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Chief Executive



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Dear Andrew,

Timetabling Process: Lessons Learnt since May 2018

1. It is a year since the failed implementation of the May 2018 timetable. A year on, the timetable for May 19 has just been successfully introduced, realising significant benefits for passengers. It therefore seems an apt time to reflect on the last year and both the progress that has been made in improving the timetable process as well as any lessons that have been learnt. I'm therefore writing an open letter to you to provide our reflections on the industry timetabling process since May 2018. I am copying this letter to members of the PMO Steering Group, recognising that the industry PMO benefits from close collaboration across Network Rail and train operators. It will also be published on our website.

Context

- 2. The May 2018 timetable change led to significant disruption for passengers in some parts of the network. As a result, ORR launched an independent inquiry which provided recommendations for industry, government and ORR and also took enforcement action setting out required actions for Network Rail.
- 3. A number of immediate changes were made by the industry to deal with the December 2018 and May 2019 timetable changes, most notably the setting up of an industry Programme Management Office (PMO). The December 2018 and May 2019 timetables have been delivered successfully representing a huge effort across industry to learn lessons from the failures in May 2018. However, this has come with some cost, as to reduce the risk to delivery the realisation of some passenger benefits have been deferred.
- 4. Upcoming timetable changes in December 2019 and May 2020 provide greater challenges in terms of scope and complexity. Further, the current processes in place have been set up on a temporary basis and decisions need to be made about how these processes are embedded.





5. This letter summarises the changes that have been made by Network Rail in the last twelve months, including those in response to the recommendations in our timetabling inquiry, and our view on those. It also sets out our plans and initial assessment of the risks surrounding the December 2019 timetable change.

Industry PMO

The role of the PMO

- 6. The PMO is comprised of a small team of staff within Network Rail currently reporting directly to yourself. The purpose of the PMO is to provide a robust and collaborative joint industry mechanism to identify and address risks and issues that arise in relation to timetable change. The PMO is supported by each owner group/operator who provide senior representatives to form a PMO Steering Group. Although the industry PMO is based in Network Rail it acts independently, to provide assurance across the industry, and the PMO Steering Group supports this.
- 7. The PMO's terms of reference state that its role covers:
 - Reporting risks arising from programmes associated with timetable changes;
 - Coordinating work with the Network Rail System Operator (SO) and industry to assess and propose timetable changes that are 'de-risked' and deliverable with the timetable planning resources available;
 - If, following the proposal on the scope of timetable change, there is additional resource available in Network Rail's Capacity Planning function (e.g. unused contingency) then the PMO coordinates the ranking and selection of additional timetable work packages that operators want and have proposed to the PMO;
 - Undertaking ongoing assurance assessments for timetable changes for infrastructure, rolling stock and track & train operations;
 - Commissioning risk mitigation / contingency plans and interventions, and leading (where appropriate) resolution of emerging issues; and
 - Providing regular reports and escalation of issues to the PMO Steering Group, National Task Force (NTF), Department for Transport (DfT) and other sponsors and funders.
- 8. In addition to the core role above, the PMO is also:
 - Leading work to identify timetabling process improvements; and
 - Considering the 'business as usual' role for PMO assurance activities.
- 9. The PMO does not alter established industry regulatory and legal processes for timetable change (such as the Network Code), and has no accountable authority over the programmes on which future timetables depend.

PMO assurance activity for December 2018 and May 2019

10. In preparation for December 2018 and May 2019, and now in preparation for December 2019 the PMO has been undertaking a number of specific assurance activities:



- The PMO produces monthly readiness assessments for each upcoming timetable change. These assessments build on reporting and engagement with all operators on operational readiness including driver resource, rolling stock and timetable production, with Network Rail Infrastructure Projects (IP) and Routes on infrastructure works and availability, with the SO on timetable production, and with ORR on the status of access rights. The RAG reporting is signed off by the PMO Steering Group and is presented and discussed at NTF:
- The PMO carries out deep dives with each operator on readiness for each timetable change. In these, the PMO meets with key staff at the operator alongside the Network Rail Route and IP as appropriate and reviews the risk reporting. The PMO will ask to be shown appropriate evidence to support the assessment of readiness given by the parties. In some cases external experts have been engaged to inform these deep dives;
- The PMO has regular engagement with relevant third parties, including funders, ORR and other relevant programmes (particularly Crossrail and HS2);
- The industry PMO Steering Group meets monthly, reviews the PMO readiness assessments and provides additional scrutiny and challenge to the reporting; and
- The PMO also provides periodic updates to the Secretary of State on readiness.

