



# ORR's review of Network Rail's Delivery Plan update (RF6) for the financial year ending 31 March 2023

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## Purpose and background

1. This note provides ORR's views on Network Rail's latest delivery plan update for its operating, support, maintenance, and renewals (OSMR) activities, which was undertaken around August 2022, i.e. its period 6 re-forecast in year 4 of control period 6 (CP6), known as 'RF6'. The plan sets out what it is forecasting to deliver and its income and expenditure forecasts for the remainder of 2022-23 (year 4) and 2023-24 (year 5).
2. Network Rail updates its OSMR delivery plan for CP6 on an annual basis. We review its updated plan as part of how we hold Network Rail to account against the Periodic Review 2018 (PR18) Final Determination, as well as to provide assurance to funders about Network Rail's delivery. Specifically, we focus on:
  - Network Rail's progress against its 2019 Delivery Plan (DP19), which sets out how Network Rail intends to deliver our PR18 Final Determination, and is approved by the Secretary of State (SoS);
  - changes since the last annual update to Network Rail's Delivery Plan (the 2022 Delivery Plan, DP22), which [we reviewed last year](#); and
  - changes since the last iteration of the plan (the RF3 plan, e.g. Network Rail's re-forecast of its plan at period 3 (June 2022) in year 4 of CP6) that we reviewed. We documented that review as part of our second set of supplementary advice which was provided to the Department for Transport (DfT) on 16 September 2022. We also shared the note with Transport Scotland.

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3. In this note we provide further information on the issues we have identified with Network Rail's CP6 delivery. Annex A provides our view on how each region, the System Operator (SO) and national functions are performing against their CP6 commitments, and any risks to their delivery. This reflects the region/function-specific approach to the way we hold Network Rail to account. Annex B provides some further comments on Network Rail's plan by presenting progress against the issues raised at RF11 in March 2022 and RF3 in September 2022.
4. Unless we refer to a specific region or part of Network Rail, the numbers in this note are for Network Rail as a whole and are presented in cash prices. Where future forecasts are included, this is based on either the Bank of England's May or August 2022 inflation forecasts, as per Network Rail's approach.

### Summary of our findings

5. **The RF6 forecast for CP6 delivery has deteriorated since the last iteration of Network Rail's plan at RF3. While it continues to deliver in a number of important areas, there are considerable risks that Network Rail may not deliver in full on its PR18 commitments.** This includes its commitments on some of its renewals asset categories (in some regions) and its modernising maintenance reforms as part of its wider workforce reform programme. However, Network Rail is broadly on track to deliver on its CP6 efficiencies and is ahead on its management reform proposals.
6. At RF6, Network Rail has reported further industrial action costs, declining train service performance (resulting in higher payments to train operators) and inflationary pressures. All these factors have resulted in further deferred (or cancelled) renewals (£0.4 billion) since RF3 and draw downs in CP6 risk funding. Network Rail now has minimal unallocated CP6 risk funding remaining (£5 million – although this is just for Network Rail Scotland). This is concerning given that some of the risks Network Rail is currently facing are difficult to predict and could be material.
7. There are various mentions in our note of reductions in renewals, some of these reductions have been made for operational reasons and some made for affordability reasons. Network Rail's plan is evolving before it is finalised at RF11 and not all of the affordability changes have been reflected in the regions' plans. So, circa £0.2 billion of the £0.4 billion reduction in renewals has been reflected in the regions' plans (e.g. Eastern and Southern) and the remainder will be reflected in future iterations of its plan. While this reduction in total forecast renewals expenditure is small relative to overall CP6 renewals expenditure (circa 2%), this does create further

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CP6 deliverability risks for the regions and all these issues could also have knock-on impacts for CP7.

8. Reflecting the points made above, Network Rail will need to manage financial risk differently in the remainder of CP6 compared to its approach so far. This will involve developing a good understanding of which renewals projects could be more easily 'switched off', if the position looks like it will worsen. Network Rail has already indicated that if further risks arise, it will review its priorities and transfer funding where appropriate. We have started to discuss with Network Rail how we can monitor and report on the robustness of this process, and any corresponding impacts on safety. We recognise that Network Rail was planning to take a different approach to risk funding in the final year anyway given how it needs to manage the budget flexibility arrangements with DfT. But the scale of the reduction in risk funding in the summer has meant that its financial position is tighter than expected, so it heightens the importance of this process.
9. Network Rail's plan for CP6 also needs to reflect the latest view of CP7, e.g. if priorities change for CP7 then some of the changes may need to start in CP6.

### Our findings on Network Rail's CP6 delivery

10. We set out below our key findings on Network Rail's CP6 delivery.

#### 1. At RF6 the wider macroeconomic environment is highly uncertain, and Network Rail has minimal unallocated risk funding left.

11. The wider economic situation means that it is currently difficult for Network Rail to plan to a high degree of certainty. Inflation is currently at a historic high (CPI was 9.6% in October 2022) and forecast to peak in the 4<sup>th</sup> quarter of 2022 at 11.1% (Office of Budget Responsibility November 2022 forecast). The rail supply chain has also been affected by wider economic issues relating to Brexit, the war in Ukraine and industrial action that has severely disrupted the rail industry since the summer. These factors have significantly increased Network Rail's costs over the last year.
12. Network Rail has now used or allocated nearly all its risk fund (at the start of CP6 this was £3 billion) and at RF6 it has £5 million remaining unallocated (this is just for Network Rail Scotland). Network Rail will need to manage financial risk differently in the remainder of CP6 to its approach so far. This will involve developing a good understanding of which renewals projects could be more easily 'switched off', if the position looks like it will worsen. If further risks arise, Network Rail has told us that it will review its priorities and transfer funding where appropriate (having assessed

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safety and asset management implications). We are discussing with Network Rail how we can monitor and report on the robustness of this process. We recognise that Network Rail was planning to take a different approach to risk funding in the final year anyway given how it needs to manage the budget flexibility arrangements with DfT. But the scale of the reduction in risk funding in the summer has meant that its financial position is tighter than expected, so it heightens the importance of this process.

