Network Rail's response to ORR's Draft Determination: Route Services

31 August 2023

Contents

Executive summary

This document is our response to the Office of Rail and Road's (ORR's) periodic review 2023 (PR23) draft determination findings on Route Services. We also provide an update on any key changes to our Control Period seven (CP7) plan since submission of the CP7 strategic business plan (SBP) in February 2023.

We cover GB-wide activities. We have considered how our updated plans and response to ORR's draft determination impacts delivery of both the UK and Scottish Governments' priorities within available funds, as set out in their respective High Level Output Specifications (HLOSs) and Statements of Funds Available (SoFAs).

Following the publication of ORR's draft determination, we have reviewed and considered ORR's draft proposals, decisions, and actions, in relation to our activities. This document sets out our response on these areas. To inform this response, we have undertaken a focused review of our CP7 SBP, as part of our iterative CP7 plan development process. This update has also been reviewed and assured by subject matter experts where relevant. Recognising the limited time available to update, assure and consolidate CP7 plans, our approach has been necessarily targeted and high-level.

There have been three key changes to our plan since the SBP:

- **Reducing Route Services spend by £100m**

  The draft determination recommended we identify an additional efficiency of £100m in centrally delivered technology projects in the Route Services plan. While we cannot identify £100m of additional efficiency, we recognise the need to identify this funding to manage the overall Network Rail position and completed a prioritisation exercise examining the impact of limiting scope or deferring activity to reduce required funding across our portfolio and have identified £100m of indicative savings which will be subject to further testing and review with regions.

  The Route Services plan was already challenging with a significant reduction compared to our bottom up plan and a significant efficiency stretch. Reducing and deferring scope will have an impact on our outputs. This has been reviewed in the round by Network Rail Executive Leadership Team to confirm we are adopting the best balance of priorities. Our current view of the £100m reduction is made up of (subject to further discussion):

  - £51m Infrastructure monitoring
  - £27m Electrical safety delivery
  - £6m IT services
  - £5m in car safety system fitment
  - £5m Asset information services
  - £3m Engineering services
  - £2m training
  - £1m Intelligent infrastructure

We will continue to review the balance of funding priorities with our customers and amend our plan if needed, following the outcome of these discussions.

