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The Scottish Government
St Andrew's House
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*By email*

26 August 2022

Dear Minister

## ORR's supplementary advice on the development of Scottish Ministers' HLOS and SoFA

We wrote to you on 17 June 2022 with advice ahead of your decisions later this year on Network Rail Scotland's future funding and outputs (we expect to receive the Scottish Ministers' High-Level Outputs Specification (HLOS) and Statement of Funds Available (SoFA) by 30 November 2022). We said that we would provide you with supplementary advice in August and September 2022. In this letter, and accompanying annexes, we provide advice on the following three issues:

- impact of Network Rail Scotland's plan for control period 7 (CP7) on train performance;
- interaction between network usage and costs; and
- consistency between information shared by Transport Scotland regarding the draft content of the HLOS and Network Rail Scotland's current initial CP7 submission.

Our June 2022 advice largely focused on our review of Network Rail Scotland's March 2022 submission setting out its plans for CP7 (the five-year control period starting on 1 April 2024). It has since provided additional analysis to us (which it has also shared with Transport Scotland) to help inform our advice to you.

We raised concerns about whether Network Rail Scotland's assumption that it will broadly deliver its CP6 outputs was realistic. The latest forecasts for CP6 show this risk to delivery has increased. We are exploring the risks and the process for producing the forecasts with Network Rail and will provide an update to Transport Scotland in the coming weeks.



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## Impact of [redacted] funding on train performance

In CP6, both Network Rail Scotland and ScotRail Trains have a train performance target of 92.5% (measured using the Public Performance Measure (or PPM) which measures the punctuality of passenger services). Network Rail Scotland's March submission stated it will maintain CP7 train performance in line with long-run average levels. The average PPM since the start of CP5 (April 2014) is 89.9% and annual performance only exceeded 92.5% during 2020-21, when passenger numbers and train services were significantly reduced due to COVID-19.

Network Rail Scotland and Scotrail have not consistently achieved the 92.5% target during CP6 (with PPM averaging around 90.4%). Network Rail has forecasted that it will reach 90.6% at the end of this year, by working with ScotRail Trains through delivery of their 2022-23 performance strategy. [Redacted].

We expect Network Rail Scotland to develop clear plans for CP7, including operational value for money opportunities aimed to deliver incremental performance improvements. [Redacted]. In addition, Network Rail's analysis shows there will be increased pressure on performance during CP7 in the [redacted] funding scenario, which will need to be managed within Network Rail Scotland's operational plans. It is important that any target set for CP7 is stretching but achievable. An unrealistic target could lead to:

- consistent negative public reporting against an unachievable target;
- setting the wrong financial incentives through an incorrect benchmark for Schedule 8 compensation arrangements; and
- a flow of Schedule 8 payments to cross border operators.

[Redacted]

There are different options to describe train performance requirements in the HLOS. One alternative to a specific quantified target could involve setting a clear direction of travel on train performance, whilst leaving the specific targets to be determined through the periodic review process. For example, ORR could set the performance trajectories in our final determination (due in October 2023) following assessment of Network Rail Scotland's plans and extensive engagement with Transport Scotland. This approach is set out in more detail in our recent consultation and would also

allow the targets to be informed by Network Rail Scotland's updated forecasts, based on its detailed plans and another year of performance data.

Further detail on this is provided in Annex 1.

**Interaction between network usage and costs**

Driven by recent changes in rail use, and in the context of its initial CP7 submission, Network Rail has undertaken work to consider the potential cost impacts of reduced network usage.

Network Rail assumed that passenger services would be at 83% of pre-pandemic levels throughout CP7 and that freight traffic would be 6.4% higher at the end of CP7 than at the end of CP6. This equates to a 10% decline in equivalent million gross tonnes per annum. Network Rail commissioned studies to explore this issue and produced a summary paper on cost variability that considered the relationship between network usage and cost. [Redacted]

Network Rail Scotland would only be able to deliver these savings if it were confident that the train service reductions will not be reversed. Network Rail has also identified a number of factors that could reduce its estimates including: there could be an adjustment needed to take account of some of the studies, including cost reductions that may not be achievable in CP7; there will be costs incurred in generating the cost reductions [redacted]; and it must ensure that there is no double-counting with its CP7 efficiency proposals. Network Rail has noted that a reduction in train services will reduce income but has not quantified the reduction in the report.

In our view, the way Network Rail has combined the effects of the different studies used in its analysis could be improved upon and the analysis needs to be interpreted with caution. It will need to refine this estimate of the impact of reduced services on costs as it develops its CP7 business plan.