13. To fund the industrial action costs, higher payments to train operators and deal with inflationary pressures, Network Rail reduced its total forecast renewals expenditure by £0.4 billion (circa 2% of total CP6 renewals spend). Some (circa £0.2 billion) of the £0.4 billion reduction in renewals has been reflected in the regions plans (e.g. Eastern and Southern), however the remaining £0.2 billion has not been included in its plan. Network Rail still needs to work out where these reductions in renewals will take place and it is planning to resolve this difficult issue by RF11.
14. It is still not clear what impact these reductions will have on the volume of renewals it will deliver overall in CP6 and, in turn, the impact on asset condition and safety. It does create further CP6 deliverability risks for the regions and all these issues could also have knock-on impacts for CP7. Network Rail's next iteration of its plan will inform its CP6 exit position and we will continue to monitor this closely and provide a further update at RF11.
15. Network Rail is discussing a funding arrangement with DfT, so that Network Rail could be held neutral on Schedule 4 and Schedule 8 payments related to industrial action.

### **2. At RF6, Network Rail has made further renewals deferrals. This means that the planned completion of renewals work across signalling, structures and telecoms is significantly backend loaded, which creates deliverability risks for the final year of CP6.**

16. At RF6, Network Rail has deferred some further renewals into the final year of CP6, which is creating deliverability risks for some asset groups in some regions, in particular North West & Central. These deliverability risks are not related to affordability, these are technical or operational issues with some areas of renewals spend. Please see Annex A for a more detailed discussion of each region, SO and national functions delivery.
17. At RF6, we are seeing backend loading across the following renewals asset categories:

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- **Signalling:** signalling delivery of effective volumes at RF6 is forecast to be 13% below DP22. This is due to two main reasons: Firstly, a risk of delivery at Birmingham New Street as work is being commissioned later this year due to industrial action impacts. Network Rail has told us that work access to Birmingham New Street is protected over the Christmas period to ensure, as far as possible, the commissioning over this period. Secondly, volumes have been deferred to year 5 because of delays in signaller training at Edinburgh Control System renewal project caused by pandemic related restrictions and the impacts of industrial action. A high volume of work is forecast for year 5 (relative to years 1 to 4), which creates significant deliverability risks for CP6. However, Network Rail has told us that it is confident in delivery because the commissioning of Rugeley to Colwich is a key workstream for North West & Central that contributes significantly to volumes. Having undertaken our own assessment, we remain cautious.
- **Structures:** structures delivery of effective volumes at RF6 is forecast to be 7% below DP22, which is worse than at RF3 (5% below DP22). These variances at RF6 are largely driven by North West & Central (effective volumes 30% below DP22) and Scotland (effective volumes 20% below DP22). In North West & Central this is because of a reduction in overbridge volume due to key schemes being impacted by access challenges in year 4. For example, one significant scheme was impacted because access was rejected to prioritise a local car park to service a vaccination centre. This scheme has been replanned. In Scotland this was driven by access issues at Camps Viaduct and Glenfinnan Viaduct resulting in deferrals. Again, Network Rail is forecasting to deliver a high volume of structures work in year 5 of CP6 (relative to years 1 to 4), which creates further significant deliverability risk for CP6.
- **Telecoms:** telecoms volumes delivery at RF6 is forecast to be 5% below their DP19 level and 39% below DP22. These in year variances are driven by: replanning of all volume types in Wales & Western (88% below DP22); replanning the delivery of Station Information and Security Systems (SISS) volumes to year 5 in Scotland (71% below DP22) primarily because Ayrshire Long Line Public Address (a Passenger Information System) was replanned to year 5 after programme changes; and, Southern replanning the delivery of its SISS volumes to year 5 (58% below DP22). While Network Rail is forecasting a significant ramp up in completion of telecoms volume delivery in year 5, it has also told us that it is unsure whether this volume of work is deliverable. We agree with this risk to delivery.

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- **Other assets:** there was a reduction in the delivery gap of Switching and Crossing and Plain Line track renewals, which had been created earlier in CP6 due to the pandemic.
18. While **earthworks renewals** are broadly in line with DP22, should this asset area experience further extreme weather impacts in the remainder of CP6, given the reduced level of remaining risk funding, then Network Rail may need to re-assess its planned renewals (e.g. in earthworks or elsewhere) to fund any sudden major earthwork failures.
19. We are still awaiting the outcome of a review by Network Rail's Rail Investment Centre of Excellence (there will be an in-depth review for CP7, which will include the CP6 exit position). This review started in October 2022 and is due to complete in February 2023. This review aims to provide further insights into the preparedness of the regions to deliver. This review will provide a basis on which to judge delivery confidence and provide the clearest forecast of the CP6 exit position. We will provide more information on the outcome of this review at our next review of Network Rail's plan in March 2023.

### **3. At RF6, Network Rail Scotland's effective renewals volumes forecasts for each asset group in year 4 are still behind budget, although this has been difficult to assure as earlier in the year we identified that its volumes delivery plan for year 4 was incorrect.**

20. Network Rail Scotland's effective renewal volumes forecasts for each asset group (track, signalling, earthworks, conductor rail, overhead line and structures) in year 4 of CP6 are behind budget. Earlier in the year we identified that the volumes delivery plan set for year 4 was incorrect, due to a lack of sufficient governance and assurance around the deferrals Network Rail Scotland made in year 3 (2021-22). Network Rail Scotland has told us this was because the plan for year 4 was not finalised in time for its reporting cut off. This has made it difficult for us to assure whether Network Rail Scotland is delivering the volumes it intended to deliver in year 4.
21. We recently stepped up our monitoring on this issue and are closely engaging with Network Rail Scotland's Executive. Network Rail Scotland is undertaking a '12-week action plan', which it is part way through, to make improvements to the governance and assurance surrounding its forecast and reporting processes to ensure that future reporting accurately reflects planned delivery. We will continue to closely monitor its progress in this area, until it has demonstrated that its processes are sufficiently

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robust. We will provide a further update on this at our next review of Network Rail's plan in March 2023.

