily Reviews and Root Cause Analysis:** We look closely at recent failures to understand the real reasons behind them. These reviews involve Operations, DU, RAM and Performance teams working together so that we can understand and capture a useful record of the root cause. This initiative is also implementing a closed-loop of ensuring FMS is updated with the failure record so the master NR failure database is accurate as a single source of truth.
- **Understanding Both Technical and Operational Causes:** FRACAS helps us to understand not just what went wrong with the equipment, but also whether there were any operational factors—like how something was used or communicated—that played a part. This ensures that when we fix something, we're fixing all the potential causes.
- **Preventing Repeats:** To stop the same problems from happening again, we analyse each issue, what actions have been taken to fix it and if that is an appropriate permanent resolution before closing the case.
- **Continuous Improvement:** Through regular data analysis and trend reviews we are consistently identifying and addressing the most critical issues, we ensure that our effort is spent where it has the greatest impact. Regular trend monitoring will also help inform our asset strategies.

By making failure analysis a part of our daily routine and focusing on both technical and operational causes, we're building a more resilient network. Importantly, FRACAS

encourages everyone to take responsibility for their part in improving the performance of the railway.

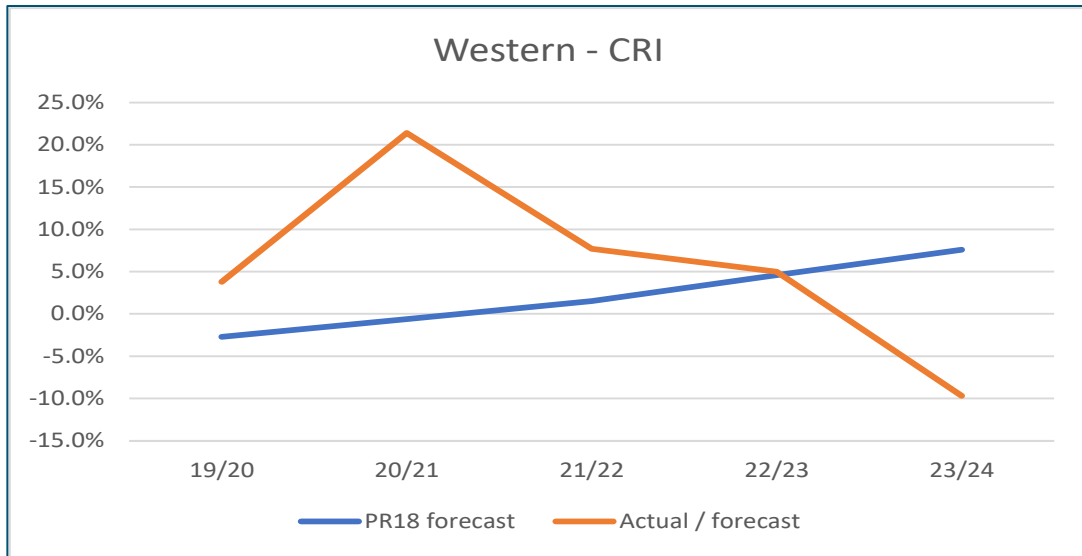
Commitment 11

We are tackling the known root causes of asset performance risk and will continue to develop tools that enable us to reduce performance risks before they occur. (*addresses NR7*)

- 7.3.16 The condition, design, usage and configuration of our assets is extremely varied across the Region. The latest funding settlement reflects an expected 2% degradation in asset sustainably and a 4% increase in Service Affecting Failures (SAFs). This is incorporated in our plans to improve asset management capability and take a market led approach to ensuring we deliver value for money, whilst prioritising performance on our most critical Routes.
- 7.3.17 Throughout CP6 and moving into CP7, we have seen a marginal increase in total number of asset failures across the Region, however, this figure is not fully reflective of the true asset reliability trends that we have experienced and is not in line with our PR18 forecasts.
- 7.3.18 Our Composite Reliability Index (CRI) against PR18 forecast is shown for both Western Route and Wales & Borders in Figures 13 and 14 respectively. It is noted that both Routes benefited from the short-term reduction in passenger and traffic volumes during COVID-19 which created artificial good CRI performance. It is also important to note that both Routes have experienced instances where specific asset classes have both exceeded and significantly underperformed CRI forecasts.
- 7.3.19 On both Wales & Borders Route and Western Route, there are instances where have met, exceeded and significantly underperformed against CPI, dependent on asset type, which is reflective of the varied nature of assets we manage and the requirement for specific targeted plans.

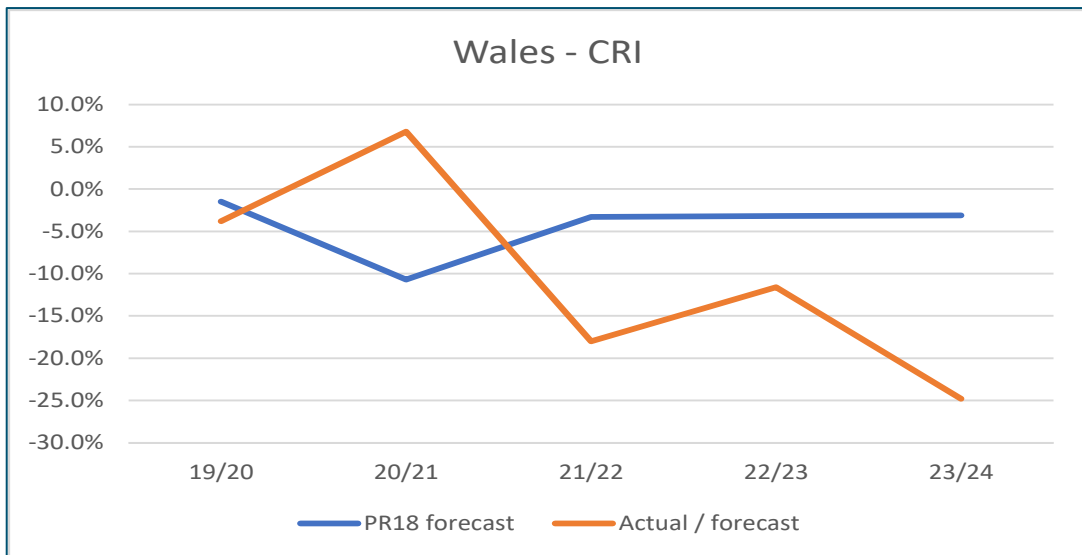
7.3.20 In the Western Route, forecasted improvements in reliability were based on the benefits of electrification and planned improvements such as introduction of axle counters between Paddington and Airport Junction. However, key failures among track, signalling and points assets in particular has led to CRI tracking well below CP5 baselines.

Figure 13: Western Route Composite Reliability Index Actual and Forecast (19/20 – 23/24)



7.3.21 In the Wales & Borders Route, an initial decline in CRI has been forecast due to the installation of new electrification asset, however, Wales & Borders has experienced a number of failures against track and points assets.

Figure 14: Wales & Borders Route Composite Reliability Index Actual and Forecast (19/20 – 23/24)



7.3.22 Improving our approach to learning lessons from incidents is enabling us to have targeted, informed plans in place that tackle the known root causes of some of our key asset reliability risks and subsequent train service performance risks.

7.3.23 To deliver on this commitment, and recognising the cost and delivery constraints we have in the control period, our interventions are based on lessons learned and fall into the following broad categories:

- Life extension works where we are improving the reliability of some of the life-expired, or near life expired assets on our railway.
- Renewal and replacement works where we are making conscientious decisions to renew an asset to reduce the mean time between service affecting failure (MTBSAF) rate.
- Targeted interventions that improve the resilience of the infrastructure to external events, such as drainage improvements to mitigate the impact of heavy rain and flooding.
- Investment in additional remote condition monitoring so that we are able to understand the condition of our assets and intervene before they impact performance

7.3.24 Our interventions cover multiple asset disciplines and are outlined in Table 4 below.

Table 4: Interventions we are taking to learn lessons from incidents by asset discipline and proposed benefits

Intervention	Proposed Benefit
Points Resilience (D09)	<p>We have completed four phases of points resilience improvements works in the Thames Valley area. With the support of Intel Rail, we have scoped points for inclusion in a fifth phase of points resilience work based on previous failure history.</p> <p>This work will include 25 point ends, which includes around 5% of the total population, but can be attributed to 45% of delay between P1 22/23 and P1 24/25. Previous phases have delivered a 60% uplift in points reliability. Phase-5 will be completed in December 2025</p>
Accelerated Vegetation Removal (D33)	<p>At a regional level, we are moving to a more proactive approach to vegetation management to address key performance risks such as OLE encroachment and signal sighting risk.</p> <p>We have let contracts for this work and propose to undertake it over the next year. In Wales & Borders, for example, we have awarded contracts for 6m vegetation clearance across the South Wales corridor as part of works planned for 2024/25. However, meeting the requirements of ecology laws in England and Wales, including obtaining the relevant licences, continues to risk delivery of volume of the remedial works at pace. We are working with Natural Resources Wales and Natural England to mitigate this risk. In addition, both Routes have issued an immediate action instruction to facilitate vegetation management within three metres of the running railway.</p>
OLE Resilience Interventions (D38)	<p>As part of improving performance of the OLE system, two bird culls have been undertaken in Spring 2024 to reduce bird roosting leading to high tripping frequency. These have been low-cost activities that have been one of the most successful OLE performance improvements in the Region.</p>

Intervention	Proposed Benefit
	<p>In addition, work is underway to design an auto-demesh facility to the Rationalised Automated Traction System which will enable automatic separation of section during normal, non-emergency tripping events. This removes a task that can normally take 10-15 minutes of Electrical Control Room Operator time before supply is partially restored. This work is expected to complete in CP7 year 1 and has the potential to reduce tripping delay minutes by several hundred thousand over the lifespan of the system.</p>
<p>Removing TSRs through remedial structures works</p>	<p>There are three in-flight schemes that will benefit the train service. These are based on three different root causes:</p> <ul style="list-style-type: none"> • At South Brent, Devon, we have a structure which is susceptible to potential scour under high river flows. We have completed scour protection works which will remove the risk mitigation requirement of closure during the winter and improves overall weather resilience in the South West. • At Limpley Stoke, a structure was hit by a heavy goods vehicle and damaged the external girder. We have progressed a renewal project to strengthen this element and restore capacity to operate at normal line speed. We will have the TSR removed by March 2025 and are working to accelerate this to Autumn 2024. • At Walcot Farm asset degradation is leading to a poor wingwall condition, similar to an asset failure we experienced at Yarnton. This asset is currently protected by a TSR but remedial works are in flight to restore line speed in late Autumn.
<p>Positive Drainage Works in Chipping Sodbury (D25)</p>	<p>The Chipping Sodbury cutting flooded eight times during winter 2023/24 at a cost of 27,000 delay minutes, compared to the eight times in the prior four years combined (Avg. 6000 delay minutes p.a.).</p> <p>While the winter rainfall was unprecedented, we are undertaking mitigating actions with interventions planned for mid-September. Actions such as the clearing of the watercourse upstream of the aqueduct and jetting and clearing of pipework are planned to maximise the capacity of the existing drainage system. Further works to monitor flows and model the drainage system to apply for greater discharge consents through the Environment Agency are planned ahead of winter 2025/26.</p>

7.3.25 We also continue to enhance our remote condition monitoring capability through upgrades to our fixed infrastructure. Our approach to R&D and investing in new technology on the railway is set out in Case Study 4. These upgrades are underway and are enabling us to predict and prevent potential performance issues before they occur. These interventions include:

- Delivered 100 SWIX remote void meters that enable improved track stability at prioritised crossings leading to a reduction in points failures and cast crossing defects with an estimated reduction in up to 32,500 delay minutes.