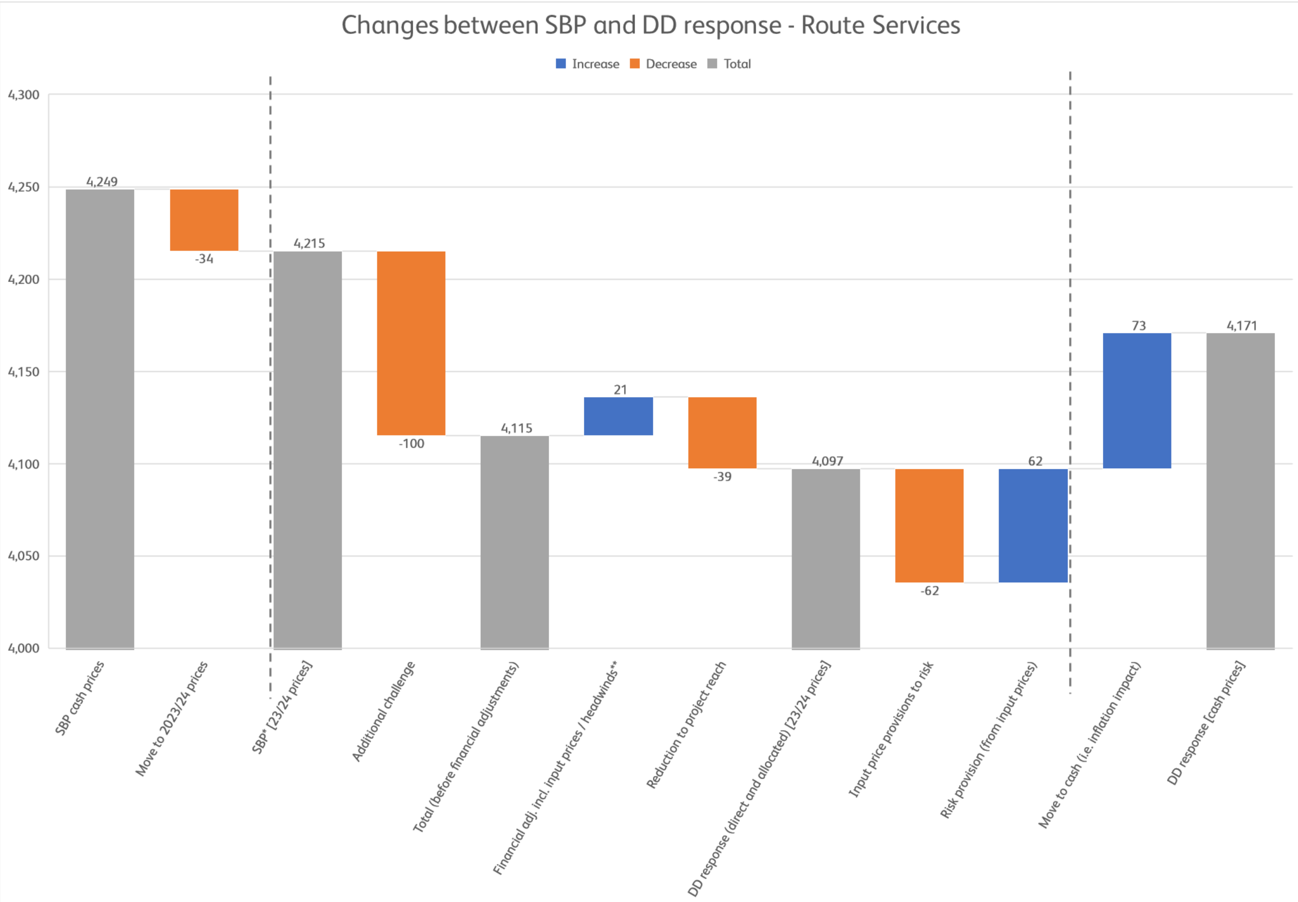
- **Financial adjustments of £21m**

  We have included adjustments to reflect changes to Network Rail forecasts which include input prices, headwinds and efficiencies. This has resulted in an increase of £28m in our operating expenditure and a reduction of £7m in capital expenditure with no change in outputs.

- **Reducing Project Reach spend by £39m**

  We have reduced Project Reach funding in CP7 by £39m to reflect a delay to start and a reduction in the commitment perimeter. New fibre funded by the reach partner is now estimated at 6,784km, compared to 7,891km in the last submission.

The impact of the above changes is shown in the waterfall below.



We welcome the comments from ORR on the readiness of our Electric Vehicle and Infrastructure Monitoring programmes and continue to review the governance of both of these.

There are several changes that were recommended which, following extensive consideration, we have decided not to adopt:

- **High output**

  We have not currently removed any of the funding for High Output in our plan, retaining funding for overhaul of one ballast cleaning system. High output utilisation remains under review and our plan will be amended to reflect the outcome of that exercise.

- **Project Reach**

  We note ORR's view that we should consider whether to fund Project Reach in a fiscally constrained environment. As acknowledged by ORR, this remains a key commercial priority for Network Rail and so we have retained it in our plan. Further detail is provided in the main draft determination response.

- **Input price adjustment**

  We recognise that there is an element of uncertainty in forecasting inflation and input price effects over a five-year period. Therefore, whilst we consider that our latest input prices assumptions are robust, our draft determination response shows £62m of our input price assumption being held in risk funding. Our view remains that we will require this funding to manage input price risk given the significant upward pressure we are seeing in digital and technology costs, over and above CPI. This, along with our exposure to foreign exchange risk presents a unique challenge to Route Services that is not faced elsewhere in the business.

In developing our response, we have maintained an open dialogue with routes, regions and other central functions.

Our plan will continue to evolve in light of our customers' requirements and feedback on priorities for CP7.