### **4. Network Rail is ahead of schedule on its management reform. However, it is behind on the delivery of its modernising maintenance programme due to the current issues with its relationship with the unions. Further delays could risk delivery of its overall workforce reform programme in CP6, impacting its CP7 plan.**

22. We are monitoring Network Rail's workforce modernisation plan to ensure that it is not compromising on efficient and safe delivery, and that it is on track to deliver its workforce reform programme during CP6. This reflects that delivery of these reforms is a key element of Network Rail's overall CP6 efficiencies, as well as its assumed starting position for CP7 (which has a significant effect on its CP7 expenditure forecast).
23. At RF6, Network Rail provided more information on the progress it is making on its workforce reform programme. We will continue to engage closely with Network Rail on this and provide a further update at our next review of Network Rail's plan in March 2023.
24. At RF6, Network Rail told us that:
  - It is currently ahead of schedule on its management reforms.
  - It is behind on the delivery of its maintenance reforms due to the ongoing industrial action, which has cost Network Rail circa [redacted] per day up to the end of September 2022. At RF6 Network Rail set aside funding for two further days of industrial action in 2022-23. Further strikes have since been announced which we expect to increase costs further.

At RF3, Network Rail told us that the maintenance modernisation programme was forecasting a delay of three months and would be delivered by July 2023 (from the original date of April 2023). At RF6, Network Rail stated that a further three-month delay to the modernising maintenance programme beyond July 2023 would cost Network Rail circa [redacted]. However, Network Rail has told us that due to continued attrition and headcount restraint across the business, these cost savings are helping offset the delay. Further delays to this programme could risk delivery of its overall workforce reform programme in CP6, and this will impact on its CP7 planning, which assumes circa [redacted] of savings from maintenance reform. Network Rail told us that it remains

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confident that these benefits will be delivered in CP6, however this remains uncertain.

- Its CP6 plan includes the cost of a pay award (which is consistent with its latest negotiating position), though this is still being negotiated and could change. Network Rail has said that any increases to the current assumption would have to be funded from additional efficiencies, which may be challenging.
- It has formed a National Safety Validation Panel, whose role it is to identify hazards and set change management safety expectations. We are an observer on this panel to ensure that any changes made consider the safety implications in full. The routes and regions will take the outputs from the safety verification panel to help them implement the changes safely and demonstrate that the risks are controlled. The routes and regions are currently planning the changes but will need the outputs from the safety panel to finalise their implementation plans, which will detail how they will demonstrate compliance with the national process and meet the expectations of the national safety panel.

### **5. Network Rail is still on track to deliver its CP6 efficiencies; however, we are concerned about Network Rail Scotland's delivery of its efficiency targets.**

25. In October 2022, we published our [Annual Efficiency and Finance Assessment](#), which detailed that Network Rail is still on track to deliver £4.0 billion of efficiencies in CP6, which is £0.5 billion higher than our PR18 efficiencies target of £3.5 billion (or 10% over CP6). This includes some of the workforce reform efficiencies outlined above. The delivery of efficiencies ramps up towards the end of CP6, matching the increase in delivery of renewals. £0.9 billion of efficiencies is forecast to be delivered in year 4 and £1.1 billion in year 5 (against an average during years 1-3 of the control period of £0.6 billion).
26. Network Rail Scotland's confidence ratings for delivering the remainder of its efficiencies target have recently not been as strong as in other regions. We are therefore concerned about the deliverability of its plan to deliver the significant level of efficiencies targeted for the rest of CP6, especially as it has deferred work to compensate for the reduced level of unallocated risk funding available for the remainder of the control period. We have recently asked Network Rail Scotland to set out to us why it considers that its CP6 efficiency forecast is robust and what actions its executive is taking to improve the robustness of its efficiency plan.
27. At a GB level, as outlined above, we have concerns about delivery of renewals (as well as maintenance reforms) over the remainder of CP6 and if these delays



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continue, this will impact Network Rail's efficiency. This is an area we will continue to monitor closely over the coming year.

### **6. Network Rail's delivery of train service performance has declined in year 4, which has resulted in higher payments to train operators and less income for Network Rail.**

28. At RF6, train service performance has declined across all of Network Rail's regions and forecast Schedule 8 payments for year 4 have increased by circa £200 million since RF3. Forecast Schedule 8 payments for year 5 have increased by £117 million. While some of this decline in performance is due to factors outside of Network Rail's direct control including hot weather and industrial action, there are a number of areas which have all led to increased Schedule 8 payments since RF3, which Network Rail is able to address, or mitigate, such as track and overhead line equipment resilience.
29. In addition, underlying performance is declining (particularly in Wales & Western) and in November 2022 we [wrote](#) to Network Rail to set out our view of current train performance, the specific improvements that Network Rail must make, and how we will scrutinise the delivery of those improvements. Our letter recognised that factors outside of Network Rail's control (including industrial action) have impacted its ability to deliver a reliable service to passengers and freight operators, and there are areas such as trespass and theft where Network Rail is working to reduce delays. Nevertheless, it is essential that Network Rail delivers on the specific interventions we set out in our letter.
30. We will continue to monitor this and will provide a further update on train service performance at our next review of Network Rail's plan in March 2023.

### **7. At RF6, Network Rail has not provided us with sufficient information in its executive packs about the potential health and safety implications of its plan, which has made it difficult for us to assure these aspects of the plan.**

31. Last year we raised concerns over the lack of assurance that revisions to the plan had been robustly reviewed and assured from a health and safety perspective. Over the past year we have engaged with Network Rail's business planning team to try and resolve this issue, however at RF6 there is no reference to health and safety in the executive packs. The lack of visibility of an assessment of the health and safety aspects of the plan is a concern, particularly in the context of funding becoming more constrained in all regions and, in many regions, work being deferred.