- Continued roll out of RADAR, digital track circuit technology in Wales & Borders (WA17) that enables remote condition monitoring of level crossing assets and is enabling us to reduce delays as a result of train detection failures.

7.3.26 We recognise that due to the nature and usage of our assets, we will still experience faults and failures on our Network. In a number of cases, we know that faults will lead to the use of TSRs to ensure safe operations of the railway, albeit with an impact on train service delivery. However, as a Region we are working to proactively manage TSRs more effectively and ensure that the necessary actions are implemented to reduce the impact of TSRs. In both Routes, we have stood up a TSR Board collaboratively with our operators where we ensure every TSR has a timebound plan for removal and a return to line speed operation.

7.3.27 As demonstrated in Figure 15 and Figure 16 below, our proactive approach to managing TSRs in Wales & Borders Route has supported a reduction from circa 6,000 delay minute per period to 2,000 delay minutes per period as a result of TSRs over the last 12 months. In Western Route, we are seeing a similar improving trend. Despite a slight spike in period 12/13 due to an embankment slip, our MAA continues to trend downward with improvement from 10,000 delay minutes per period to 5,000 over the last 10 months.

Figure 15: Western Route – delays in minutes due to speed restrictions and moving annual average

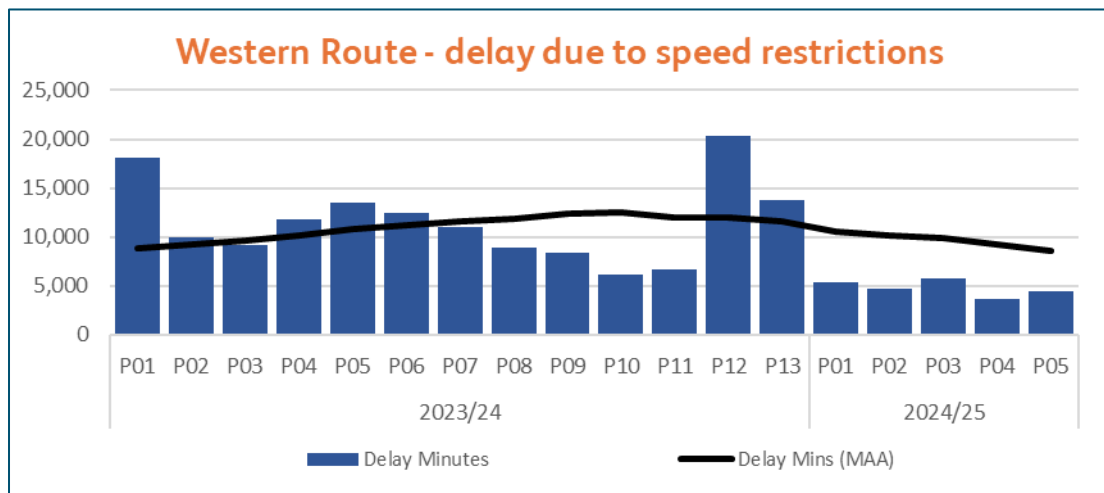
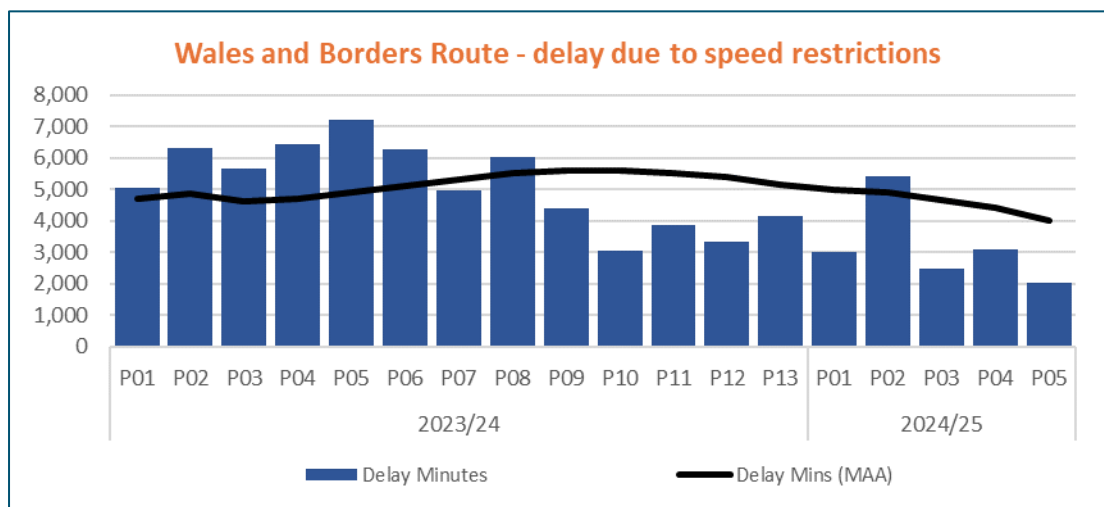


Figure 16: Wales & Borders Route – delays in minutes due to speed restrictions and moving annual average



Case Study 4: Integrated Intelligent Infrastructure Monitoring (IIIM)

Utilisation of technology and innovation to manage our infrastructure is a key part of our W&W asset management strategy for CP7 and beyond. Using technology and remote monitoring enables us to run a safer, more reliable and more efficient railway.

Our forum occurs on an 8 weekly basis and promotes a cross-discipline, holistic approach to infrastructure monitoring.

W&W is the only Region in NR that has ringfenced funding within our CP7 delivery plan for research and development (R&D). The Integrated Intelligent Infrastructure Governance Board forum reviews new R&D investment opportunities are presented and endorsed for authority via the R&D funds. Having this forum in place supports us to align our investments to our priorities and allows a cross-discipline and function review for collaboration, minimising duplication of effort.

Holding a fund for R&D initiatives also supports us to explore new and novel ideas from our local teams.

Since setting up the IIIM forum, we have identified a number of investment opportunities to be funded by our R&D authority. These will be monitored through the IIIGB forum to track progress on delivery and next steps for future implementation.

R&D funded projects for CP7 identified so far include:

- Phase 2 of CRAVE Telecoms project - this project uses Artificial Intelligence and Machine Learning to identify and classify troughing and associated defects.
- AIVR Thermal Imagery for overhead line assets – enabling early detection of thermal hotspots on OLE to allow prevention of asset failures.

Commitment 12

We are delivering on Project Brunel’s timebound plan, rolling out its holistic approach and learning to other performance improvement activity across the Region (*addresses NR2*)

- 7.3.28 Project Brunel is delivering the Thames Valley Recovery Plan. It aligns management, process, governance and structure around a multi-faceted workstream.
- 7.3.29 Launched in January 2024, Project Brunel uses a data and evidence based approach and has developed a programme to improve the top six areas causing delay in the Thames Valley and beyond.
- 7.3.30 Project Brunel has been developed over the past eight months to apply a holistic approach, using the ‘Ten Pillars’ of performance improvement (access, communications, detection, infrastructure management, information management, overhead cables, operations, points, track and drainage, procurement and safety, assurance and finance). These pillars align to Project Brunel’s activities to contribute to performance outcomes and benefits including a reliable and punctual railway. Project Brunel is being delivered in three phases:
- **The Stabilisation phase** (0-6 months, completing Summer 2024) – focused on carrying out activities to stabilise current performance of the Thames Valley area whilst also planning activities to be deployed as part of the Improve Phase.

- **The Improve phase** (6-18 months, completing Summer 2025) – focused on delivering works, processes and procedures to make improvements to the reliability of the Thames Valley area. This phase will include new activities and build on the successes of Stabilisation phase.
 - **The Sustain phase** (post Summer 2025) – focused on continuing to embed change and ensuring a structure fit for the future, mapping to HS2 and future railway operations.
- 7.3.31 From June 2025, we will also include work to ensure new railway systems from HS2 interact efficiently with existing operations and ensure wider infrastructure is fit for increased traffic and that the timetable changes consider infrastructure and maintenance requirements.
- 7.3.32 So far during the Stabilisation phase, we have delivered the following groups of initiatives:
- **Track & drainage** – Alongside reducing the maintenance backlog, we have identified track interventions, half of which have been delivered with the other half planned. We have also undertaken drainage surveys alongside catchpit cleaning, allowing water to drain away correctly reducing the risk of wet beds. We have also sourced additional resource to supplement maintenance teams in terms of track quality, welding and grinding. In addition, a number of redundant Insulated Rail Joints have been removed to date.
 - **Points** – Phases 1 to 4 heavy maintenance works have been completed. Phase 5 works has commenced, with short term mitigation plans to further support performance.
 - **Detection** – We have completed hard lock nut replacements to ensure axle counter heads no longer come loose. We have also deployed ‘Insight’, a data system allowing fault prediction, allowing targeted axle counter maintenance to take place.
 - **Access** – We have extended access windows that support reducing work back logs and defect removal (see Commitment 6).
 - **OLE** – Supplementing completed B10 inspections in 23/24, we have completed a further 13 since March. Three defective OLE switches have been returned to service and line-guards will soon be installed where clearance issues exist. Additional teams have been mobilised to clear extensive vegetation with over 30 additional sites (see Commitment 7).
- 7.3.33 Within the **Operations** pillar, we have delivered and will continue to deliver change and culture improvements. For example, we have:
- Addressed vacancy and capability gaps through recruitment and training programmes.
 - Introduced “after action” reviews to support lessons learning, including providing guidance and support to managers.
 - Created guidance, run workshops and introduced feedback loops for Electrical Control Operators (ECOs) to support incident management.
 - Introduced a Paddington assist workstation and digitised our pit stop plans. These activities support us to embed changes from Project Brunel into the way we work.
- 7.3.34 We have also made ARS improvements following feedback, including making data changes at the boundary of the Central Operating Section. We will make continued ARS improvements, including using our TMS (see **Case Study 2**) to provide consistent error data outputs, remove conflicts and ensure an effective feedback loop into the base timetable.