Route Services response to ORR's PR23 draft determination settlement document

1. Our response to ORR's draft determination findings on Route Services

The key change to our plan since the SBP is our response to ORR's request to reduce Route Services expenditure on technology projects by circa £100m. We have undertaken a bottom-up and top-down review of CP7 plans to establish an indicative view on how we could best allocate cost reductions across our national programme delivery and core services to routes and regions:

- In the England and Wales overview and national functions supporting documents ORR recommended that we make an efficiency saving, while the sustainable and efficient cost document proposed a reduction to pre-efficient spend. For the avoidance of doubt, a further efficiency saving is not possible in the Route Services plan. There is already a significant efficiency stretch in our plan and we are still working through the impact of funding reductions on the efficiencies already declared. While we remain true to our commitment on efficiency in the SBP and are confident in our ability to deliver the total value of efficiency stated, we do not believe it will be possible to go further. Instead, we have looked at where we can reduce scope or defer activity to deliver savings in CP7.
- The draft determination proposed that we identify savings in centrally delivered technology projects based on ORR's review of such projects which highlighted concerns around project delivery. We noted that some of the projects identified in the draft determination as evidence to support the reduction in Route Services spend are not delivered by Route Services, such as OTTO. The draft determination also referred to electrical safety delivery as an example of a technology project that had generated concerns, but these were not related to the programme having too much money allocated. The targeted assurance report referenced also did not flag excess funding as a concern. We are not persuaded that there is evidence that centrally delivered technology projects should be subject to cost reductions or efficiency stretch.
- However, we do recognise the need for financial savings in the overall Network Rail plan and so have identified an indicative view of the £100m of reductions but have looked more widely than centrally delivered technology projects to do so, balancing priorities across the Route Services portfolio to protect service delivery for our customers.
- The table below sets out the indicative savings we have identified and the impact of each reduction. We will continue to work with our customers to ensure we are delivering the best balance of services to them:

Table 1: Overview of £100m reduction (£m, 2023,24 prices)

Source	SBP	Reduction	Specific impacts from this change
Infrastructure monitoring	£526m	(£51m)	Where possible, we will try to offset the £51m reduction in funding with more efficient ways of securing outputs. As part of planned engagement with routes and regions, we will revisit

			prioritisation to best align investment to the most impactful outputs and outcomes. If all remains equal, indicatively, we expect the funding reduction to affect planned improvements to inspection of switches & crossings and electrification & plant, likely resulting in more manual inspections in regions than if IM were delivered in line with SBP assumptions. Note that this revised funding level is still a significant increase compared to CP6 and we have not yet contracted outputs for CP7 so the precise impact is not known. Further information is provided in annex E.
Electrical safety delivery	£361m	(£27m)	To deliver this saving, some safer, faster isolations technology will be deferred to Control Period eight (CP8, which covers 2029 to 2034). As a result CP7 productivity and track worker safety benefits will be constrained. Further funding will be required in CP8 to deliver the ORR commitment to conclude safer faster isolations technology deployment by 2034.
IT services	£1,160m	(£6m)	Year five renewal activity will be deferred into CP8. This is expected to impact technical currency of IT estate in Y5 but is tolerable. CP8 funding will be needed to undertake the residual renewal.
Fitment of in car safety system	£5m	(£5m)	Initial phase is complete and there is now no funding in Route Services to deliver in car safety systems for our road fleet. Expectation that regions will fund new installations or recycle existing equipment in line with fleet replacement.
Asset information services	£70m	(£5m)	Results in a cut to services with the effect of some Route customers being averse to mandated requirements, or being required to fund or otherwise undertake the work themselves.
Engineering services	£29m	(£3m)	Existing capability will be impacted with full service consultation with customers required to understand alternative efficient means of delivery.
NR training	£30m	(£2m)	The “Mobile training opportunities” project is removed from the workbank for CP7. This means each region will not receive the planned mobile training solution to provide remote training, pre-shift competence uplifts and associated benefits.

Intelligent infrastructure	£116m	(£1m)	Less capacity increases risk to delivery of programme priorities including management of track geometry and hot weather mitigation.
Total		**£100m**	

Our response on our core plan

Most of the comments in the draft determination focused on our national programmes but ORR also noted the benchmarking undertaken on IT services and commercial & procurement which showed both functions are more efficient than similar organisations. ORR also proposed a reduction to high output which is part of our core plan:

- **IT services**

  As part of the draft determination response review, IT has sought to further reduce CP7 expenditure levels in order that funds can be realigned in support of NR's core renewals programme. As such, total forecast for IT Services' CP7 expenditure is now £1.15bn, an overall reduction on CP6. Operational expenditure at £755m is higher than in CP6 which reflects the need to support an increased and growing IT and digital estate. IT Services capital programme will reduce in CP7 in line with a reduced £399m allocation. IT funded improvement delivery will significantly reduce compared to CP6 volumes with 71% of the capital expenditure programme focused on IT asset renewal.