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32. We recently wrote to each of Network Rail's regional Directors of health and safety to request that they provide assurance that each Director:
- has reviewed the RF6 information and understands any changes and associated health and safety impacts;
  - provides assurance that any Health and Safety impacts from revisions to the plan are assessed and changes in risk managed, via effective mitigation, to maintain legally compliant levels of safety; and
  - provides a summary of this review and its findings as part of the revised delivery plan submissions to ORR.
33. Network Rail told us that its executive packs were developed to provide a summary of key financial movements since its last iteration of its plan and that there are separate assurance processes in the regions and Network Rail's Technical Authority to consider the safety implications of updates to its plan. Network Rail advised that its Technical Authority would liaise with the regions on the options to provide an appropriate overview for ORR and would follow up with a single response to ORR's letter. Once we have received Network Rail's response, we will work to agree a way forward on this issue.

### **8. At RF6, Network Rail told us that the capital implementation costs associated with the changes made to the track worker safety arrangements have declined from March 2022, and that the changes Network Rail are making to its track worker safety arrangements are forecast to deliver £100 million of savings across CP6.**

34. At RF6, Network Rail has updated information on the costs associated with the changes made to the track worker safety arrangements. The total cost of delivering these changes is now forecast to be £373 million (compared to £382 million in March 2022). This is made up of the:
- capital implementation costs of £218 million (post-efficient) in CP6. This is a reduction from £227 million at RF11 and Network Rail has said this reduction is because less investment is required than previously expected in goods and services for warning technology;
  - ongoing operational costs of this programme of £130 million (post-efficient); and
  - cost of the Planning 4 Delivery (P4D) programme aspect of these changes in the regions is £25 million.

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35. At RF11, we asked Network Rail to clarify the savings and the timeframe over which the savings are expected to materialise. At RF6, Network Rail has provided this to us and told us that changes made are forecast to deliver £100 million of savings across CP6. We note that this is lower than the ongoing operational costs of £130 million for CP6. This consists of several efficiency initiatives including:
- £31 million from workbank optimisation;
  - £29 million from closure of work orders and improved productivity;
  - £18 million from P4D programme;
  - £8 million from increased benefits from plain line pattern recognition (PLPR); and
  - £14 million from various other efficiency initiatives.
36. We now have more clarity on the income and costs since our review of Network Rail's plan in March 2022.

### Next steps

37. We will work with Network Rail to ensure that the issues raised in this note are resolved in advance of our next review of Network Rail's plan in March 2023, where possible. This work will also play an important role in informing our CP7 determination, including our review of Network Rail's Strategic Business Plan (SBP) due in February 2023. This reflects that Network Rail's next iteration of its plan will inform its CP6 exit position for its SBP.
38. To ensure Network Rail provides this information, we will include the issues discussed in our note in our 'issues tracker' and where necessary we may choose to step up our monitoring on specific issues. We will discuss the issues raised in this note at our monthly business planning liaison meetings with Network Rail. As part of this we will agree with Network Rail which points should be included in the tracker and the criteria for closing them.

## Annex A: Our assessment of how Network Rail's regions, SO and national functions are performing against its CP6 commitments.

### Network Rail's regions

#### Eastern

- 1.1 The Eastern region is on target against its year 4 spend and delivery of renewal volumes, but it is backend loading in several asset renewal categories to the final year of CP6.
- 1.2 The full year forecast for turnover has worsened by circa £70 million since RF3. The main drivers for this are industrial action, which is resulting in higher than forecast Schedule 4 payments. Eastern has been more heavily affected by industrial action compared with other regions (it has accounted for 33% of Network Rail's overall impact in terms of financial costs, reflecting it is the largest region). The region has received some additional risk funding from the centre (£32 million) to help address this.
- 1.3 Similar to other regions, there is no allowance for industrial action from October 2022 onwards. Asset teams are currently reviewing year 5 workbanks to identify potential deferrals to deal with the overall financial position.
- 1.4 In both years 4 and 5, Eastern has reduced its overall volume of track work, driven in part by rising material costs. It is ahead on its signalling volumes compared with the original CP6 plan (i.e. the Delivery Plan 2019), and there are significant increases in volumes for year 5 (with plans to continue this into CP7). It is now planning to increase the volume of work on structures, with effective volumes showing an upward trend towards the end of CP6, with slight backend loading in both years 4 and 5.
- 1.5 Eastern is also backend loading electrification and fixed plant volumes in both years 4 and 5, with the overall volumes showing a large increase when compared to the region's original CP6 plan. This is partly due to the resilience programme for existing Overhead Line Equipment (OLE). It is positive that the region is accelerating delivery of OLE volumes as we recently [highlighted our concerns with the resilience of OLE in Eastern](#). Improvements should lead to better performance outcomes for passengers and freight operators. While we consider that the region's plan for OLE is well developed and scoped, it is important that headcount reductions and other foreseen issues, such as future industrial action, should be

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considered as part of the region's deliverability assessment. This is an important area that we are keeping under review.

- 1.6 The region has confirmed that key deferrals from CP6 into CP7 have been considered within its CP7 planning and deliverability/cost assessment. Deferrals include Liverpool Street Station works; Cambridge re-signalling; and Selby re-signalling.
- 1.7 At RF6, Eastern has fully deployed the remainder of its risk fund (£30 million) to mitigate operating expenditure increases and inflationary pressures across years 4 and 5.
- 1.8 Other areas of future financial risk not included in the region's re-forecast include maintenance modernisation (although there is provision for this held in group risk); industrial action; further Schedule 8 underperformance; pay inflationary risks; and inflationary risk affecting its capital expenditure portfolio. To help address this, it has established a multidisciplinary working group to help identify and develop mitigation strategies (e.g. value engineering, proactive supply chain collaboration/contract management, project contingency management).
- 1.9 In CP6, the region is forecasting to achieve efficiencies of £1,078 million, outperforming its original £923 million target (from its Delivery Plan 2019). Leading indicators for the region remain strong (suggesting confidence in delivery).