Our assessment of effectiveness of PMO

- 11. From the experience of the PMO being in operation for the December 2018 and May 2019 timetables, our view to date is that the PMO is successfully carrying out assurance activity which is increasing confidence in the delivery of the timetable, consistent with its terms of reference. There is a structured way for getting input from operators, NR IP and routes on timetable delivery risk a process which did not exist prior to the PMO being in place. We have no evidence that parties are not providing accurate information to inform the RAG status reporting and the PMO does not have any concerns in this regard we have asked the PMO to immediately raise with us any concerns they have regarding inaccurate information. The additional deep dives that the PMO has carried out seem appropriate and the use of independent experts for these provides additional checks and balances.
- 12. Our view is informed by feedback from stakeholders, gathered informally and also formally in the development of our Phase 2 Inquiry recommendations. They share the view that introducing the PMO has resulted in a more effective process for the identification and reporting of system wide risks to the timetable. In addition, we have to date found that where we have been made aware of an issue or risk that may impact on the timetable and raised these with the PMO, it had already identified these risks, giving us confidence in its work. We have rarely identified issues that the PMO is not already aware of.
- 13. The introduction of the December 2018 and May 2019 timetables has suggested that the PMO process worked well. Generally, risks were identified in the timetable over a number of months and progress of contingency plans tracked. For example, this has meant that the issues arising in Scotland for December 2018 and a potential delay to



achieving 100mph running on the Bolton Corridor for May 2019 were known in advance of the timetable introduction and that there was visibility of the plans in place to manage these. This was both contained in the readiness reporting and updated through regular calls and email exchanges with the PMO on the subject.

- 14. The industry PMO Steering Group has provided constructive challenge on readiness and also acted as a body to identify linkages between issues. This has led to cross industry working groups to resolve problems which could give rise to risks to the successful delivery of the timetable change. For example, operators have come together to look at operational plans for Neville Hill depot as it become apparent during the review of the readiness assessments that this was a timetable risk for a number of operators.
- 15. However, there were instances leading up to May 2019 of issues arising close to the timetable change which had not been identified and reported by industry through the PMO. In one case, 5 days before the timetable change SWR reported problems with the refurbished Class 442 rolling stock due to be introduced in May 19 which meant that the entry of some proposed additional services had to be delayed. This required last minute contingency plans to be put in place for a short period of time, including the last minute withdrawal or short forming of services. Similarly, on the West Anglia Main Line, the delay to the opening of the new Meridian Water station was identified at a late stage. Again, contingency plans were put in place by the project team and operator.
- 16. We recognise that the PMO has only been set up for two timetable periods and therefore we expect processes to evolve and mature over time. The PMO has carried out its own lessons learnt exercise following the May 2019 timetable change, and this has been endorsed by the industry PMO Steering Group. This has identified a number of areas for improvement in PMO processes including where the visibility of PMO activities and engagement can be improved, and specific lessons learnt in the areas of infrastructure works, stock and crew, train planning, operational readiness and sale of access rights.
- 17. Specifically regarding rolling stock, the PMO has identified that it needs deeper assurance from operators in future on new or modified rolling stock, in a similar manner to the assurance it currently receives on driver and train crew availability through its deep dives. Learning from Meridian Water, the PMO has also identified that more specific deep dives are needed on some infrastructure schemes, and that each timetable dependent infrastructure project should have a single nominated accountable owner in order that the PMO can gain accurate and timely progress updates.
- 18. ORR's authorisations process also plays a significant role in the introduction into service of new rolling stock and new infrastructure such as Meridian Water. We will be reviewing the industry processes, including ORR's role, for the authorisation of Bolton Corridor and Meridian Water in the run up to May 2019 and will discuss any lessons learned with you.
- 19. We also note that while the PMO has improved the timetable process by increasing the visibility of risks to the process, the PMO itself does not in most cases have the authority to take action on issues it has highlighted. These remain for operators, Network Rail System Operator or infrastructure projects or funders for decisions. For example, looking forward to December 2019, operators may not be fully compliant with the Persons with Reduced Mobility Technical Specification for Interoperability, which requires either a



derogation being obtained from a funder or a contingency plan being put in place by the operator. In addition, the PMO does not have complete visibility over all relevant programmes and it has no remit to consider the viability or impact of major network changes still in the planning or early delivery phase which may impact on future timetable changes.