  At the point that Gartner benchmarking analysis was undertaken in 2020/21 IT Services were identified as operating with 19% fewer heads than comparable organisations and following the management modernisation programme internal headcount has reduced by a further 17%. These staffing levels will be maintained across CP7.

  We remain confident that IT Services will provide a good service to our customers in CP7 with the resources allocated.

- **Commercial and procurement**

  During CP7 and in line with HLOS requirements, we will be considering alternative ways of operating and contracting. By using an enterprise-based approach, where we bring together owners, suppliers, and other partners to work in a more integrated and collaborative manner, we can deliver greater benefits. Furthermore, by carrying out robust assessment of contracting options based on an evaluation of numerous considerations will allow us to evaluate the optimum business model and will be a key channel for discovering new ways of creating value with our supply chain.

  During CP7, this approach will help unlock greater value, efficiency, innovation and reduce supplier risk. Digital procurement technologies are also a key focus area for CP7 and digital tools will enable us to automate processes, improve communications and generate deeper insights. This will allow our practitioners to focus on more value adding activities and deliver greater efficiencies.

- **High output**

  ORR's draft determination proposed not refurbishing our high output ballast cleaning system (BCS) in CP7, delivering a saving of £41m as it assumed we would not deliver any high output volumes in CP7. This was because at the time of the SBP, regions had not committed to high output volumes in their plans. We have continued to review the requirements for high output capability and will retain one BCS in CP7 and beyond. We therefore need to retain the funding for the mandatory overhaul of the BCS (£41m) in CP7, which is unchanged from our SBP.

  We are retaining one BCS as we think we can effectively deploy the system in CP7, but also because it will form a key part of our CP8 delivery approach for track renewals. Removing our BCS capability (i.e. one BCS) in CP7 would remove our ability to deliver large track renewals during short windows of access to the network and we would also need to remobilise this capability in CP8 to prevent a longer-term sustainability issue in future control periods.

- **Telecom Services**

  While not highlighted by ORR in the draft determination, a recent internal review of our telecoms asset base has identified potential additional financial pressures. We are currently working through how best to manage this in our plans.

Our response on national programmes

Many of the comments in the draft determination related to our national programmes. We have continued to work on behalf of the business to develop these, taking account of the comments from ORR:

- **Electrical safety delivery**

  We are proposing a reduction of £27m in CP7. To deliver this saving, some safer, faster isolations technology will be deferred to CP8. As a result, CP7 productivity and track worker safety benefits will be constrained. Further funding will be required in CP8 to deliver the ORR commitment to conclude safer faster isolations technology deployment by 2034.

  Further information can be found in annex C.

- **Electric vehicles**

  Increased adoption of electric vehicles is a critical part of Network Rail's wider decarbonisation plan.

Due to the variable density and complexity of the rail network along with the geographical differences the regions will tailor to their new ZEV fleet to their own explicit operational needs aligned to the available vehicle capabilities.

Funding variability across the regions within our CP7 plans takes these factors into account as they have an impact on overall fleet size. For example, Eastern currently has the largest road fleet which is twice the size of the Wales and Western fleet.

We are continuing to review the best approach to delivering the best environmental and financial outcomes.

Further information can be found in annex D.

- **Infrastructure monitoring**

  We have reduced funding for IM by £51m in our DD response. In line with comments in the DD about clarifying our approach, following independent review requested by Route Services executive leadership team we are currently resetting the programme to ensure we are clear on the scope and governance to ensure we deliver regional requirements.

  Further information can be found in annex E.

- **Digital signalling**

  Network Rail is continuing to review and refine Route Services' training and OTM fitment projects, begun in CP6, that are supporting digital signalling, and details of our planned scope and spend will be reflected in our delivery plan for CP7.

  Further information can be found in annex F.

- **Project Reach**

  We note ORR's view on the priority of Project Reach. However, as recognised by ORR in the draft determination, this is of key importance for Network Rail and therefore continues to be included in our plan.

  Further information can be found in the main response.