### North West & Central

- 1.10 In year 4, the region has revised downwards the full year forecast for effective volumes from 102% to 88% (compared with its Delivery Plan 2022), the majority of which is due to reductions in signalling (delivery at Birmingham New Street at risk as work is being commissioned later this year (year 4)) and plain line track mainly due to volumes being deferred due to industrial action (including impact from lost access and resource availability) and high temperatures earlier in the year. The region has instituted periodic deliverability reviews to unblock obstacles and provide confidence in its plan for the remainder of CP6. Given continued inflationary pressures and the region using all of its remaining risk funding we have concerns as to whether the region will be able to meet its CP6 renewals plan. We are seeking assurance from the region on its prioritisation process should renewals need to be deferred.
- 1.11 The Commonwealth Games in Birmingham also had an impact on year 4. In some areas there was slippage (particularly in earthworks), while in other areas there was an acceleration of volumes (e.g. in electrification and fixed plant) to help

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improve resilience in the network, which involved some planned CP7 work being brought forward. Due to the availability of resource for reporting due to the Commonwealth Games, the region also reported some under delivery in maintenance during the games, and we understand the reporting will be updated at RF9.

- 1.12 We have previously reported concerns with reliability of track in North West & Central (track reliability is consistently below target). As set out above, some track volumes have been deferred. It is planning to recover this later this year (year 4) and in year 5, and additional volume has been brought forward from CP7. This means that it now expects to exceed the volume of track work compared with the original CP6 plan. We will continue to monitor the region's track interventions as this is an important area which should help to drive improvements in passenger and freight performance.
- 1.13 On structures, it is planning to deliver significantly higher volumes of work in year 5 compared with the volumes delivered in previous years (indeed, it is more than twice the maximum volume delivered in any year in CP6). The region is confident of delivering the works planned. When challenged on this, it stated that many of the schemes are mature, at grip stage 5/6 (i.e. Governance of Railway Investment Projects - detailed design/construction, test and commission stages) and all projects have had financial authorisation.
- 1.14 North West & Central has fully allocated its risk funding, drawing down [redacted] for industrial action. Like other regions, North West & Central has not made provision for further industrial action in its forecast (but assumes a risk of between [redacted] and [redacted] per day). The region has said it has a process whereby it could 'switch off' some renewals should funding become constrained and it notes that the majority of schemes have authority split between design and implementation to allow schemes to be paused after design should risks materialise. We will continue to discuss with the region how this process would work in practice.
- 1.15 North West & Central is aiming to deliver £728 million of efficiency improvements in CP6, outperforming its original £608 million target (from its Delivery Plan 2019). The region is confident it will deliver these efficiencies. However, it is behind on some of its leading indicators for 2023-24, and we are monitoring progress, recognising that authority always ramps up after period 8 following the process to agree budgets for the next year.

## Scotland

- 1.16 Network Rail Scotland's effective renewal volumes for year 4 are behind its Delivery Plan 2022 forecast. Earlier in the year, we identified that the volumes delivery plan set for year 4 was incorrect, due to a lack of sufficient governance and assurance around the deferrals Network Rail Scotland made in year 3. Network Rail Scotland has told us this was because the plan for year 4 was not finalised in time for its reporting cut off. This has made it extremely difficult for us to assess whether Network Rail Scotland is delivering the volumes it intended to deliver in year 4. However, Network Rail Scotland's Executive has assured us that it is making improvements to the governance and assurance surrounding its forecasting and reporting processes to ensure that future reporting accurately reflects planned delivery.
- 1.17 Since its previous reforecast, Network Rail Scotland has further delayed commissioning the Edinburgh Control System renewal project due to delays in signaller training caused by pandemic related restrictions and industrial action. This has meant a deferral of 80 Signalling Equivalent Units into year 5 of CP6. Network Rail Scotland has told us that it will commission this project before the end of CP6.
- 1.18 It has also deferred some structures volumes into year 5 (equivalent to 295 volumes), which is primarily due to the delay of work on Camps Viaduct (nine arch stone single track viaduct over the gorge of the River Almond in Perth and Kinross). Finally, while the variance in earthworks volumes compared with DP22 is low (earthwork volumes are ahead of DP19 for CP6 overall), further deferrals are expected this year due to costs coming in higher than the unit rates set for year 4. This has been partly attributed to the implementation of Lord Mair and Dame Slingo recommendations.
- 1.19 Network Rail Scotland's updated forecast assumes that it will need to pay compensation over the remainder of CP6 to train operating companies for disruption caused by industrial action. This was not anticipated in the delivery plan for the year and the level of compensation has not yet been finalised, but it is worth noting that Scotland is the only region to have allocated risk funding to provide for potential future industrial action. The impact of industrial action is significantly greater in Scotland because compensation levels will be proportionately lower in England and Wales due to many TOCs taking industrial action on the same days. The same has not been the case in Scotland, meaning compensation levels faced by Network Rail are likely to be higher.