- 7.3.35 As we enter the Improve Phase, we continue to deliver operational change and culture improvement, including:
- Introduction of new resources to support changes like the joint point care regime introduction.
 - Mobilisation of the Control Operations Leadership Academy (see Commitment 9).
 - Strategic command group upskilling and re-briefing and training for those who need it.
 - Providing Initial Signalling Training locally.
 - Making floor layout changes at TVSC.
 - Introducing static welfare officers at Thames Valley stations.
 - Rollout of under-platform anti-trespass signage and consideration of further application.
 - Further development and embedment of our traffic management system.
 - Development and deployment of our Operational Platform (OP1)
- 7.3.36 As we continue to deliver Project Brunel, we will align where appropriate to the activities in our regional performance leadership and culture plan (see Commitment 13).
- 7.3.37 Project Brunel has dedicated governance to give the programme focus in the Route. The programme is overseen by the Western Route Director with oversight by the Region executive team through the newly introduced Quarterly Business Reviews (see Section 8). Delivery is monitored at a periodic (every four weeks) Project Brunel Programme Board with membership including the Western Route Director, Project Director, Head of Metro Operations and Heads of Performance. Procurement, funding and key proceed decisions are governed by the two weekly acceleration and change panel, led by the Route Director.
- 7.3.38 Whilst Project Brunel was originally limited to Thames Valley, we are widening our geographic influence building our holistic approach into activities across the Route. For example, we are clearing vegetation between 0 and 50m and rolling out our TMS business change programme across the West Country.
- 7.3.39 We are also reviewing extension of infrastructure intervention pillars to the Central area of the Route. The review will look to understand performance related challenges, existing performance improvement plans within the Route and identify any gaps. Recommendations on approach and methodology should be used to produce or amend existing plans. This should also include a review of the structure and organisation and make recommendations to improve or add to the current set up. The review should also identify areas within Project Brunel that could be utilised further within the Route, and equally any best practice from elsewhere that should be fed back into Project Brunel.
- 7.3.40 A key benefit of Project Brunel is learning from stakeholders across the industry, such as Route Services, Technical Authority, other Routes and operators. Our weekly engagement sessions help us not only to understand priorities but to build relationships and to improve learning between NR and operators.

7.4 Future considerations

- 7.4.1 As we improve our capability to learn lessons from incidents and capture the root causes of poor asset reliability across the Region, we will undoubtedly identify new emerging risks and challenges associated with the condition and usage of our assets. We will also identify further opportunities to improve our operational decision making and how we work with industry partners during significant incidents.
- 7.4.2 As new risks emerge, we will need to review and make decisions on the allocations of funding and resources to asset reliability improvement schemes. As set out in 6.1, we are delivering our asset management challenge against a real terms lower funding settlement than CP6 and will therefore need to make decisions that balance cost, risk and performance.
- 7.4.3 Central to achieving this improved decision making will be our transformation to create our devolved operating model currently underway (see Commitment 15). This will transfer infrastructure decision making, including financial accountability and asset management capability from the Region to be closer to the Routes. This will support the interface between asset management decision making and our core maintenance and renewal plans.
- 7.4.4 We will also continue to build on improvements we are making to how we manage access to the railway, such as the improved access discussions with operators that set out in Section 6, to ensure we deliver remedial works with minimal impact on passengers and customers.

8. Our response: Leadership Structures, Culture and Governance (Theme 4)



8.1 Background and context (“Why”)

8.1.1 Our performance improvement activity and plans are managed through our PRPs including:

- Our Route Performance Improvement Plan in Western Route, including a specific project to deliver the Thames Valley Recovery Plan (Project Brunel).
- Our Wales & Borders Route 7R’s (research, repetition, risk, reliability, resilience, restrictions and resource). Each ‘R’ includes a component critical for the safe and reliable operation of our infrastructure and so sets out a holistic plan for how Wales & Borders Route will take action to identify, detail and implement performance activity. 7R’s also feeds into the Wales & Borders Tripartite performance strategy with TfW and Amey Infrastructure Wales.

8.1.2 Whilst we lead our PRPs at a Route level, aligned with our devolved model, we “plan” at three levels as aligned to the NR “plan, do, check, act” model:

- **Longer-term objectives** are set out in the control period business plan.
- **Medium-term strategies** are developed including with external stakeholders, e.g. joint performance strategies with operators.
- **PRPs** are developed and led at Route level.

8.1.3 We have made real progress over the past 12-24 months on maturing our plans and are confident they have the right activity to improve our performance, however we must continue to invest time and resources in maturing our performance leadership, culture and governance to support these. Below, we summarise where we have started to take action to improve.

Leadership & Culture

- Aligning our leadership team around priorities for performance e.g. through development of Our Plan.
- Developing our frontline and senior leaders e.g. through Line Manager Induction and Great People Managers course.
- Driving a stronger performance culture, e.g. at TVSC and through the Wales & Borders “On Time to 3” campaigns.
- Have a stronger and more consistent focus on listening to and supporting our colleagues through engagement (e.g. through Your Voice Surveys and executive roadshows) who continue to work hard to deliver excellent work for our customers.

Governance

- Developing our regional governance model so that it supports performance focus, e.g. through introduction of Quarterly Business Reviews.
- Continued to build performance management capability using the PIMS and RM3P.
- Created opportunities for senior leaders across operators and NR to share learning and collaborate to positively intervene.

8.1.4 Leadership, culture and governance are interconnected and considered together in Our Plan. For example, we know the performance culture we want to build on starts with our leadership (see: **NR3**). Whilst we have had changes in leadership at RMD and Route Director levels since our formation as a Region in 2019, we have now had permanent Route Directors in place for over a year and a new RMD who put performance at the heart of the Region and Route’s strategic focus.

8.1.5 We passionately believe that focusing on our people through leadership, culture and governance will improve performance, passenger outcomes and help make W&W a better place to work. For this reason, we are committed to:

- Improving our performance leadership and culture including by mobilising a region-wide leadership and culture change plan.
- Improving our performance governance by refreshing our regional governance model.
- Improve senior cross-industry collaboration through greater alignment of Region and Route cross-industry performance boards and our governance model.

8.2 Outcomes we will deliver (“What”)

8.2.1 The planned and ongoing activities described in this section contribute to delivery of the right performance activity at the right times within our agreed funding position. Specifically, the plans in this section support delivery of the following improvement areas, which contribute to us being able to deliver our targets for On Time and cancellations:

- **Organisational Culture:** Introducing activities to improve performance leadership and behaviours across the organisation including through our executive leadership and culture plan (G25) and Cultural Insights Tool (G26).
- **Organisational capability:** Maximising our organisational set up, structure and ways of working to deliver improved performance including through our devolved operating model changes (G15), governance model changes (G21) and governance effectiveness reviews (G19). We will also continue to use RM3P assessments (G03) and develop SIP to mature how we manage performance activities and risks (G22).
- **Industry collaboration:** Bringing teams from across Industry and NR together to collaborate on whole system outcomes including through set up and embedding of local railways (G16) and creation of a regional whole industry performance board (G27).

8.2.2 Relating to the PIMS framework, our plans primarily focus on:

- Developing our performance management capabilities (including people, process governance and tools) across all areas of the RM3P Performance Management Wheel (see Figure 17) utilising assessments and benchmarking from other Regions and Routes.
- Developing our people to drive passion into thinking and acting in a way that contributes to performance.
- Working collaboratively and in partnership with operators, including through our joint performance plans, to ensure infrastructure, fleet and people elements are considered in parallel in line with system thinking principles.

8.3 Plans and actions we are taking (“How”)

Commitment 13

We are improving our performance leadership and culture by mobilising a region-wide leadership and culture change plan (*addresses NR3*)

- 8.3.1 Leadership and culture are critical to delivering performance improvement outcomes and we commit through our joint performance strategies to strengthening these areas both internally and with industry partners. Our W&W People Plan sets out our objectives related to our people (including our leadership and culture). Aligned to our CP7 strategy and NR's CP7 People Objectives, it contains five overarching objectives that directly and indirectly contribute to how we will develop our performance culture:
- Developing great empowered leaders to make this a great place to work
 - Equitable and inclusive actions to reflect the diverse communities we serve
 - Creating a sustainable, modern and flexible organisation
 - Brilliant, safe and caring culture within a learning organisation
 - Continuously modernising and innovating, working together with our industry partners
- 8.3.2 We are already taking action to deliver on these objectives. For example, we run courses like the Line Manager Induction and Great People Managers course (includes leadership, emotional intelligence, collaboration etc.) to support our managers and leaders to build and maintain high performing teams. We also use new leadership development tools like the Empowering Talent Toolkit to strengthen succession planning with bespoke development plans. We are also assessing good practice for how non-frontline colleagues best work together which will inform a review of our hybrid working arrangements.
- 8.3.3 We continue to draw on learnings from across NR to develop our skills and competencies. For example, we are applying NR's Systems Thinking 'Model DU' work to Cardiff Delivery Unit and Western West Delivery Unit to help improve core maintenance activities. Work has begun in both DUs and there is ongoing review by the Systems Thinking team to understand the impact and measures of success by December 2024. In addition, we will adopt the learnings from the Systems Thinking Frontline Leader Programme in Tottenham DU as a trial in one of our Model DUs with scoping of this proposal due by the end of October 2024.
- 8.3.4 We are also using an evidence-based approach to better understand our colleagues and their needs so we can act in the areas that matter most. For example, we received feedback from colleagues through Your Voice engagement surveys and executive roadshows (which commenced in July 2024 and will run to December 2024). We have acted on this feedback, for example by increasing Train Delay Attribution resource levels in the Western Route Performance team. The benefits of this include a more balanced workload, increased delay attribution accuracy and improved identification of root cause. The change will also support colleague engagement and retention.
- 8.3.5 We are also using engagement, grievances, disciplinarys and sickness data to create early warning indicators using our Cultural Insights Tool (**G26**). First used in 2022 at Thames Valley Signalling Centre, the tool has been deployed in Exeter and Gloucester and Wales & Borders to support managers to identify hot spots where they may need to intervene to support their team(s). It has also been used to target where we roll out our Route people manager upskilling programme. We will continue to develop how we understand our people including through launch of our regional Equality, Diversity and Inclusion strategy in September 2024.
- 8.3.6 We are also strengthening how we communicate about the behaviours we expect of our colleagues. In our W&W CP7 Health and Safety Strategy, our RMD sets out that we should:
- Trust – by being clear on our intent.
 - Never be overly bureaucratic or avoiding plain speaking.

- Do the right thing – even when no one is looking.
 - Understand our people and their constraints (their motives, drivers and difficulties).
- 8.3.7 Going forward, we need to build on these activities to further develop our performance leadership and culture. We will focus on overcoming our top three challenges:
- We have experienced change in our leadership teams in the past few years and as we stabilise, we need to better align on priorities including for performance.
 - We will provide our managers and frontline colleagues with the right skills and behaviours to create an environment where people feel psychologically safe to try new things to drive whole system performance.
 - We will create a better line of sight as to how everyone’s work impacts performance by breaking down siloes and encouraging greater collaboration across our Region and Routes, including by leading through the ‘power of 6’ (having the right group of experts).
- 8.3.8 We are already making progress in these three areas, especially in building the right behaviours across our management teams. For instance,
- Western Route’s TVSC management team is being recognised by external stakeholders for the contribution our teams are making to performance. TVSC was nominated by GWR in July 2024 for their 'Every Second Counts Heroes' award as the result of signallers’ contributions to performance at Paddington, Reading, Oxford, Didcot, Bristol Parkway and Bristol Temple Meads. For example, Reading signallers supported implementation of Reading to Newbury regulation policy to reduce late running. In Didcot and Oxford, signallers pro-actively fed back to central scheduling teams on potential issues.
 - Wales & Borders Route’s “On Time to 3” campaign (as set out in our joint performance strategy) includes a performance pledge that communicates to colleagues expected behaviours, including collaboration with other Routes and embedding learnings from ILRs.
- 8.3.9 We will complement this existing activity by creating an executive-sponsored leadership and culture improvement plan (**G25**). The first step in the plan is a strategic review of our culture and leadership. This review is underway and considers evidence like insights from our latest workforce engagement scores (from Your Voice surveys) and external reviews (incl. ORR Investigation Report). The review will be complete by September 2024.
- 8.3.10 The review and plan will be focussed on the areas of our business where we need to improve, e.g., future phases of Project Brunel. Outputs will include toolkits that Route and Region leadership can implement as part of their ongoing performance improvement activity.
- 8.3.11 In Table 5 below, we set out the plan’s further activities, subject to refinement based on outcomes of the review. These activities address the challenges set out above.