Efficiencies

We are committed to delivering the ambitious opex and capex efficiency targets for CP7 that we set out in our SBP. However, achieving this level of efficiency will be increasingly challenging. This is because our CP6 efficiencies, which exceeded targets, creates a lean foundation with very limited repeatable savings due to renewals lifecycle one offs such as CP6 rationalisation of services and workforce following modernisation. With the same level of funding in CP7 and new accountabilities we have significantly reduced our capex portfolio, making efficiency delivery even more challenging. Nevertheless, we are committed to delivering over £600m of efficiency within Route Services.

We also note that around 30% of Network Rail's total CP7 efficiencies relates to our share of industry reform savings, and that this may be more challenging to achieve given delays to reform legislation. Not all reform initiatives require legislative reform (e.g. joint property strategies, workforce modernisation and optimising access initiatives) and ORR support for driving forward and delivering these whole-system savings will be instrumental.

In annex A to our response, we provide a high level breakdown of the efficiency initiatives that underpin our plans. This includes providing more detail on operational efficiencies as requested by ORR.

Inflation

Increases in inflation forecasts since the start of the year mean that the cost of our CP7 plan is significantly higher than we assumed in our SBP (£1.5bn higher across England & Wales using May 2023 Bank of England forecasts). The Route Services plan has reduced by £78m in cash terms since the SBP, with the reductions identified in response to the draft determination and changes to Project Reach more than offsetting inflationary increases. While we have not had time to reflect the latest August 2023 Bank of England inflation forecasts in our response, the forecasts are similar to the May 2023 forecast. We discuss this further in our overall Network Rail response.

Financial risk

Our SBP assumed £2bn of risk provisions in England & Wales based on £500m of funding in Group with £1.5bn held as contingent activity across region plans. The impact of recent higher inflation forecasts on our CP7 plans means that we have already had to absorb £1.5bn of additional cost through our move to the risk-adjusted plan. This leads us to start CP7 with lower risk across Network Rail funding compared to the SBP.

We have, however, identified a proportion of our input price provisions to sit within risk funding to reflect that there is some uncertainty about whether the previously observed relationship between CPI inflation and our own costs will re-establish themselves after we move on from the high inflation environment that we are currently in. For Route Services the allocation is £62m which is being overlaid and held as risk in our plan. We have not adjusted the Route Services funding total as we believe this will be required in full to cover input price movements.

We think the plan is currently deliverable. However, any material changes in future inflation, or other significant unplanned financial outlays will mean we need to review plans to further prioritise activity to live within the funding available for CP7. Changes to plans during CP7 would be taken through the managing change process.

Further information on the Route Services financial plan can be found in annex A.

2. Governance and stakeholder engagement

We have continued to engage our stakeholders throughout developing our draft determination response:

- We have taken all the regions through our efficiency plans and proposals for future reporting since submitting the SBP and have had positive feedback on our proposals. We will continue to develop our efficiency plans and will keep regions sighted as we do this.
- We have supported ELT discussions and decisions on prioritisation across the business and have reflected the outcomes of decisions where relevant in our response.
- Our national programmes have continued to engage directly with regions to understand their requirements.
- We will engage in deep dives with regional colleagues on topics of interest, including high output, electrical safety delivery, infrastructure monitoring and electric vehicles ahead of delivery plan.

Annex A: Updated financials

The Route Services plan has reduced by £118m across opex and capex in FY24 prices.

- **Reducing Route Services spend by £100m**

  The draft determination recommended we remove a further £100m from the Route Services plan. We recognise the need to identify this funding to manage the overall Network Rail position and completed a prioritisation exercise examining the impact of reducing funding across our portfolio and have identified £100m of reductions.

- **Financial adjustment increase of £21m**

  We have included adjustments to reflect changes to forecasts including input prices, headwinds, and efficiencies. This has resulted in an increase of £28m to our operating expenditure and a reduction of £7m in capital expenditure with no change in outputs.

- **Reducing Project Reach spend by £39m**

  We have reduced Project Reach funding in CP7 by £39m to reflect a delay to start and a reduction in the commitment perimeter. New fibre funded by the reach partner is now estimated at 6,784km, vs 7,891km in the last submission.

Route Services has also moved £62m of input price provisions to risk. This has not changed the overall level of funding in the plan.