Long term status of the PMO

20. In order to ensure the long term effectiveness of the changes made for December 2018 and May 2019, it is critical that the PMO becomes part of the business of usual activity and is fully integrated with the established practices of developing the timetable, as set out in Part D of the Network Code. Network Rail has set out how to us that it intends to establish the PMO on a permanent basis, continuing largely with the process that has been developed over the last 12 months. It has reviewed this in more detail over the last two months, and discussed the proposals with the industry PMO Steering Group prior to formally updating us on the position at the end of June. We will review this when received before reaching a conclusion on whether we consider that the actions taken will ensure the effectiveness of these processes in the long term.

Systemic Risk

- 21. Whilst the role carried out by the PMO has led to significant improvements in the timetabling process over the last year, we have always been clear that it does not fully address the gap related to systemic risks that was highlighted in our timetable inquiry.
- 22. The timetable inquiry noted that the PMO had provided transparency about the ability of the SO, and industry, to deliver proposed changes with the resources available and it has added in risk assessment and mitigation considerations that were not previously undertaken. However, it noted that these alone were not sufficient to fully manage the material risks that arise when managing complex interaction of multiple programmes of change being developed in parallel over a long time period.
- 23. As a result, the inquiry made a recommendation that an enhanced system wide advice, audit and assurance capability for major network changes should be introduced as soon as possible. The inquiry identified three factors as critical to the establishment of a permanent capability to oversee and manage risks to the delivery of major interdependent programmes:
- (a) Authority, derived from sponsors, to interrogate all aspects of programmes that they have commissioned on which network changes depend;
- (b) Expertise, sufficient to audit and assure the delivery and risks across multiple technical programmes; and
- (c) Trust, by industry that the judgements and advice received represent the best interests of the system as a whole and focus on delivering the greatest benefits for end-users.
- 24. To support the optimal management of system risk this advice needs to cover the whole portfolio of relevant projects, which will necessarily include programmes sponsored



by multiple parties. It would need to cover technical and commercial impacts so that decision makers have a comprehensive understanding of the impacts that their decisions will have across the portfolio. This advice will necessarily consider passenger outcomes, freight end users, value for money, and commercial sustainability. To ensure that the advice is trusted, it needs to be independent of any particular programme delivery body.

- 25. This solution could either be an enhancement to an existing arrangement such as the Industry PMO or SO, or a newly created or independently commissioned capability. However it is necessary in any model to fill this gap to address the central finding in the Inquiry's Interim Report that 'no one took control' in the preparations for the May 2018 timetable change.
- 26. This recommendation from our timetable inquiry is outstanding. It cannot be solved by Network Rail alone, but falls within the scope of the Williams Review, which will publish findings and recommendations in the autumn of this year.

Response to other recommendations

SO capability and application of the timetabling process

- 27. Our timetabling inquiry found that timetabling teams in the SO and operators were placed under extreme pressure as a result of the rewrite of the May 2018 timetable and that not enough had been done to estimate and meet the demand placed upon them. It was noted that there had already been funds set aside in CP6 to deliver a more accurate and resilient timetable and that this had been accelerated into the last year of CP5.
- 28. Network Rail has now reported that 112 additional operational planners are in the role in the last 12 months and that it has put in place a new people plan to embed improvements to the capability and retention of staff. This has halved the turnover of operational planners since the start of 2018/19. The PMO also now explicitly considers available resources when reviewing the scope of upcoming timetable changes.
- 29. Network Rail will integrate two indicators into its Tier 1 SO Scorecard for CP6 on planner capability and retention. These metrics will form part of the SO incentive framework used to determine pay. We welcome these changes and will monitor these metrics during CP6 as part of our ongoing review of scorecards and in regular discussions with the senior SO team. If we have concerns, we will carry out further investigations in line with our holding to account policy.
- 30. Our timetabling inquiry also identified inefficiencies within the timetable process, in terms of collaborative working and use of technology. Although they were not direct causes of the disruption, data handling and integration processes compounded the inability of the SO and train operators to recover planning timescales.
- 31. We had already agreed £60 million of capital expenditure in the CP6 final determination to fund improvements in data, train planning systems, access planning and whole system modelling. The timetable inquiry also recommended that the SO:



- review the progress of a trial with ScotRail whereby ScotRail were given greater input access to the Network Rail planning system; and
- create an industry timetabling strategy to improve the timetabling process, in close consultation with industry. It was also recommended that operators and funding authorities participate in the development of this strategy and consider the business case for bringing forward individual improvements.
- 32. Since then, the ScotRail trial has continued and another pilot has commenced between GWR and the Network Rail planning teams to consider other areas for improvements. The learnings from these trials are being collated and a formal structure developed to assess and roll out best practice more widely where appropriate.
- 33. Network Rail has also included an additional £40m capital expenditure in the final SO delivery plan to support the development of options for an industry train planning platform, which is an anticipated outcome of the industry timetabling strategy. It has set out how it will work with industry to explore this solution and develop the strategy. This will also be informed by the outcomes of the current trials.
- 34. Network Rail has set out details of its technology improvement plans in its 2019/20 Strategic Plan for the SO, including planned milestones for each programme. Delivery of these milestones is measured as an item in the SO Tier 1 scorecard. Network Rail will also set out more details on how these projects are progressing in its annual narrative report. We will monitor progress against the milestones through our review of the scorecard and regular discussions with SO at senior levels. If we have concerns on any aspects we may carry out further investigations in line with our holding to account policy.
- 35. Network Rail also has a clear plan to strengthen stakeholder engagement in the governance of these capital investment programmes, informed by a review carried out by Nichols in 2018. We welcome this plan, which builds on the requirements we set for it in the CP6 final determination.

Informed traveller timescales

- 36. In the run up to May 2018 there was a breakdown in the normal "informed traveller" timescales by which timetables are published 12 weeks in advance. An initial recovery plan had been put in place by Network Rail which had to be further revised to reflect the impact of the revised timetable implemented in December 2018. As a result, in our enforcement order we required Network Rail to continue to deliver against its plan and to report publically against this.
- 37. On 10 April 2019, Network Rail informed us that informed traveller timescales had been recovered across the network, except GTR which continued to consistently bid late. This is consistent with the plan it put in place in the summer of 2018. Network Rail has put in place a revised recovery plan for GTR and this is on track. Network Rail has put updates on the position on their website. We recognise the hard work that has been put in across Network Rail and industry to achieve this.



Part D of the Network Code

- 38. Our timetable inquiry concluded that Part D of the Network Code which sets out the procedure and timescales for developing the timetable is not working as envisaged. It noted that the SO was proposing an industry review and the report highlighted a number areas that the review should focus on. It also set out the expectations about how industry should be engaged in this review.
- 39. Network Rail has worked closely with stakeholders to design a review of Part D and is in the process of carrying out a number of structured task and finish groups with industry to address issues that have been raised. These will result in proposals for change to the Network Code which will be subject to the normal code governance process. We are actively engaged in the review of Part D of the Network Code and will continue to monitor progress on an ongoing basis.

December 2019

- 40. The PMO has been sharing with us its risk assessments for the next timetable change in December 2019 for a number of months. From these it is clear that there are a number of key risks that the industry needs to manage over the coming months. Particular examples include:
 - A number of infrastructure enhancements that need to be completed in order to run
 the full timetable, particularly electrification on the Great Western Main Line and
 power supply upgrades elsewhere on the network required to run new rolling stock
 or additional services; and
 - Decisions to be taken around Persons of Reduced Mobility Technical Specification for Interoperability dispensations that may be needed where use of current rolling stock is being extended due to delays in delivery of new rolling stock.
- 41. In the run-up to the next timetable change in December 2019 we will continue to be actively engaged with the PMO in monitoring the work being done to identify and manage these emerging risks.
- 42. I am happy to discuss with you any of the issues raised in this letter further.

Yours sincerely

John Larkinson

Copied to:

PMO Steering Group members

Polly Payne and Ruth Hannant at Department for Transport