Table 5: Leadership and culture improvement plan proposed development areas, activities and outcomes

Development area	Activities we will deliver	Outcomes
1. Create a collaborative leadership team that works together and with partners to drive performance	<ul style="list-style-type: none"> Get our leadership team re-aligned around a common purpose and by building a cohesive team and performance culture. Clarify the collective role of our executive for delivering performance improvement, including where collaboration internally and with industry partners is required. Support and develop our leadership to role model 'what good looks like' to others in our business in making passenger led decisions, balancing performance safety and cost. 	A cohesive executive aligned on priorities for delivering train performance, with accountability to make investment trade-offs through system and risk-based decision making
2. Provide our people and frontline staff with the knowledge, practical tools and experience to deliver excellent performance	<ul style="list-style-type: none"> Build on training offered to upskill our people on how their work impacts performance. Bring together teams in a supportive environment to try new ways of working, break down siloes across industry and solve problems together. See Case Study 5 for details on how Anglia Route is innovating how it works with partners. Develop ways to create new industry leaders at senior and frontline levels to think about performance in a whole industry context. 	People know what good looks like and have the knowledge, tools and support to deliver it
3. Listen to and motivate colleagues at all levels to work together and take ownership for performance	<ul style="list-style-type: none"> Re-visit incentives, working practices and measures so that performance-based behaviours are encouraged and understood. Communicate with our colleagues more effectively including celebrating success, promoting innovative thinking and sharing the tangible actions we are taking to respond to their feedback. 	Reduction in perceived 'us and them' gap between managers and frontline colleagues on performance accountability

8.3.12 Short-term milestones for the plan include:

- By end of September 2024, we will have worked together as an executive team to agree the change in behaviours, accountabilities and visible actions that will define how we will work differently. This will include how we work as a Region with industry partners as part of our new regional (whole industry) performance board.

- By end of October 2024, we will have articulated the culture we want based on the outcomes of the strategic review and have developed a roadmap with timings and milestones on how to get there. This roadmap will be endorsed and owned by our executive team.
- By February 2025, we will have evidenced progress against our roadmap by having undertaken at least one initiative from each of our three development areas outlined in Table 5 above. The initiatives will be measured and monitored through the Programme Board.

8.3.13 The main benefit of the plan is to strengthen the focus, behaviours and collaboration required to deliver our performance commitments, including Our Plan (See Section 9).

Case Study 5: Anglia performance culture programme

In Anglia Route, teams have been developing their performance culture and whole system approach including creation of a Train Performance Centre to collaborate on insights with operators. A main aim of the Train Performance Centre is to bring the full range of operators together to make collaborative, best for industry decisions, in doing so making all parties feel part of the 'system'. For example, it is creating the environment for making 'joined up' decisions around how best to deploy resources to address speed restrictions, like choosing to go in quickly to remove the impact or persevere with the short-term disruption and address the problem in a less disruptive manner.

Work to develop this vision and the centre has been delivered in three pillars:

- **Data** (implemented) - Visualisation tool delivered identifying failures across the route, Train Performance Centre established and continuously refreshed with current insights, data trusted by all parties, dashboards & insights developed to continuously improve.
- **Collaboration** (implemented) - Genuine collaboration witnessed through ARPB & Performance Boards, Governance established including roles and responsibilities, Joint performance plans established focusing on key priorities.
- **Continuous Improvement** (in progress & on track) - Improved role profile and model for NWR Performance Team, Evidence Joint improvement plans are established, Evidence of understanding across top route challenges, Evidence of a robust review cycle throughout the framework.

The main benefit of the Train Performance Centre is taking a step towards a collaborative, whole industry culture. The data and collaboration elements have been fully deployed, with work on continuous improvement now the focus to drive the tangible benefits. W&W currently uses data visualisation meetings in both Routes so is considering how elements of the Train Performance Centre can be adopted to improve on its current approaches.

Commitment 14

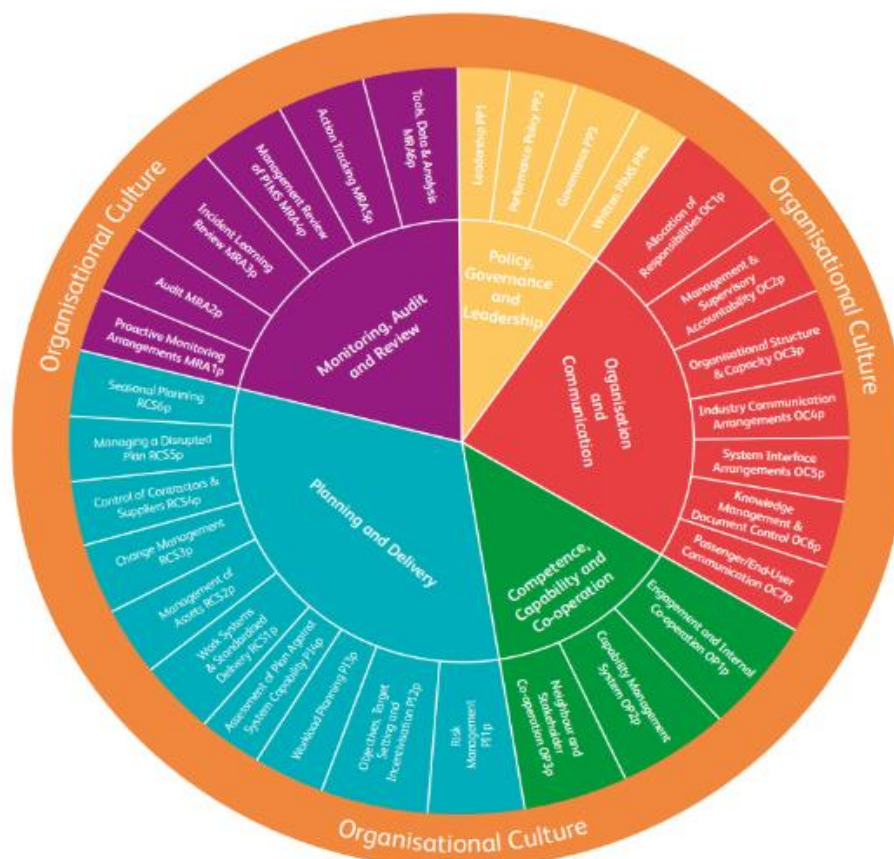
We are maturing our governance over performance by refreshing and reviewing effectiveness of our regional governance and assurance model (*addresses NR3*)

8.3.14 We have taken steps to strengthen our governance and assurance over performance including through:

- Continued use of PIMS and RM3P assessments to assess and mature our capability.
- Improving how we govern our region’s portfolio of performance activity using SIP.
- Maturing our regional governance and assurance.

8.3.15 At a Route level, we continue to strengthen our governance and assurance over performance through use the PIMS model and by taking forward actions from regular RM3P assessments across five areas of the performance management wheel (see Figure 17 below).

Figure 17: PIMS RM3P Performance Management Wheel



8.3.16 We continue to use RM3P performance assessments (**G03**) to assess and identify how mature we are across five areas of performance management including performance governance. RM3P assessments are undertaken at different levels of the business (team, Route) and both Routes also undertake joint assessments with operators and develop actions together. A key benefit of using RM3P is that it enables and encourages continuous improvement by providing a common framework for industry performance management. Outputs and recommendations from assessments are being shared on the Industry Knowledge Hub to share good practice. Undertaking regular RM3P assessments in collaboration with our operator partners also supports our W&W People Plan objective of developing our learning culture.

- 8.3.17 Our most recent assessments (February 2024) identified the following activities which we have acted or are acting on, for example:
- In Western Route, our joint NR and GWR assessment identified a need to improve our governance (scoring 2 of 5) including coverage and escalation of information from three tactical-level performance groups (Thames Valley Operations & Performance Board, Central Board and Devon and Cornwall Local Delivery Board) to our executive level performance boards (Joint Performance Executive and Directors Alliance Board). To improve, we drew on learnings from Wales & Borders governance forums from a Wales & Borders colleague seconded to Western to help improve its governance. We have also made updates to our dashboard reporting and are proposing a new joint performance board with new terms of reference that align to our three lines of defence model, ensuring the tactical-level performance groups escalate appropriately into NR and industry forums.
 - In Wales & Borders, our Tripartite assessment showed we needed to develop our governance (scoring 3 of 5), written management system (1 of 5) and risk management (scoring 2 of 5). To respond, we created a Wales & Borders Performance Board with our other boards and taskforces reporting into it. To strengthen NR's performance-related written communications, we have created a single performance dashboard to share with colleagues across the Route which contains On Time, On Time to 3, delay and freight cancellations data as well as a user-friendly performance briefing. We have also set up a performance knowledge hub and have signposted colleagues to this site. To mature our risk reporting, we are refining our Route performance risk register which has individual risk action plans aligned to our 7Rs plan, ensuring risk ownership is clear.
- 8.3.18 We will assess the impact of these activities, including joint activities delivered with our industry partners, through future RM3P maturity assessments.
- 8.3.19 We are also improving how we govern our region's portfolio of performance improvement activity by expanding SIP to create a region-wide programme management database (**G22**). SIP is a Microsoft Project tool created by W&W in 2023 and is now being adopted as good practice in other Regions. It includes information like timelines, milestones, accountable owners / sponsors, key risks, interdependencies and benefits.
- 8.3.20 By December, activities from our PRPs will be migrated to SIP so that it can be reported at a holistic, executive level. This visibility will enable us to better collaborate on areas of good practice. Using SIP alongside our existing risk management processes (for example our Business Assurance Committees) will also support us to identify, escalate and mitigate performance risks at a Region level. We will continue to mature the way we manage our portfolio of performance activity, including use of SIP, by drawing on support from the NR Capital Delivery Centre of Excellence.
- 8.3.21 We are also maturing our regional governance and assurance model to strengthen oversight of performance. For example, we have introduced Quarterly Business Reviews with each member of the executive which will support the RMD to hold Routes to account for performance outcomes. To strengthen assurance, we have improved compliance and the feedback loop to the standards and control framework as the result of risk-based audits introduced in Track. For example, we have applied learning from our Level 2 assurance findings and insights from the Colton Junction incident on Eastern Region to improve Level 1 assurance undertaken by our maintenance teams for Track, including by adding technical questions to target areas of risk related to quality of inspections and / or interventions.

- 8.3.22 We will continue to review and mature our Regional governance and assurance model and gain executive endorsement on a new model (**G21**) by October 2024. One of the outcomes of the review include maturing our Level 2 (Management Level) assurance. The benefits of the review include creating a model that:
- Supports Routes to deliver their performance activity, by ensuring the right decisions are being made at the right levels.
 - Effectively links Route performance governance to national governance forums, like the Network Performance Board.
 - Assures Route performance activity (e.g. by monitoring that outcomes align to our regional CP7 delivery plans and regulatory requirements) including through use of KPIs. See **Case Study 6** on how Southern has automated its KPI reporting which we will learn from as we continue to develop our reporting processes and tools.
- 8.3.23 We will also undergo regular governance effectiveness reviews to continuously test and refine the model, for example to ensure meetings have effective feedback loops and are being used for their intended aims (**G19**). These reviews should consider robustness of Level 2 assurance across performance and compliance activities.