Table 2: Route Services plan overview (£m, 2023/24 prices)

Expenditure type	SBP	Draft determination response
Operating expenditure	2,205	2,175
Capital expenditure	2,010	1,922
Total	**4,215**	**4,097**

Table 3: Route Services operational expenditure movements from SBP (£m, 2023/24 prices)

Operating expenditure movements from SBP	Movement
Strategic business plan	**2,205**
Infrastructure monitoring	(51)
Asset information services	(5)
Engineering services	(3)
Group adjustments	28
Draft determination response total	**2,175**

Table 4: Route Services capital expenditure movements from SBP (£m, 2023/24 prices)

Capital expenditure movements from SBP	Movement
Strategic business plan	**2,010**
Electrical safety delivery	(27)
IT services	(6)
Intelligent infrastructure	(1)
Supply chain operations	(5)
NR training	(2)
Project Reach	(39)
CP6 inflation adjustment	(17)
Group input prices	25
Group headwinds	(12)
Group efficiencies	(3)
Input price provisions to risk	(62)
Risk provision (from input prices)	62
Draft determination response total	**1,922**

Table 5: Route Services CP7 allocation to regions (£m, 2023/24 prices)

£m in 2023/24 prices	Direct costs			Allocated costs			Total costs		
	CP6 (RF3)	SBP	DD Response	CP6 (RF3)	SBP	DD Response	CP6 (RF3)	SBP	DD Response
Operations	0	0	0	0	0	0	0	0	0
Maintenance	413	595	569	-413	-595	-569	0	0	0
Support	1306	1610	1606	-1306	-1610	-1606	0	0	0
Industry costs and rates *	0	0	0	0	0	0	0	0	0
Electricity for traction (EC4T)	0	0	0	0	0	0	0	0	0
Total operating expenditure (excl. EC4T)	**1719**	**2205**	**2175**	**-1719**	**-2205**	**-2175**	**0**	**0**	**0**
Renewals	553	550	483	-553	-550	-483	0	0	0
Other capital expenditure	1770	1460	1439	-1770	-1460	-1439	0	0	0
Total capital expenditure	2323	2010	1922	-2323	-2010	-1922	0	0	0
ETCS enablers	0	0	0	0	0	0	0	0	0
Risk funding	0	0	0	0	0	0	0	0	0
Total Expenditure (excl. EC4T)	**4042**	**4215**	**4097**	**-4042**	**-4215**	**-4097**	**0**	**0**	**0**
Input prices moved to risk funding			62			-62			0

Efficiency overview

Route Services plans to deliver £621m of efficiency in CP7. A high level breakdown of the efficiency initiatives that underpin the Route Services plans can be found below.

Table 6: Route Services efficiency summary (£m, 2023/24 prices)

Function	Opex	Capex	Total
Business services	0	5	5
Engineering services	1	0	1
IT services	24	39	63
Intelligent infrastructure	0	12	12

Route Services directorate	49	56	105
Supply chain operations	61	37	98
Telecom services	5	46	51
Subtotal	**140**	**195**	**335**
Project Reach	0	286	286
Total	**140**	**481**	**621**

Annex B: Sign-off

Job Title	Name	Date
Managing Director	Robert Morton	16 August 2023
Finance Director	Jacqueline Young	16 August 2023

Annex C: Electrical safety delivery

The Electrical Safety (ESD) strategy outlines Network Rail's plans to improve workforce safety for traction power and demonstrate increased compliance with EaWR by the end of CP8. ESD enables the 'step change' required by the strategy and this informs the programme's objectives for CP7 (separate objectives and measures information available).

Network Rail's December 2022 deep dive process resulted in an independent review for ESD to assure CP7 delivery plans. As a result, a phased approach to devolution of funds to regions for technology deployment was recommended to ensure legal safety and compliance obligations are met and the remaining funding available for safer, faster isolations is only allocated based on the best business case given constrained funds available. The approach to regional allocation of funds was endorsed by regional stakeholders on 18 May 2023.