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- 1.20 Inflation is also a risk, and while Network Rail Scotland previously created a £25 million provision for the impact of inflation on renewals in year 4 and year 5, it has now removed this as it has not seen the effect of inflation coming through as quickly as initially assumed. It expects to manage any further inflation in renewals through project contingencies. Other regions have not reduced their inflation provisions to this extent. We are concerned that removing this provision may be premature, and that the region may now begin to feel the impact of inflation as pre-bought materials and fixed prices within supplier contracts as they run out.
- 1.21 Network Rail Scotland was provided with £329 million of risk funding for CP6. As at period 6 of year 4, only £5 million of this remains unallocated. We recognise there are further risks to the remaining risk fund position not captured within the £5 million figure. Furthermore, the latest risk forecast assumes delivery of all Network Rail Scotland's forecast CP6 efficiencies, which are challenging targets to deliver, with significant inherent risk.
- 1.22 We continue to be concerned about the limited amount of unallocated risk funding remaining but recognise that this is being managed carefully. We will continue to monitor efficiency delivery and the levels of Network Rail Scotland's risk funding as a priority and to challenge the region to demonstrate that it has a credible plan to manage risk and deliver its efficiencies to the end of CP6.
- 1.23 Network Rail Scotland is forecasting to achieve £404 million of efficiencies, outperforming its £358 million original CP6 target. To date, the region has delivered 43% of its planned efficiencies. Network Rail Scotland provides us with ratings of its confidence in delivering the remainder of this target. Those ratings are not as strong as in other regions. We are concerned about the deliverability of Network Rail Scotland's plan to deliver the significant level of efficiencies targeted for the rest of CP6, particularly as not delivering them will put further pressure on the risk fund. We have recently asked Network Rail Scotland to explain why it considers that its CP6 efficiency forecast is robust, and what actions its executive is taking to improve the robustness of its efficiency plan.

### Southern

- 1.24 Southern is £50 million behind budget on year 4 renewals, primarily driven by the transfer from locally held risk funding in renewals to OPEX where risks have crystallised (Schedule 8 and industrial action impact on Schedule 4). There has also been under delivery in plain line track and switches & crossings volumes during the year. The region has a plan to partially recover this underspend, but the risk remains that there will be £24 million underspend of renewals. This may



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reduce further at the next reforecast (RF9) and projects may be accelerated depending on value for money, project maturity and deliverability.

- 1.25 On earthworks, while the region is forecasting to deliver 7.1% above target in year 4 (due to acceleration of soil cutting (refurb) volume from year 5 and acceleration of embankments work from year 5 and CP7), Southern's delivery year to date is only 65% of its target volumes for the period to RF6. This is an emerging concern, in particular the low level of refurbishments across the three asset types, which is currently just above 52%. Southern will need to make a concerted and focussed effort in the final year of CP6 to deliver the remaining activity.
- 1.26 The region is also forecasting under delivery on building volumes in year 4 (forecasting 20.7% below target). It has reported that this is due to a fall in volumes of work at franchised stations due to procurement issues. Along with light maintenance volumes, a number of these volumes have been deferred to year 5, with a small number potentially re-planned to CP7 to explore more efficient means of delivery.
- 1.27 Southern's income is £59 million below target. Like most other regions, Southern has made no allocation for future industrial action. The region has estimated that further industrial action could cost around [redacted]. It has allocated £63 million for Schedule 8 underperformance – this is the region's forecast to the end of CP6. It considers that inflation risk for capex projects is largely reflected in the project anticipated final cost (AFC). However, it is still assessing some further exposure in years 4 and 5.
- 1.28 At RF6 the region has drawn down its remaining risk fund of £64 million to largely address the deterioration seen in train performance. The £50 million under spend in renewals (mentioned above) also provides the region with potential headroom to manage further risk. Separately, it is also identifying potential opportunities to help manage any new risks as they emerge.
- 1.29 It has said it is managing inflationary cost pressures through tight cost control, however there is no provision for further inflationary cost increases. The region is planning to use the headroom from renewals to absorb this risk, along with any other opportunities that it identifies.
- 1.30 The region is forecasting to achieve £957 million of efficiencies, outperforming its original CP6 target of £833 million. While the region is confident it can deliver these efficiencies, there is some uncertainty around pay related efficiency stretches (£30 million) and the realisation of forecast telecoms efficiencies (£90

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million). The reform efficiencies primarily relate to the delivery of the region's maintenance modernisation programme. The telecoms uncertainty relates to the change in strategy in relation to Driver Only Operation on the Kent route. However, the region expects progress to improve in the coming periods.

### Wales & Western

- 1.31 The region's year 4 effective volumes remain ahead of forecast. However, this does not take account of further industrial action and there is limited ability to re-plan lost work. Inflationary pressures are having an impact and likely to be particularly acute in year 5 for currently uncontracted work when tenders have yet to be received. Year to date spend is £28 million ahead of the region's last re-forecast.
- 1.32 The region is planning to deliver an increased volume in track renewals in both years 4 and 5. There is also a significant increase in signalling and electrification and fixed plant volumes planned for year 5, this is because signalling volumes are reported on final completion of works, which have been ongoing for multiple years. There is also a planned increase in buildings volumes.
- 1.33 With backend loading of renewals in the final years of CP6, we consider that there is some risk of deferral to CP7. We challenged this, and the region has committed to providing a further update at RF9. We will maintain a focus on effective volumes, particularly on deliverability of signalling volumes.
- 1.34 Risk funding has been fully utilised. Future financial risk will have to be funded by deferral of renewals for which a prioritised list is being developed.
- 1.35 Within its risk funding, the region has allocated provision for inflation funding (£93 million). The region has modelled a 'most likely' case for remaining inflation cost in CP6 for income, opex and renewals of £136 million, leaving a gap of £43 million. The region plans to mitigate this gap through deferrals of renewals. It is developing a prioritisation plan as part of this, which considers safety performance and asset sustainability impacts.
- 1.36 The largest non-inflation risks within the region relate to train service delay risk (£20 million for remainder of CP6), and any future industrial action. Overall, train service delivery, inflationary pressures, pay deal uncertainty, and continued industrial action are generating cost uncertainty in CP6. Future industrial action costs have not been included. The re-plan also assumes that train performance improves significantly. While the region is delivering on a consolidated

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improvement plan, train performance has been worsening and the decline has not yet been arrested. Poor train performance continues to be a significant risk.