Case Study 6: Southern Region Automated KPI Reporting

Southern Region has been working to improve how it reports KPIs using the Microsoft Power BI tool. To do so, it has:

- Defined its reporting requirements in consultation with executives, including a need to make the report flexible and adaptable to changes in KPIs and reporting structures.
- Sketched out a model by “report theme” for both leading and lagging metrics, working with data owners to map their sources and allocate each report theme to an executive lead.
- Developed and tested a new reporting format with the business.
- Converted the reporting format to Power BI and automated population of the report using back-end data available. A set of Power Apps were also created to add commentary to the report.
- Rolled-out the reporting system and worked with the business to embed it into new ways of working.

The reporting themes brought together metrics across Safety, Sustainability and Environment; Performance (Train and Asset); People; Finance; Capital Delivery; Investment; Station Management; Communication and Customer & Stakeholder Engagement.

Benefits of the change include reducing the time to develop the report from around three weeks to around one week and reduction in over 50% of colleagues’ time spent to develop the report. The change has also improved accuracy of reporting and has helped Southern to build its performance culture by allowing its teams to spend less time manipulating data and more time analysing insights and making interventions.

W&W has matured its KPI reporting including use of Power BI and will draw on and share lessons with Southern to continue to mature its process and tools.

Commitment 15

We are delivering our transformation programme to ensure our structure, including how infrastructure is delivered within our organisation, drives effective performance management (*addresses NR3*)

- 8.3.24 During Putting Passengers First, NR's transformation programme completed in 2021, W&W took the decision to introduce an operating model that did not fully devolve some areas of the organisation that other Regions devolved, e.g. Route Infrastructure Directorates.
- 8.3.25 As part of our plans to evolve our organisation to create a truly devolved Region, we are developing and implementing our Route-devolved operating model (**G15**).
- 8.3.26 For example, drawing on learning and experience from other Regions, we have taken a decision to create Infrastructure Directorates in both Routes, creating greater capacity and integration. A key principle of the model is to create manageable spans of control both within our Routes and the Region teams that support them. It also creates:
- Infrastructure Directors to focus on the asset portfolio with greater opportunity to make real performance interventions to the benefit of our customers, including passengers and freight.
 - Asset Management capability for Track, Signalling & Drainage and Off-Track in the Routes.
 - Asset Management capability in the Region in Electrification & Plant, Geotechnics, Buildings, Structures and Telecoms (where specialist resources are shared to deliver the best service).
 - A Region Asset Management & Engineering directorate focussed on Asset Management strategy over the medium to long term and a Region Engineering team (and regional safety & asset strategy team) to provide technical leadership and Level 2 assurance to the Region.
- 8.3.27 This change will result in closer working between asset management and Route operations. This supports the project team to resolve whole system risks by bringing together asset management and operations into the Route and by involving asset managers and maintainers more closely throughout the lifecycle of the project. Another benefit is that Route Directors will have under their direct control key levers to influence better outcomes for passengers and customers including the Infrastructure Directorate which will bring together Asset Management and Maintenance, workforce and system safety capability, and customer/stakeholder relationship management teams.
- 8.3.28 The change will also support a change in culture, putting a greater emphasis on performance. To support this change, we are helping to upskill those new in role by making visits to other Regions where Infrastructure Directors already exist. Other ways we are embedding the change include changes to ways of working, including both people/behaviour activity (i.e. training and upskilling, culture, decision making) and process-related activity (i.e. governance, financial authority, assurance, data, systems, metrics and reporting).

- 8.3.29 In July, the new model was put in place in shadow mode. By October 24, parts of asset management (signalling, track, drainage and lineside) will be partly devolved into Routes and Infrastructure Directors will have sufficient autonomy to make performance decisions on some assets. This will include the ability to apply new process and governance to support performance decisions. By April 2025, we will have undertaken a post-implementation review into the changes, including looking for evidence of how the changes have embedded and how a performance culture has improved. This review will also help us take evidence-based decisions about how to further evolve the model to support Routes.
- 8.3.30 To enable success of the Infrastructure Directorate, a future evolution of our operating model is also being developed. For example, we are developing proposals to align our Capital Delivery renewals business to geography of the Routes to support a customer-led work bank. The model is being designed and we will seek to implement it by the end of this calendar year, subject to people consultation and safety validation. Further devolution, such as aligning Investment and Sponsorship to Routes with appropriate HR and Transformation organisations to support, are also being considered as part of the design. Milestones for future operating model changes include:
- By November 2024 – Design of Capital Delivery model completed.
 - By April 2025 – Investment and Sponsorship aligned to Routes, with further changes to HR and Change organisations to support new design.
 - By September 25 – Decisions taken on further devolution, e.g. of Finance, asset management and Construction services.
- 8.3.31 One of the key enablers of effective performance decision making will be continued meaningful collaboration with operators and other partners. One of the ways we are doing this is through local railways and local business units.
- 8.3.32 We operate three local railways across W&W, most recently creating Central and West Wales in February 2024. Leads for each local railway have been appointed and are responsible for creating new local guiding minds and working across the Route and Region organisations to deliver performance improvements. See **Case Study 7** for a recent example of how the Devon & Cornwall local railway worked with partners to agree an access solution.
- 8.3.33 By working collaboratively at the frontline between NR and operators, the first two pilot areas have delivered improvements to train performance relative to the rest of the Region. For example, the Devon & Cornwall team's focus on the North Devon Line saw a 20% improvement in delay minutes and an 18% improvement in On Time performance in 12 months. The approach was also recognised as industry best practice at the 2024 Golden Whistle Awards (Best Team category). The approach is also impacting our culture by creating a greater focus on customer and performance outcomes at the frontline.

Case Study 7: Devon & Cornwall Local Railway Dawlish Access Solution

Our local railways bring together people to understand local challenges and implement appropriate actions. This has been demonstrated recently in the Devon & Cornwall area, where we recently worked with GWR to develop a novel solution to an access-related challenge.

Work to mitigate weather-related risks and therefore improve system resilience was behind schedule in the Dawlish area. The conventional approach to resolve this would have been for the project team to request additional access to complete the works, at considerable Schedule 4 expense and disruption to service users.

The local railway team was approached to consider options to extend access windows for the works. Working with local operations teams, project managers and local GWR teams, the group identified a number of empty trains at the end of each day that had paths for refuelling and stabling overnight and that alternative arrangements could be made with no material impact on start up of the morning service.

A local consensus was agreed which resulted in altering the paths to allow for around 60 additional minutes of access to the network. This allowed the project to extend their working times, improve productivity and ultimately to complete the works on time.

The local solution resulted in less disruptive access and negated Schedule 4 costs that would have been incurred by the project. This solution demonstrated a desire to agree a local, pragmatic solution but also one that was cost effective for the industry. Passenger impact was at the forefront of the decision, with the morning service protected and strengthening the network from future weather-related delays.

- 8.3.34 We have plans to create three more local railways by March 2025 (including a hybrid of Central and West and in North Wales) (**G16**). Feasibility work is underway. We have also set up a taskforce between Severn Tunnel and Swansea to prepare for a local railway model there.
- 8.3.35 We have more work to continue to embed local railways into our Route organisations and ways of working ahead of rail reform. In setting up new local railways, we will adopt the delivery models for each so they are fit for purpose for the geographic area and its unique needs.

Commitment 16

We are reviewing effectiveness of our region's senior cross-industry engagement on delivering system wide performance, including how well this engagement informs regional governance and decision making (*addresses NR5*)

- 8.3.36 Whilst we feel we are collaborating well with our operator partners at a local level, we recognise we need to strengthen our approach to senior cross-industry collaboration to ensure we are considering the right range of stakeholder views and have the right forums for identifying and resolving disputes and aligning on desired industry outcomes. It is important that this governance is used to enable both NR and operators to hold each other to account in delivering the outputs required to deliver joint plans.
- 8.3.37 As part of our governance model review (**G21**), we will refresh the purpose and scope of our cross-industry performance meetings to ensure they directly feed into Route and Region governance. Today, our approach is to operate senior cross-industry forums at a Route level:

- In Wales & Borders Route, we run a Tripartite Governance Board with TFW and Amey Infrastructure Wales. Its main purpose is to deliver the “One Railway” for Wales & Borders Performance Strategy published in April. A separate Route Supervisory Board is independently chaired and run to hold the Route to account by external stakeholders including operators and Transport Focus. The board covers topics beyond performance and is attended and recognised by the ORR.
- In Western Route, we have two Joint Performance Boards held between (1) Western Route and GWR, and (2) Western and Anglia Routes, MTR and RFL. Our Western & GWR board recently published its GWR / NR Western Joint Performance Strategy (2024-2029). We are in the process of bringing these boards into a single Shenfield to Penzance Performance Board to strengthen collaboration on performance, including by using it to review progress against metrics (like On Time and delay minutes). Once this board is stood up and stabilised, we will look at expanding membership to freight operators. Western Route also operates a Western Route Oversight Group, with a similar purpose and membership to the Wales & Borders Route Supervisory Board.

8.3.38 Part of the refresh will include how our performance boards meaningfully feed into the Network Performance Board and other relevant forums (E.g. NR’s executive leadership team and Board) in tandem with internal Route and Region governance forums.

8.3.39 Through performance boards, we collaborate with operators to align strategically and to create shared objectives that can be cascaded through our joint performance strategies. However, we know we could do more to embed these strategies into the way we govern our activity and so will continue to work internally to cascade these into function / team and individual performance outcomes (see **IN3**). For example, we have developed a communications plan in our Wales & Borders Tripartite performance strategy which sets out how we will cascade the Tripartite strategy through our organisation.

8.3.40 As part of this response, we have agreed to re-introduce a regional whole industry performance board (**G27**). During Autumn 2024, we will set clear terms of reference including membership and purpose. We envisage the board will be attended by TOC and FOC MDs, Route Directors and the RMD as well as representative(s) from System Operator. As part of its re-introduction, we will review how this board works with Route Performance Boards and has meaningful feedback loops that drive performance outcomes that can be tracked.

Commitment 17

We are working with industry to refresh the Network Performance Board including how it supports W&W on delivery of joint performance plans (*addresses IN3*)

8.3.41 The Network Performance Board is currently being refreshed under the leadership of a new independent chair. This refresh includes a review of membership and the terms of reference. The benefit is an increased focus on holding duty holders to account for delivery of performance outcomes. The board will:

- Work with industry to develop, promote and steer action on network level strategic priorities for performance.
- Act as a custodian for sharing best practice, including assurance of joint performance strategies, oversight of PIMS and network-level risks and opportunity management.
- Hold the industry to account where performance delivery is below expectations.

- 8.3.42 The Network Performance Board will continue to provide oversight in the development and delivery of joint performance strategies with a focus on driving sustainable performance improvement across the industry. For example, the Network Performance Board sponsors the annual peer review of all joint performance strategies being carried out in the Autumn. The Network Performance Board will also support the Region by acting as a point of escalation and support.