Phase 1 – Scope agreed, £245m. (Regional business plans received in July and independent review of central plans completed in May). This phase includes key legal safety and compliance priorities for CP7:

a. Any increase in CP6 slippage will be ringfenced in phase 1 and result in a further reduction in funding available for phase 2 allocation.

b. Funding for central enablers and regional deployment costs for CP7 priorities (process and culture change and remote securing on OLE). The ESD programme is due to close at end CP7 and transition to business as usual.

c. Regional technology projects aligned to legal, safety and compliance priorities for CP7 comprising:

i. Deployment of infrastructure changes to enable remote securing Trapped Key in W&W (W&W plan to continue using Railcom and is therefore out of scope for SCADA TPCMS Remote Securing App).

ii. Upgrade of W&W infrastructure to enable the £1.6m vicinity zone (a dependency for SAI OLE Phase 6).

iii. Continuation of local securing on Conductor Rail (high level of maturity in technology solution, addresses key cause of isolation irregularities to improve safety and enables productivity improvements for the region to enable maintenance modernisation plans).

Phase 2 – Remaining funds will be allocated to regions for deployment of safer, faster isolation technology based on a business case given the fund is over-subscribed. This situation results in a high confidence in deliverability.

There is a high confidence in delivery of the ESD SBP commitment of £361m as this is lower than the original submission of £515m which resulted from a deliverability assessment of regional plans (fund demand £719m). A further reduction in funding to £334m will result in reduced network coverage, reduced benefits, negative impact on the programme multi-control period business case and a need to re-visit the closure statement for RAIB Roade Rec 3.

In CP7 regional ESD funding for safer, faster isolation technology will be transferred to regions and form part of local financial performance metrics. This will mitigate the risk of CP6 deliverability issues in some regions.

The independent review commissioned by the December 2022 ESD deep dive has provided confidence in deliverability of central enablers and the approach for regional deployment of process, culture and standards changes.

The ORR Capital Investment team have monitored ESD plans, risks and dependencies and Network Rail report each quarter to the ORR Electrical Safety Strategy meeting on progress and delivery against commitments arising from closure of improvement notices.

ESD is due to close at end CP7 as a programme and transition to business as usual. This aligns with the commitment in the Electrical Safety Strategy to conclude deployment of a single approach to isolations and improvements in electrical safety competence by end CP7. Any change in this assumption will be considered by Technical Authority to inform CP8 plans.

The 2018 strategy included an assumption that Safer, Faster Isolation technology deployment would continue into CP8, however the responsibility is expected to move to regions as part of the wider control period planning exercise. Support will be provided by Technical Authority and the ESD Programme team for transition to business as usual and support for regions with Safer, Faster Isolation planning for CP8.

Annex D: Electric vehicles

Due to the variable density and complexity of the rail network along with the geographical differences (urban, suburban, countryside, topographical, seasonal ranges) the regions will tailor to their new ZEV fleet to their own explicit operational needs aligned to the available ZEV capabilities. The early deployments of ZEV will help Network Rail refine the region’s zero emissions vehicle requirements. Funding variability across the regions in our current estimates takes these factors into account as they have an impact on overall fleet size. For example, Eastern currently has the largest road fleet which is twice the size of the Wales & Western fleet. Reassessing road fleet usage to ensure optimum fleet coverage will naturally form part of the programme as vehicles are replaced.

We are continually reviewing our approach to ensure it delivers the best outcomes financially and for the environment.

Annex E: Infrastructure monitoring

Since submission of our SBP we have continued to review our Infrastructure Monitoring (IM) programme, alongside considering ORR's wider proposed £100m reduction to Route Services' CP7 plan. The purpose of this supporting annex is to provide further information on the current status of the IM programme and CP7 plans. We also discuss a current review of the programme and our next steps ahead of the CP7 delivery plan in which we expect to be able to respond fully to the action in ORR's draft determination, to set out timescales and deliverables for the programme to improve and meet increased regional demands for train-borne and infrastructure monitoring.

Introduction

In CP6, we have spent around £265m to operate the current IM services, but it is widely accepted that our existing monitoring fleet is at the end of its life and additional investment will be needed in CP7 to continue to deliver the current service. Additionally, Route Services' CP7 SBP highlighted that regions told us they need improved IM services in CP7 to underpin their maintenance commitment and accelerate safety.