- 1.37 The region is forecasting to achieve £570 million of efficiencies, outperforming its £471 million original CP6 target. The region has delivered 70% of its CP6 planned efficiencies (£401 million). We highlight above the potential for more deferred renewals (as volumes being delivered in final years of CP6 are high). If this materialises, it is likely to have an impact on efficiency delivery as a large proportion of the region's efficiency plan relates to renewals.

### System Operator

- 1.38 In CP6, the System Operator committed to delivering the following projects: Industry Timetable Technical Strategy (ITTS, which aims to deliver an integrated system and data to support industry planners develop timetables); Weather Risk Task Force (developing safer operation); National Exercise Facility (supporting operational competence across the industry by providing a facility to test and trial ways of working and response to incidents); and Enhanced On-Train Passenger Announcements via GSM-R (which aims to improve control room to passenger communication without distracting the driver).
- 1.39 The System Operator has assured us that these projects are broadly on schedule, but some milestones are backend loaded to year 5 and there are some deferrals to CP7. The scope of projects, particularly those with work planned into CP7, is under review because of uncertainty over the level of funding available in the SoFA for CP7.
- 1.40 There has been some slippage in CP6 GSM-R project costs, with costs and delivery deferred into the early years of CP7. This was because the original supplier withdrew, which caused delays. The System Operator led multi-agency National Exercise will take place in March 2023 and delivery of the National Exercise Facility Programme will be partly deferred to CP7. External factors, including the impacts of the pandemic, demands of responding to industrial action and delivering Operation London Bridge (the plan initiated for the funeral of Queen Elizabeth II), have contributed to these delays but there have been impacts from internal factors, including a major re-organisation.
- 1.41 We are pressing for greater clarity on delivery of project milestones, particularly as we near the end of CP6. The System Operator needs to be clear on any slippage, and the implications for CP7.

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- 1.42 As part of our review, we looked at the System Operator's resources. As part of delivering efficiencies in CP6, the System Operator has been reducing its headcount. Its headcount is forecast to achieve its target of [redacted] in year 4 and [redacted] in year 5. A concern is the gap in capacity planning resource where there is high staff turnover and challenges in recruiting roles. The System Operator is addressing this by prioritising recruitment into these roles, reviewing levels of pay for certain grades and has 5 cohorts of recruitment planned in the remainder of year 4. However, it is aware that wage inflation in the economy has put pressure on its ability to hire and retain front-line staff and will continue to monitor this closely.

### Network Rail's National Functions

#### Property

- 1.43 Much of the responsibility for property was devolved to the regions in September 2020 under Putting Passengers First. The Group Property team however retains responsibility for some areas, including delivery of larger and more complex development and sales schemes, working with Joint Venture partners, provision of Commercial and Finance resource to manage the Managed Station retail activities (which then forms part of the regional results), managing the central workplace estate and acting as a professional head. At RF6, we have reviewed the central property plan and the plan in each of the regions to have the complete picture.
- 1.44 The most significant risk relates to business rates on income from advertising at managed stations. The valuation office wants to subject this income to an independent assessment, instead of it being part of the cumulo rates valuation. This is subject to the outcome of an appeal by Network Rail. The estimated cost for the control period of this revised approach would be £131 million. This is covered by a Group risk fund provision which has been allocated but not paid.

#### Route Services

- 1.45 Route Services at RF6 is forecasting an overspend of £22 million against its CP6 target, which is covered by an agreed provision from the Group risk fund. This is mainly because of inflationary pressures of around £49 million and scope increases on some of its programmes since RF3; the largest of which are for Intelligent Infrastructure, SCADA (Supervisory Control and Data Acquisition) and decarbonisation. Intelligent Infrastructure programme costs have increased by £30 million. The SCADA programme has also identified an additional £16 million in costs, which are required to deliver the last element of the programme. For decarbonisation, Route Services are working towards Department for Transport's zero emission vehicle targets with a glidepath to get to 100% of car and van short

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term hires greater than 5 days to be zero emissions by end of 2027. At RF6, the function was behind where it needed to be in terms of infrastructure to support the first planned vehicle deliveries in 2023, and therefore needed to increase the magnitude and speed of spend by £9 million to support the overall strategy and hit the upcoming 2023 milestone.

- 1.46 These additional costs have been offset by a reduction of £90 million as Route Services considered that there was optimism bias in the programme forecasts. It is also looking to generate additional efficiencies. Group Finance is also looking at further decreases in CP6 renewals across Network Rail to mitigate the impact of industrial action on the company's financial position.
- 1.47 The implications of the movements in the Route Services plan at RF6 regarding the CP6 exit position and therefore the impact on CP7 are being worked up and will be included in the next iteration of the CP7 plan.
- 1.48 Route Services is ahead on meeting its internal CP6 Efficiency Target of £414 million by £66 million, with much of this a result of the management modernisation programme. It is also enabling £581 million in efficiencies for the regions, which is embedded in the region's plans.

### Technical Authority

- 1.49 Total costs for the Technical Authority are unchanged from RF3. Costs have remained in line with internal targets at RF6 and the new organisational changes are reflected in the plan, with the Technical Authority now operating on a reduced headcount compared to the beginning of the control period. If Group Finance require further reductions in the Technical Authority renewals funding, due to a lack of risk funding available, a prioritisation exercise will need to be undertaken. The Technical Authority has highlighted at RF6 that there have been delays to the Optimised Train Track Operations (OTTO) programme and is considering the implications for CP7.
- 1.50 While Electric Current for Traction (EC4T) is largely a pass through cost for Network Rail to train operators, the Technical Authority recognises that one of the biggest cost risks is the rise in market prices for electricity. Some cost pressure is mitigated by 85% of forecast electricity usage for the next financial year being hedged and there is an expectation that prices will go down by Summer 2023, although they will remain higher than the hedged price. The current purchase agreement ends next year and the Technical Authority have committed to provide further detail on its future plan for this and the views of the industry, including how they can better manage their electricity supply. Contingency plans are also being

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put in place to mitigate the risk of blackouts if there are outages on the electricity network this winter but the financial forecast has not included any costs of potential outages.