8.4 Future considerations

- 8.4.1 Despite some good progress, effectiveness of our governance over performance will continue to be limited by fragmentation in the industry. Despite our efforts to align through joint performance strategies and through the creation of a regulatory On Time measure, we do not have full alignment with operators and other industry stakeholders on the objectives and outcomes we are striving for.
- 8.4.2 In addition, remaining incentive structures (e.g. delay attribution) and organisational ways of working are likely to continue to impact our ability to deliver most effectively on what matters most to passengers and freight. We are supportive of our new government's commitment to rail reform and as a result, we see a real opportunity for us to act to further evolve our leadership and governance to be more focussed on whole industry outcomes that drive day-to-day performance improvement.

9. Delivering Our Plan



9.1 How we will deliver Our Plan

9.1.1 As outlined in Sections 5-8, we have identified a series of activities in Our Plan to stabilise, improve and sustain performance and in doing so, address the ORR's recommendations. This section describes how we will deliver Our Plan. It focusses on three elements:

- Ways of working that drive accountability for delivery, including taking an integrated approach to developing and delivering Our Plan and continuing to build our performance culture to focus on outcomes and benefits to passenger and freight.
- Empowering the Routes to deliver local improvements whilst applying governance and assurance processes that align reporting and oversight.
- Communications and engagement with our colleagues and stakeholders.

9.2 Ways of working

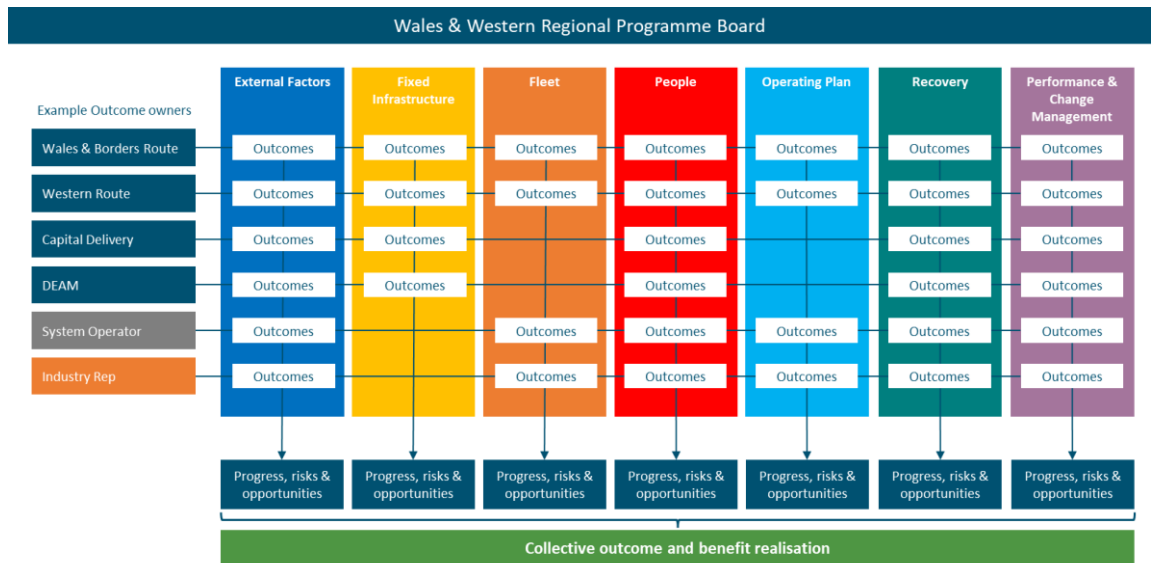
9.2.1 Ways of working set out how we will manage Our Plan on a day-to-day basis, including driving a performance culture. In doing so, we will continue to learn from and incorporate best practice from our PRPs (including Project Brunel and 7Rs, see: **NR2**). We will build on this learning by continuously refining our programme management approach to maintain clear functional ownership and accountability to deliver.

9.2.2 Our Plan brings together activities from existing CP7 Delivery Plans and PRPs, managed by our Route and functional teams. These teams record and track progress at a project / programme level within the appropriate business area, feeding into relevant governance forums as appropriate (see 9.3).

9.2.3 Figure 18 below sets out how we will manage Our Plan as an integrated, regional portfolio of performance improvement activity, with oversight provided by a new W&W Region Programme Board ("the Programme Board", see 9.3 for further detail). It shows that periodic updates from Route and functional teams are collated and presented to the Programme Board for periodic review. It also shows that activities will:

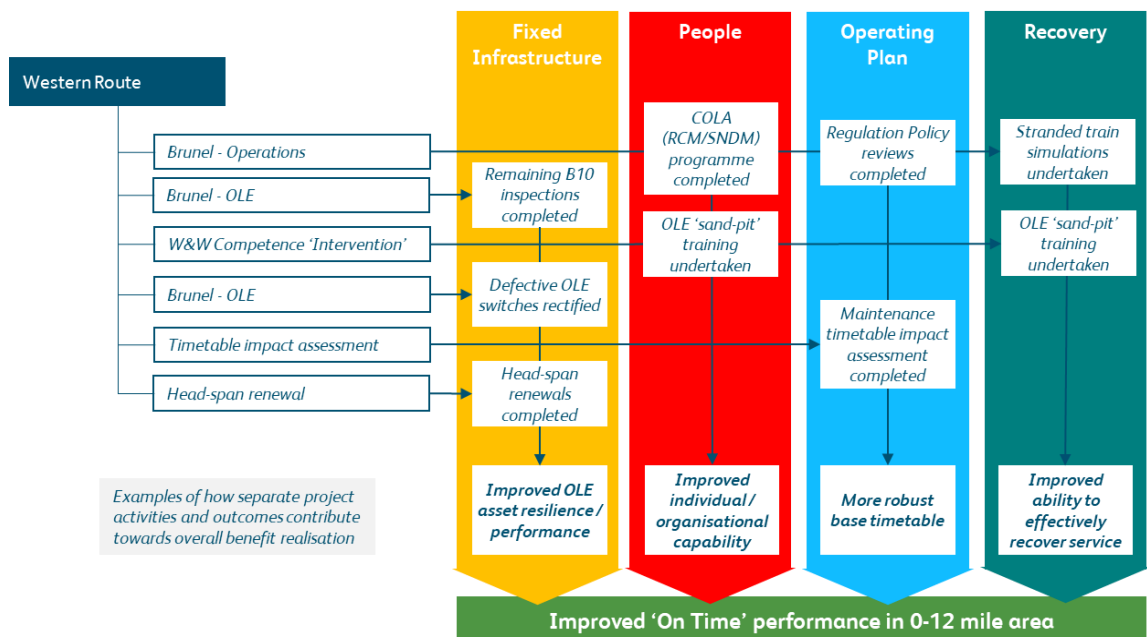
- Have accountable owners (e.g. Wales & Borders Route, System Operator).
- Align to the PIMS model and contribute to whole system performance.
- Have defined outcomes and benefits, allowing us to track our progress against relevant improvement outcomes (e.g. On Time performance).

Figure 18: Illustration of how our Plan delivers outcomes across the PIMS whole system performance model



9.2.4 Figure 19 below shows an example of how the Plan is built around a range of functional, task or asset-based interventions designed to achieve their own ‘stand-alone’ outcomes. The example refers to work we are delivering through Project Brunel. The overall benefit (improved On Time performance in the 0-12 mile area) will be achieved through the collective outcomes across the wider programme. The figure shows a selection for illustration purposes only.

Figure 19: Example of how project activities owned by Western Route deliver outcomes and On Time benefit



9.2.5 We use SIP to track and report on activities in Our Plan (see 8.3). SIP is a project management tool created by W&W and offers benefits including enabling oversight of performance improvement activities so that risks, interdependencies, and issues can be identified and addressed, and good practice can be shared across the Region.

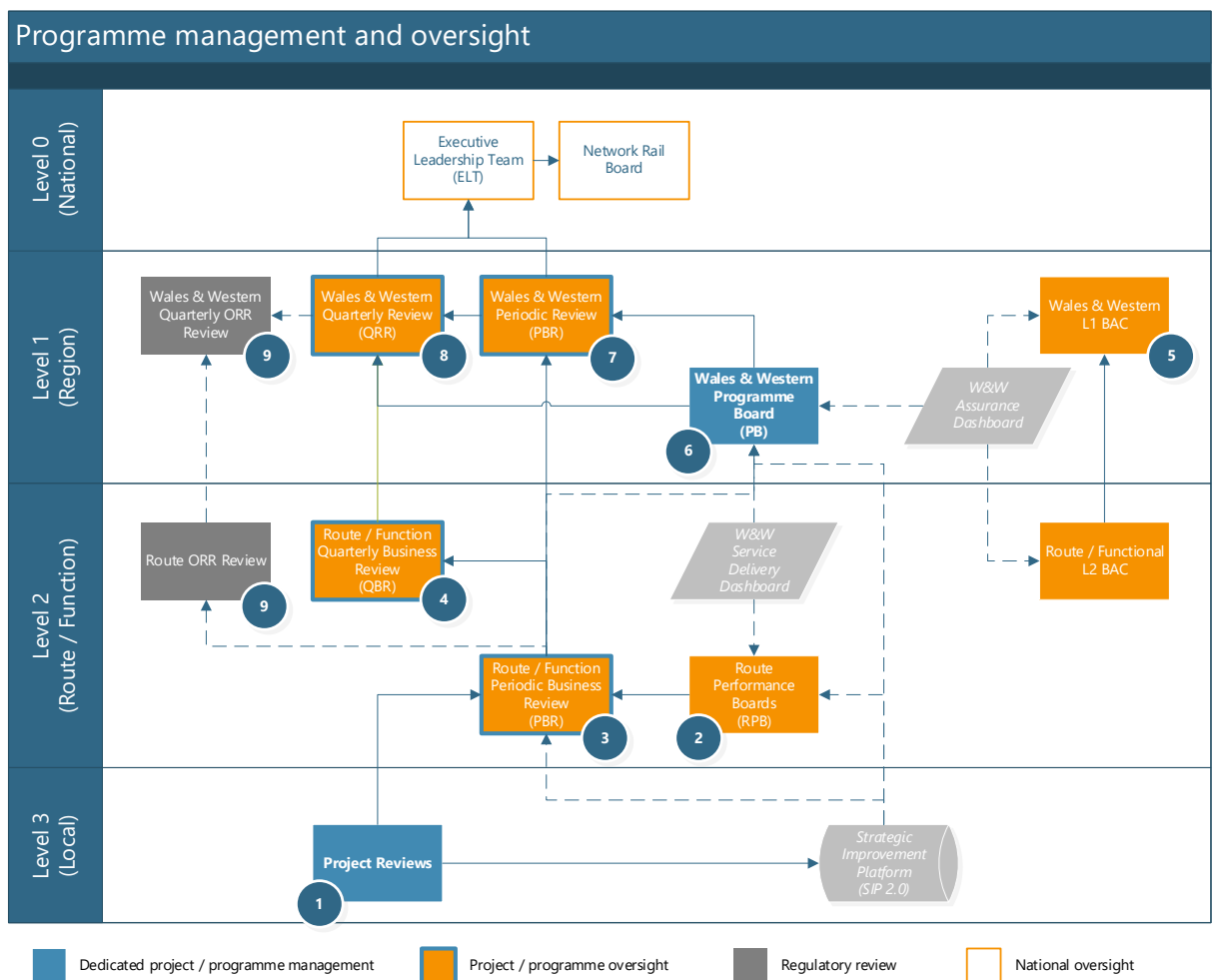
9.2.6 Key to delivery of Our Plan is continuing to drive our performance culture. This includes aligning outcomes between frontline and senior leaders so that delivery is not perceived as top-down. As set out in Section 8, we know we have more to do on this and so we will use our executive-sponsored leadership and culture improvement plan to continuously develop how we deliver Our Plan. We will also listen to our colleagues regularly, by adding questions to our existing Your Voice / pulse surveys that ask colleagues about how engaged they are in delivery of its activities. We will be clear about how we have acted (or not) on this feedback. To ensure culture remains a focus, the Performance Board (see 9.3) will set and monitor delivery of culture objectives.