It is worth noting that there are considerable difficulties in trying to accurately estimate the effects on CP7 of the decline in passenger services. There is a lot of uncertainty about the relationship between costs and train services and it is rare for such a sudden change in train services to happen. However, what is clear is that a high proportion of Network Rail's costs are fixed and do not vary significantly with a change in usage, over the short to medium-term.

Further detail on this is provided in Annex 2.

**Consistency between draft HLOS and Network Rail Scotland's initial CP7 plan**

ORR has an important role in the periodic review process to determine whether the funding provided in your SoFA is consistent with the outputs required by your HLOS. The team at Transport Scotland have helpfully shared their early thinking regarding aspects of the HLOS for Scotland. [Redacted]

We asked Network Rail Scotland to provide a detailed comparison of its initial plan with the draft requirements to better understand any areas where further engagement is needed. [Redacted] this exercise helps draw out the funding implications of different HLOS options. We have included a high-level summary of key areas for further discussion in Annex 3 and have shared a more detailed breakdown of our views on each draft HLOS requirement with the team at Transport Scotland.

**Next Steps**

My team and I remain committed to continued engagement with you and your officials ahead of your HLOS and SoFA decisions. We expect Network Rail Scotland to ensure it is in a position to respond to any further requests for information in a timely manner. A number of tri-lateral working level meetings are planned in the coming weeks to help resolve outstanding issues.

In September 2022 we will provide an update on Network Rail Scotland's delivery in CP6 and supplementary advice on the following issues:

- Network Rail Scotland's digital signalling plans;
- Network Rail's central costs and the allocation to Scotland; and
- implications on maintenance of lower renewals spend.

Reflecting the need for transparency about how periodic review decisions are made, as well as our role in contributing to these, we intend to publish this letter once your HLOS and SoFA are published.

Yours sincerely

**Will Godfrey**

**cc to Bill Reeve (Director of Rail, Transport Scotland) and Alex Hynes (Managing Director, Scotland's Railway)**

# Annex 1: Supplementary advice on CP7 train performance forecasts

## *Summary*

*Context*

In its March 2022 initial submission for Control Period 7 (CP7) to Transport Scotland, Network Rail Scotland stated it will maintain CP7 train performance in line with long-run average levels. Long-run average ScotRail train performance (from the start of CP5, April 2014) is 89.9%, measured using the Public Performance Measure (PPM).

PPM is the proportion of trains arriving at their final destination early or less than five minutes after the scheduled time for London and South East, Regional and Scotland operators, or less than ten minutes for Long Distance operators. Where a train fails to stop at one or more booked calling points on the journey, the train is considered to have failed PPM. A higher score indicates better punctuality.

Network Rail Scotland has subsequently said its "primary objective is to aspire to maintaining delivering PPM during CP7 at CP6 exit levels", in its analysis of Scotland's Railway's train performance during CP7 (July 2022). As part of its draft 2022-23 performance strategy, it has developed a 'glidepath' to deliver 92.5% PPM for ScotRail by the end of CP6 (March 2024). 92.5% is the ScotRail Franchise PPM target set by Scottish Ministers in the CP6 High Level Output Specification (HLOS). [Redacted]

Our views in this note are based on Network Rail Scotland's submissions in its:

- analysis of Scotland's Railway's train performance during CP7; and
- assessment of the impact of reduced renewals on train services in CP7.

*ORR's supplementary advice on Network Rail's analysis*

- [Redacted]. Network Rail Scotland's 2023-24 performance improvement plans are under development, resulting in a weak link to forecast performance outputs [redacted].
- This forecast for the end of CP6 also relies on a [redacted] uplift due to a change to the standard industry methodology used to calculate PPM to remove the impact of blanket emergency speed restrictions implemented as

part of the operational changes introduced following the Carmont derailment and the impact of trains held for connecting services. Scottish Rail Holdings has introduced these changes for ScotRail performance requirements in CP6 only. Network Rail has reflected these changes in its CP7 forecasts without robust supporting evidence or justification. In addition, this change to the definition of PPM has not gone through industry wide governance and is not consistent with the industry PPM figures produced by Network Rail and published as official statistics by ORR.