- 1.51 The Technical Authority plans to put further attention this year on Research, Development and Innovation (RD&I), particularly to look to build on the momentum and efficiencies the programmes have generated to date. Further collaboration between the function and the regions will be critical to deliver the benefits of these programmes, with the Technical Authority noting that the growing maturity of projects will mean that the results of this are more visible by the end of the control period. This should allow the Technical Authority to show the benefits of these programmes more clearly.

## Annex B: Network Rail’s progress against the issues raised at RF11 (March 2022) and RF3 (September 2022)

**Table B.1: Open issues**

Issue	Progress made at RF6	Next steps
Network Rail has not provided commentary on the safety implications of changes to its regional plans.	Please refer to ‘Our findings on Network Rail’s CP6 delivery’.	Please refer to ‘Our findings on Network Rail’s CP6 delivery’.
If the pay award (which is consistent with its latest negotiating position) is approved then Network Rail intends to fund this via an increase in CP6 efficiencies, however it does not have a firm plan in place to deliver these increased efficiencies.	Please refer to ‘Our findings on Network Rail’s CP6 delivery’.	Network Rail to keep ORR informed of progress on this issue.
Network Rail did not provide us with assurance of its ability to deliver its planned renewals.	<p>Network Rail to use its re-forecasts to update delivery information and assess confidence on deliverability.</p> <p>Deferrals of planned CP6 renewals will be risk assessed as per the standard Network Rail processes and any impacts to CP7 planning will be factored into the regional SBP submissions. The CP7 deliverability assurance work will incorporate any associated change in volume caused by CP6 deferrals as part of that workstream.</p>	Network Rail to provide the results of its Rail Investment Centre of Excellence review for CP7, which should include an assessment of its CP6 exit position.

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<p>Network Rail Scotland will fall below the regulatory floor at the end of Year 3 of CP6. This means that Network Rail Scotland is not delivering sufficient renewals to achieve the levels of asset sustainability it agreed to in the Final Determination. A reduction in asset sustainability in the long term is likely to cause a deterioration of network assets through ageing and wearing out. This will have implications for areas such as train and freight service performance.</p>	<p>Scotland provided an update to the CSI forecast in July based on the RF11 forecasts.</p> <p>We have stepped up our monitoring on this issue.</p>	<p>Ongoing engagement between Network Rail Scotland and ORR. We have requested a refresh of this analysis to see an updated forecast, taking into account the latest delivery forecasts.</p>
<p>Network Rail Scotland has undertaken further deferrals of renewals from year 4 to year 5 of CP6 in its latest update of its CP6 plan (June 2022), which has increased our concerns that it will not deliver these projects in CP6. The largest movement in renewals volumes has been in Scotland where Network Rail Scotland has reported that it is forecasting to under deliver on its year 4 effective volumes budget across all asset types by between 9% and 16%. The original budget set for year 4 was incorrect, which has caused part of this variance.</p>	<p>Following a review of its planned volumes, Network Rail Scotland has implemented a 12-week action plan to make improvements to the governance and assurance surrounding its forecast and reporting processes.</p>	<p>Ongoing engagement between Network Rail Scotland and ORR. We will continue to monitor this issue closely.</p>



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**Table B.2: Closed issues**

Issue	Reason for closure
It is still unclear if Network Rail has appropriate governance arrangements in place to ensure that risk funding is distributed at the right time and is used in the most efficient manner in the regions.	Network Rail has produced a tracker, which will allow it to track how and where the remaining risk funding will be spent. This will be shared with ORR on an ongoing basis.
Network Rail should provide better transparency over costs and benefits incurred in its track worker safety arrangements in the regions.	Meetings were held with Network Rail to discuss this issue further and Network Rail has provided further transparency on both the costs and benefits. Please refer to 'Our findings on Network Rail's CP6 delivery'.
Assurance around the longer-term impacts of being behind on its effective volumes in the areas of plain line, switches & crossing and structures.	It was agreed that this assurance work would be provided as part of future reforecasts.
'Shadow' reporting of Network Rail's maintenance numbers. Network Rail's regions provided us with its new maintenance indicator as part of its RF11 plan. We expect the accuracy of the data to improve over the next quarter.	To be taken forward as part of the regular engagement between ORR and Network Rail asset management teams. It was agreed that maintenance volume KPIs were to be included in Network Rail's executive packs going forward.
Network Rail has not fully explained how it will monitor the impact of its workforce modernisation plans on its wider commitments to asset management, safety, and train performance.	A meeting was held between ORR and Network Rail on Monday 17th October 2022 where additional information was provided by Network Rail. It was agreed that this issue could be closed and that we would continue regular engagement with Network Rail's executive on its workforce modernisation programme.
Network Rail needs to better explain in its plan why it considers £323 millions of risk funding to be adequate, as well as the key risk mitigation strategies it is considering. This should include Network Rail clearly explaining how, if necessary, instead of drawing down risk funding it could manage financial risks in other ways.	Network Rail now has minimal unallocated CP6 risk funding remaining. Network Rail will now manage risk through deferring renewals.  A meeting was held on the 17 November 2022, where Network Rail's asset management team explained the current work on its risk management strategy to ORR. We will work with Network Rail to identify a way that it can show that its process is robust and how we can monitor and report on it.
Network Rail Scotland's financial risk position and how this is managed.	Network Rail Scotland has improved transparency around its risk fund.
Network Rail's regions did provide us with some information on the implementation of the Lord Mair/Dame Slingo recommendations however we require additional information so that we can understand how they are implementing the recommendations.	ORR has been provided with greater detail on regional action plans. Network Rail has provided justification for the Lord Mair recommendations that have not been progressed. ORR is continuing further work with Network Rail in this area as part of the Weather Risk Task Force.