9.3 Governance and assurance of Our Plan

9.3.1 We have put in place robust governance and assurance processes to oversee Our Plan’s delivery and to track realisation of benefits. These processes support clear, local accountability for delivery and an integrated, region-wide view of activities.

9.3.2 Figure 20 below shows how Our Plan will be governed and assured including how this is integrated with our existing regional governance model, ensuring Our Plan remains at the centre what we do.

Figure 20: How Our Plan will be governed and assured through our governance structure



- 9.3.3 The governance structure supports us to manage Our Plan’s activities at a local level with appropriate regional oversight, for example of benefits delivery. Other areas of the model (as annotated) include:
1. Projects are monitored and governed at a local level. SIP is used as the primary system to report holistic progress against Our Plan, e.g. by the Programme Board.
 2. Route performance boards determine and monitor joint actions and plans with operators.
 3. The regional executive holds functional and Route teams to account for delivery of PRPs and other performance improvement activity through Periodic Business Review (PBR).
 4. The RMD holds the regional executive and their teams to account through QBR.
 5. The Business Assurance Committee (BAC) will continue to monitor strategic (Level 1/2) risks and mitigations in line with the regional assurance model.
 6. A dedicated forum, the Programme Board, will manage Our Plan so activities can be managed from a milestone, benefit and risk perspective.
 7. The Programme Board will report into the regional PBR and QBR processes with Wales & Western Region executives.
 8. The RMD will report key progress and risks through the Quarterly Regional Review (QRR) process with W&W executives, Network Rail executives including our Chief Executive and a NR Board representative. NR’s executive leadership team will have the opportunity to review progress and key risks on delivery of Our Plan through QRR updates. Likewise, the NR Board will review risks or issues of national, strategic importance.
 9. We will use our standing regulatory engagement meeting with the ORR to provide updates on delivery of Our Plan (see 9.5).
- 9.3.4 The Programme Board (see 6 in Figure 20) is being set up in September 2024 to oversee delivery of Our Plan and is anticipated to occur once every period, including associated reporting of risks, status, etc., to the Board. The purpose of the Programme Board is to:
- Assure delivery of Our Plan
 - Understand dependencies and make trade-offs between projects and activities
 - Manage risks, opportunities, and to share best practice
 - Crucially, to take strategic, executive-level decisions including course corrections required and/or opportunities to accelerate progress where there is clear benefit in doing so
- 9.3.5 To support its purpose, the Programme Board will periodically review information on progress against Our Plan, achievement of outcomes and realisation of benefits, change control and risks. Information for these reviews will be collated and distilled by an accountable lead who will provide an integrated view of the Region’s progress on delivery (including capital, operational and business) and of benefit and outcome realisation. The Programme Board will be chaired by the RMD and attended by the regional executive team and key stakeholders. Terms of reference are being developed.
- 9.3.6 Cross-industry oversight and stakeholder engagement on the Plan will be led by the Region’s Whole Industry Performance Board (**G27**). See 8.3.40 for more information.
- 9.3.7 The governance model will also support us to monitor benefits and risks:

- **Benefits:** shown in 4.2, Figure 10, each activity in Our Plan will deliver key benefit(s) grouped into ten “improvement categories” according to the PIMS Whole System Model for Performance. The Programme Board will monitor tracking of benefits and make recommendations where it has identified risks to delivery of these.
- **Risks:** will be monitored at multiple levels in line with our risk management framework. Risks will primarily be monitored by the activity’s functional / Route project lead. The Programme Board will monitor strategic, collective risks and dependencies including those reported as part of the Level 1 Business Assurance Committee. If risks are not being appropriately mitigated at the project level, the Programme Board can take action to resolve this, including by working with multiple functional / Route leads if necessary.

9.3.8 As set out in Section 8, we will continue to undertake regular PIMS RM3P assessments to assure ourselves over maturity of our performance management capability and to identify areas where we could improve. This will include continuing to undertake regular Route and joint (with operators) assessments and sharing learnings on the Industry Knowledge Hub.

9.4 Communications & engagement

9.4.1 We will establish a clear framework setting out how we will communicate and engage with stakeholder groups, supporting decision making on who, what and how we engage. Where possible, we will engage with stakeholders within our Region, across NR and with key external stakeholders (e.g. operators), where possible through existing engagement forums (including the re-introduced W&W Region Whole Industry Performance Board). Below, we set out key stakeholder groups and a summary of the engagement we propose for each group.

Table 6: How we will engage with stakeholders on Our Plan

Stakeholder Group	Summary of engagement proposed
NR Colleagues	<ul style="list-style-type: none"> • We will continue to work jointly with our thousands of colleagues across Wales & Western to deliver the service passengers and freight deserve. • We’ll provide regular updates to our teams on where we are against Our Plan, tracking of outcome/benefits and mitigation of risks and issues. • We will provide regular updates to our executive leadership team through our governance processes.

Stakeholder Group	Summary of engagement proposed
Passengers	<ul style="list-style-type: none"> • During significant disruptions, we will continue to run awareness campaigns to manage travel demand and ensure passengers are aware of improvement works that may impact their journeys, including the performance benefits of work being delivered. • We will provide passengers with updates on delivery of Our Plan and its impacts using NR's social media channels (with further amplification on operators' own channels) and online resources (NR's website). • We will launch a proactive PR plan to mark milestones and progress. This may include 'Meet the Managers' type sessions at NR managed stations (Paddington, Reading and Bristol Temple Meads) with managers from NR available to talk to passengers directly about what is being done to improve performance. • We will seek input from Transport Focus to ensure this activity is meeting passengers' needs and expectations.
Public and local / national politicians	<ul style="list-style-type: none"> • Work to build trust and confidence by working alongside operators to communicate regular updates against the Plan, highlighting key deliverables, milestones and performance impacts.
Wider industry and other stakeholders	<ul style="list-style-type: none"> • Keep other key stakeholders informed, working in a collaborative way and being open to suggestions for improvements. • In addition to the above, we will engage with stakeholders via a range of direct communications. For example, we will issue quarterly performance emails including joint activity with TOCs such as regular briefings, e.g. GWR's Local Transport Forums, joint events in parliament and the Senedd, as well as regular stakeholder breakfasts across the Region.

9.4.2 We will evaluate communications and engagement on Our Plan through two primary metrics:

- Increase confidence of industry and political stakeholders in our performance improvement activity, with an increase in perception in 2024 and 2025 W&W stakeholder surveys, and Member of Parliament polling.
- Improve passenger perception of Wales & Western rail journeys, so that passenger satisfaction increases, as measured by NR's periodic polling.

9.5 Next steps, including engagement with the ORR

9.5.1 In summary, Our Plan includes our commitments to:

- **Take action to sufficiently plan for cumulative change:** by (1) completing our review of modelling undertaken for the Elizabeth Line, (2) applying lessons from Elizabeth Line to in-flight and future changes in W&W and (3) working with industry to improve processes for introducing major changes including by (4) reviewing and clarifying accountabilities of ESGs.
- **Understand operational factors driving increased delay:** by (5) improving our understanding of the impact of incidents and ensuring we have the right measures to improve factors within our control, (6) reviewing and optimising access, (7) delivering on our plans to upgrade overhead line headspans in the Thames Valley, (8) maximising timetable resilience within the possibilities of the current specification and (9) improving our operational capability and ways of working to be focussed on performance.
- **Learn lessons from incidents:** by (10) improving the way we learn lessons from incidents including by taking a lead on learning from multilateral delay incidents, (11) tackling the known root causes on asset performance including by developing tools to reduce performance risks and (12) delivering on our timebound plan for Project Brunel.
- **Drive improved performance through our leadership structures, governance and culture:** by (13) mobilising a Region-wide leadership and culture change plan, (14) refreshing and reviewing effectiveness of our regional governance and assurance model, (15) delivering our transformation programme to ensure our devolved structure drives performance outcomes, (16) reviewing effectiveness of cross-industry engagement in the Region including re-launching the regional whole industry performance board, and (17) working with industry to refresh the Network Performance Board.

9.5.2 We commit to establishing a structured, regular drumbeat of engagement with the ORR at a regional level to review both 'business as usual' performance and progress against the activities above as part of Our Plan. We will engage with the ORR, providing regular updates and working collaboratively to discuss any observations and address ongoing concerns. The information for these updates will be drawn from SIP to provide a high-level, strategic view of progress against delivery and benefits realisation. At a Route level, progress against Our Plan and benefit realisation will form part of the regular, regulatory drumbeat that is currently in place with the Route teams.

Appendix

The following appendix should be read with this response.