Our SBP included £526m spending on infrastructure monitoring to support the provision of data to regions so that they can safely manage the network. This includes the ongoing cost to run the service as well as the cost to transform the service. This could include transitioning to data as a service as well as fitment and upgrade to our fleet and in service trains. The proposed move to procuring data as a service for both existing and new requirements (as opposed to heavily investing in capital assets) drove an increase in operational expenditure to £491m in the SBP, with £35m capital expenditure to cover the transition from the current to future service and required fitments. Operational expenditure has reduced to £440m in our draft determination response as we have taken out £51m of scope in order to meet ORR's proposed £100m reduction in Route Services spend. This reduction is expected to affect our ability to deliver all of the improvements requested rather than plans to increase reliability of the current service.

Infrastructure Monitoring programme in CP6

The current rail fleet, associated recording equipment and operating model that underpins the delivery of today's IM services struggles to achieve 80% 'right first time' delivery of recording; this makes achieving the maximum permissible recording intervals detailed in standards extremely difficult.

The dependency on IM services by regions has been growing for a number of years, although in CP5 and into CP6, there was a greater ability for regions to manually obtain measurements, as a last resort. Today, restrictions in accessing the infrastructure and regional headcount make this impractical and there is increasing demand to obtain more data from train-borne measurement to leverage the safety, efficiency and consistency benefits that it brings. Our current services require significant improvement to meet these demands.

During CP6, in addition to life extending the current equipment (where possible), we have also taken a different approach to engaging the supply chain by asking them to use their expertise to help us understand what alternatives are possible to deliver the services regions have told us they need in CP7. We have sought to actively collaborate with the wider rail industry and beyond, and tested alternative ways of working; we have called these trailblazer projects.

Infrastructure Monitoring plans for CP7

A considerable amount of time in the last two years has been spent understanding route and region requirements. These have been signed-off by each Director of Engineering and Asset Management (DEAM). In addition, we have also worked with colleagues in the Technical Authority to review relevant standards. For example, taking into account all of the learning possible from the vast of amount of IM data that has been collected in the last two decades, so that we can be sure that recording intervals are optimised.

Routes and regions have asked us to expand the data collected, the frequency of collection and how it is presented, as well as highlighting the impact that declining reliability and their increasing dependence on monitoring is having on their ability to deliver CP7 commitments. The existing fleet cannot deliver the existing service or additional requirements in CP7 as it is at the end of its life and failing more frequently.

Our CP7 plan therefore comprises three main activities:

- Short term fixes to keep the service running.
- Life-extending the current fleet to enable a transition.
- Procuring services to deliver better reliability and support improved outcomes in the longer term.

Whilst we estimate it is possible to deliver some capabilities that will improve service reliability in the first half of CP7 some, like the expected refresh of the dedicated recording fleet, we expect to take 2-3 years to deliver.

The formal procurement process will dictate when regions will see all of their requirements met. Supplier engagement we have undertaken gives us confidence that service levels they have asked for can be met before the end of CP7. We have aligned and rationalised route and region requirements to deliver best value.

Further work ahead of CP7 delivery plan

As part of our transition to CP7, the Infrastructure Monitoring programme have taken the opportunity to review the significant feedback we have received through industry engagement, review the set-up of the programme and leverage the expertise more widely available within Route Services.

In the autumn, we will be further engaging regions to understand how they've calculated benefits from Infrastructure Monitoring in their CP7 plans, including any dependencies in their planning assumptions.

In parallel, we will further refine our cost model. The model we have provides a solid foundation for making business decisions, including the best sourcing methodology, and has been used to develop our Strategic Business Plan. By exploring alternative data acquisition and presentation methods we expect to deliver an efficient improvement in service provision. Once we complete market engagement and further refine the scope of the programme, working iteratively with our customers and factoring in the latest view of market prices and the impact of £51m funding constraint, we will be able to indicate what the deliverables and benefits will be. This will require significant stakeholder engagement in order to carry out an objective review, which will take a number of months. We expect to be confident of our approach ahead of the Delivery Plan in March 2024.

Annex F: Digital Signalling

Post SBP publication, Network Rail has carried out an assessment of deliverability and scope for ETCS fitment to on track machines that was begun in CP6 and will be required during the roll out of ECDP. It is now clear that the cost of this fitment will be greater than expected and alternatives to fitment will therefore be required in some cases to continue to meet the operational need. These alternatives to fitment may reduce capital costs for fitment but will increase our operational costs for activities such as loco-hauling. We are currently reviewing these mitigations and their impacts within Network Rail and with the OTM sector and will reflect our proposals in our delivery plan for CP7.