- **Appendix 1: Our Plan**

ID	ORR Rec	Workshop ID	Task Name	Commitment Category	Finish	Scope	PIMS 'Whole System Performance Model'	Improvement Category	Outcome	Benefit	Benefit Type	2025			2026			2027			2028			2029								
												Q3	Q4		Q1	Q2	Q3	Q1	Q2	Q3	Q1	Q2	Q3	Q1	Q2	Q3						
ORR Rec: NR01												Mon 31/03/25																				
36	NR01	WA91	Stranded Train simulation exercises - Wales	New	Mon 30/09/24	Wales	Recovery	Service recovery	Exercise completed with Avanti	Increased industry capability to manage stranded train incidents, improving passenger safety and experience	ENABLER	30/09	◆	Exercise completed with Avanti																		
60	NR01	WE43	HILDA (implementation)	Existing	Mon 30/09/24	Western	Recovery	Service recovery	Implementation complete	Improved operational response to incidents (an enabler for improved train service performance)	ENABLER	30/09	◆	Implementation complete																		
44	NR01	WE81	CRISIS / Exec on call review	Existing	Thu 31/10/24	Region	Recovery	Service recovery	Review completed, revised arrangements implemented	Improved management of operational incidents (therefore improving train service performance, both on-time and cancellations)	ENABLER	31/10	◆	Review completed, revised arrangements implemented																		
53	NR01	WE110	Stranded Train simulation exercises - Western	New	Thu 31/10/24	Western	Recovery	Service recovery	Programme of exercises commenced	Increased industry capability to manage stranded train incidents, improving passenger safety and experience	ENABLER	31/10	◆	Programme of exercises commenced																		
55	NR01	WE28	Train detection monitoring tool - implementation	Existing	Thu 31/10/24	Western	Fixed Infrastructure	Asset reliability and performance	Trial complete, embedded as BAU process	Improved axle counter performance (an enabler for improved train service performance)	ENABLER	31/10	◆	Trial complete, embedded as BAU process																		
42	NR01	WE60	Operational Performance Insight Tool	New	Tue 31/12/24	Region	Performance & Change Management	Learning, knowledge & insight	Insight tool implemented and fully operational	Increased organisational knowledge, insight and understanding (an enabler for improved train service performance)	ENABLER	31/12	◆	Insight tool implemented and fully operational																		
61	NR01	WE45	RAPPORT (trial)	Existing	Tue 31/12/24	Western	Recovery	Service recovery	Implementation and post trial assessment complete	Minimise the impact of operational incidents, contributing to improved train service performance (on-time, cancellation)	DIRECT	31/12	◆	Implementation and post trial assessment complete																		
35	NR01	WA89	Trespass and Route Crime projects (Wales)	New	Mon 31/03/25	Wales	External Factors	Network availability	Planned interventions completed	Improved network availability, contributing to improved train performance (on-time, cancellation) in Wales & Borders Route	DIRECT	31/03	◆	Planned interventions completed																		
ORR Rec: NR02												Tue 31/12/24																				
26	NR02	G22	Strategic Improvement Platform (SIP 2.0) expansion	Existing	Tue 31/12/24	Region	Performance & Change Management	Learning, knowledge & insight	All Regional business change / performance improvement activities migrated to SIP 2.0	Increased organisational knowledge, insight and management of performance improvement initiatives (an enabler for improved train service performance)	ENABLER	31/12	◆	All Regional business change / performance improvement activities migrated to SIP 2.0																		
ORR Rec: NR03												Mon 31/03/25																				
16	NR03	G15	Regional Operating Model change - Phase 1A	New	Mon 01/07/24	Region	People	Performance culture	Infrastructure Director stand-up (shadow mode)	Increased organisational capability (an enabler for improved train service performance)	ENABLER	09/11	◆	Infrastructure Director stand-up (shadow mode)																		
17	NR03	G15	Regional Operating Model change - Phase 1B	New	Mon 30/09/24	Region	People	Performance culture	Asset Mgmt. devolved to Routes	Increased organisational capability (an enabler for improved train service performance)	ENABLER	30/09	◆	Asset Mgmt. devolved to Routes																		
25	NR03	G21	Regional governance model	Existing	Mon 30/09/24	Region	Performance & Change	Organisational capability	Review completed and recommendations implemented	Increased organisational capability (an enabler for improved train service performance)	ENABLER	30/09	◆	Review completed and recommendations implemented																		
64	NR03	G25	Executive-sponsored leadership and culture improvement plan - RM3P maturity assessments - Wales & Borders	New	Mon 30/09/24	Region	People	Performance culture	Phase 1 - Strategic review completed of Region's culture and leadership development	Increased organisational capability (an enabler for improved train service performance)	ENABLER	30/09	◆	Phase 1 - Strategic review completed of Region's culture and leadership development																		
13	NR03	G03	RM3P maturity assessments - Wales & Borders	New	Thu 31/10/24	Wales	Performance & Change	Organisational capability	Maturity assessments complete: Wales & Borders	Increased organisational capability (an enabler for improved train service performance)	ENABLER	31/10	◆	Maturity assessments complete: Wales & Borders																		
19	NR03	G15	Regional Operating Model change - Phase 2	New	Thu 31/10/24	Region	People	Performance culture	Phase 2 Design complete	Increased organisational capability (an enabler for improved train service performance)	ENABLER	31/10	◆	Phase 2 Design complete																		
65	NR03	G25	Executive-sponsored leadership and culture improvement plan - Cultural Insights tool - launch	New	Thu 31/10/24	Region	People	Performance culture	Phase 2 - Development of roadmap with timings and milestones	Increased organisational capability (an enabler for improved train service performance)	ENABLER	31/10	◆	Phase 2 - Development of roadmap with timings and milestones																		
67	NR03	G26	Cultural Insights tool - analysis	New	Thu 31/10/24	Region	People	People development	Soft launch of tool to leadership teams	Increased individual / organisational capability (an enabler for improved train service performance)	ENABLER	31/10	◆	Soft launch of tool to leadership teams																		
68	NR03	G26	Cultural Insights tool - analysis	New	Thu 31/10/24	Region	People	People development	Priority focus areas identified	Increased individual / organisational capability (an enabler for improved train service performance)	ENABLER	31/10	◆	Priority focus areas identified																		
21	NR03	G16	Local Railways - new units created	New	Sat 09/11/24	Wales	Performance & Change	Industry collaboration	New unit stood up in Wales & Borders Route - North Wales (P8)	Enables improved train performance (on-time, cancellation) as a result of integrated local decision-making	ENABLER	09/11	◆	New unit stood up in Wales & Borders Route - North Wales (P8)																		
69	NR03	G26	Cultural Insights tool - action planning	New	Sat 30/11/24	Region	People	People development	Action plans and interventions agreed	Increased individual / organisational capability (an enabler for improved train service performance)	ENABLER	30/11	◆	Action plans and interventions agreed																		
22	NR03	G16	Local Railways - new units created	New	Sat 07/12/24	Western	Performance & Change	Industry collaboration	New unit stood up in Western Route - Central (P9)	Enables improved train performance (on-time, cancellation) as a result of integrated local decision-making	ENABLER	07/12	◆	New unit stood up in Western Route - Central (P9)																		
14	NR03	G03	RM3P maturity assessments - Western	New	Mon 31/03/25	Western	Performance & Change	Organisational capability	Maturity assessments complete: Western	Increased organisational capability (an enabler for improved train service performance)	ENABLER	31/03	◆	Maturity assessments complete: Western																		
18	NR03	G15	Regional Operating Model change - Phase 1C	New	Mon 31/03/25	Region	People	Performance culture	Investment, Sponsorship and CD (part) devolved	Increased organisational capability (an enabler for improved train service performance)	ENABLER	31/03	◆	Investment, Sponsorship and CD (part) devolved																		
23	NR03	G16	New Local Railway (3) - TBC	New	Mon 31/03/25	Region	Performance & Change	Industry collaboration	New unit stood up, location TBC (P13)	Enables improved train performance (on-time, cancellation) as a result of integrated local decision-making	ENABLER	31/03	◆	New unit stood up, location TBC (P13)																		
24	NR03	G19	Governance effectiveness reviews	Existing	Mon 31/03/25	Region	Performance & Change Management	Learning, knowledge & insight	Review completed and recommendations implemented	Increased organisational knowledge, insight and management of performance improvement initiatives (an enabler for improved train service performance)	ENABLER	31/03	◆	Review completed and recommendations implemented																		
ORR Rec: NR04												Tue 30/09/25																				
38	NR04	WE04	Capacity Planning - accelerated training programme	Existing	Thu 31/10/24	Region	People	People development	All vacancies filled	Improved individual / organisational capability (an enabler for a more resilient timetable and therefore improved train service performance)	ENABLER	31/10	◆	All vacancies filled																		
40	NR04	WE07	Old Oak Common - sponsorship and delivery model	New	Thu 31/10/24	Western	Performance & Change Management	Industry collaboration	Revised operating model operational	Improved industry oversight and collaboration, resulting in more resilient and robust operating plan for December 2026 timetable	ENABLER	31/10	◆	Revised operating model operational																		
33	NR04	WA73	Port Talbot freight growth - readiness programme	New	Tue 31/12/24	Wales	Operating Plan	System resilience	Readiness works completed	Improved network and organisational readiness for anticipated freight growth (an enabler for sustained train performance)	ENABLER	31/12	◆	Readiness works completed																		
39	NR04	WE04	Capacity Planning - accelerated training programme	Existing	Tue 31/12/24	Region	People	People development	Training programme delivered	Improved individual / organisational capability (an enabler for a more resilient timetable and therefore improved train service performance)	ENABLER	31/12	◆	Training programme delivered																		
71	NR04	S01	Old Oak Common INITIAL December 2026 timetable modelling	New	Fri 28/02/25	Western	Operating Plan	Timetable resilience	INITIAL OOC Dec 2026 timetable performance modelling completed	Increased resilience of the operating plan for Western route (an enabler for better on-time performance and reduced cancellations)	ENABLER	28/02	◆	INITIAL OOC Dec 2026 timetable performance modelling completed																		
79	NR04	S20	System Operator modelling capability and tools improvements	New	Mon 30/06/25	Region	Operating Plan	Organisational capability	v.14 operational	Improved individual / organisational capability (an enabler for a more resilient timetable and therefore improved train service performance)	ENABLER	30/06	◆	v.14 operational																		
80	NR04	S20	System Operator modelling capability and tools improvements	New	Tue 30/09/25	Region	Operating Plan	Organisational capability	National Infrastructure Model operational	Improved individual / organisational capability (an enabler for a more resilient timetable and therefore improved train service performance)	ENABLER	30/09	◆	National Infrastructure Model operational																		
ORR Rec: NR04, (NR09)												Fri 31/10/25																				
41	NR04 (NR09)	WE55	December 2026 Timetable Planning Rules and Sectional Running Time review	New	Fri 31/10/25	Western	Operating Plan	Timetable resilience	Review complete and findings published	Increased resilience of the operating plan for Western route (an enabler for better on-time performance and reduced cancellations)	ENABLER	31/10	◆	Review complete and findings published																		
ORR Rec: NR05												Sat 31/05/25																				
70	NR05	G27	Regional Whole Industry Performance Board	New	Tue 31/12/24	Region	Performance & Change Management	Industry collaboration	Cross-industry performance board is established	Increased organisational capability and industry collaboration (an enabler for improved train service performance)	ENABLER	31/12	◆	Cross-industry performance board is established																		
72	NR05	S02	Capacity Planning team's review of Trenissimo modelling	New	Sat 31/05/25	Western	Operating Plan	Learning, knowledge & insight	Review complete and findings shared	Increased organisational knowledge, insight and understanding through lessons learned (an enabler for improved operating plan resilience)	ENABLER	31/05	◆	Review complete and findings shared																		
ORR Rec: NR06												Sun 31/05/26																				
3	NR06	D14	Wales & Western competence intervention	Existing	Wed 30/04/25	Region	People	People development	Phase 1 Trial completed	Improved capability of maintenance workforce, leading to qualitative improvements to inspection, maintenance and repair of assets (enabler for performance improvement)	ENABLER	30/04	◆	Phase 1 Trial completed																		
59	NR06	WE42	Maintenance timetable impact assessment process (Brunel)	Existing	Mon 30/06/25	Western	Operating Plan	Timetable resilience	Impact Assessment process implemented	Improved management of affected assets (an enabler for improved train service performance in 0-12 mile)	ENABLER	30/06	◆	Impact Assessment process implemented																		
52	NR06	WE107	Maintenance timetable impact assessment process (Western)	Existing	Sun 31/05/26	Western	Operating Plan	Network availability	Impact Assessment process implemented	Improved management of affected assets (an enabler for improved train service performance in Western Route)	ENABLER	31/05	◆	Impact Assessment process implemented																		
51	NR06	WE106	Optimised earthing	New	TBC (subject to TU)	Western	Fixed Infrastructure	Network availability	Implementation of magnetic earthing	Improved network availability, contributing to improved train performance (on-time, cancellation)	DIRECT																					
ORR Rec: NR07												Wed 31/03/27																				
5	NR07	D29	Rectification of defective OLE switches	Existing	Mon 31/03/25	Western	Fixed Infrastructure	Asset reliability and performance	24 defective switches repaired	Improved asset reliability (OLE) contributing to improved train performance (on-time, cancellation) for passenger and freight services operating through Thames Valley area	DIRECT	31/03	◆	24 defective switches repaired																		