- Network Rail Scotland states it will maintain 92.5% PPM during CP7. It is working on its CP7 plans which would need to deliver this outcome. Also, separate Network Rail analysis indicates there will be additional downward pressure on CP7 performance in the [redacted] funding scenario, due to the impact of more asset failures as renewals programmes are constrained.
- The average ScotRail performance over the last eight years was 89.9% PPM, with it only exceeding 92.5% once during this period – in 2020-21, when performance was positively affected by the significant reduction in train services due to the pandemic. Apart from 2020-21, the highest annual PPM achieved since the start of CP5 was 90.6%, in 2015-16.
- [Redacted]
- Network Rail Scotland needs to draw up more detailed analysis to forecast the level of performance that can be achieved within the [redacted] funding scenario, with uncertainty analysis. [Redacted].
- Due to the uncertainty around train performance forecasts, exacerbated by the pandemic and current financial constraints, Scottish Ministers could consider if it is more appropriate to describe the high-level strategic train performance outcomes that it expects Network Rail Scotland to deliver in its HLOS, instead of a detailed specification of train performance targets. This would enable the setting of effective incentives in our Final Determination based on:
    - assessment of Network Rail Scotland's updated detailed forecasts in its Strategic Business Plan in 2023; and
    - our engagement with Transport Scotland and industry stakeholders.

In this annex we summarise Network Rail Scotland's recent submissions (August 2022) and then set out our supplementary advice.

## *Network Rail Scotland's submission (August 2022)*

Network Rail Scotland submitted two supplementary documents on CP7 passenger train performance.

*Quantification of PPM to be maintained in CP7*

We asked Network Rail to quantify the performance it is planning to maintain in CP7. It has provided analysis that illustrates plans to achieve 92.5% PPM by the end of CP6 and maintain this level during CP7. The below table summarises the key drivers for change from 2021-22 performance to CP6 exit.

| | **PPM** |
|---|---|
| Actual: 2021-22 exit | [redacted] |
| *Variance: 2022-23 performance improvements* | [redacted] |
| Forecast: 2022-23 exit | [redacted] |
| *Variance: 2023-24 performance improvements* | [redacted] |
| Forecast: 2023-24 (CP6) exit | [redacted] |
| *Variance: Change to PPM methodology* | [redacted] |
| Forecast: 2023-24 (CP6) exit - adjusted PPM methodology | [redacted] |

Network Rail Scotland has set out further details, including the steps it took to provide this analysis, in a document entitled *'Scotland's Railway – analysis (quantify) train performance during CP7 (July 2022)'*, which we received on 8 August 2022.

*Advice on the impact of reduced renewals on train services in CP7*

Network Rail also provided further analysis that looked at the relationship between renewals funding and train performance outputs. In summary, this estimates that the [redacted] level of renewals in Network Rail Scotland's initial submission is likely to lead to additional downward pressure on CP7 performance. This means Network Rail Scotland will need to consider additional mitigations in its CP7 improvement plans.

Network Rail Scotland has set out further details, including the steps it took to provide this analysis, in a document *entitled 'Scotland's Railway – advice on impact of reduced renewals on train services in CP7 (Technical Authority – July 2022)'*, which we received on 10 August 2022.

## *ORR's supplementary advice*

Network Rail Scotland has presented a 'glidepath' from 2021-22 performance of 90.2% PPM, to achieving 92.5% by the end of CP6. In CP6, both Network Rail Scotland and ScotRail have a train performance target of 92.5% PPM, as set by Scottish Ministers in the CP6 High Level Output Specification (HLOS). This reflects the train performance target in the ScotRail Trains Limited grant agreement.

*Network Rail Scotland's methodology for forecasting CP6 exit train performance*

The first part of Network Rail Scotland's 'glidepath' is its 2022-23 improvement plan to achieve 90.6% by the end of this year, as set out in its draft 2022-23 performance strategy. We previously reviewed this glidepath and considered at the time that it was **based on a reasonable set of assumptions**. Network Rail Scotland's latest forecast is that it will deliver PPM of 90.3% by the end of 2022-23, reflecting the inherent uncertainty in performance forecasts.

[Redacted]

The final part of the glidepath models improved performance from [redacted] due to a change to the standard industry methodology for calculating PPM. Scottish Rail Holdings has introduced these changes to the measurement of PPM in CP6 for ScotRail Trains. This adjustment is to remove the impact of:

- blanket emergency speed restrictions implemented as part of the operational changes introduced following the Carmont derailment; and
- services that have been held to wait for a connecting train.

PPM is an established measure that is well understood across the industry. However, Network Rail Scotland has reflected these changes to methodology in its CP7 forecasts, without robust supporting evidence or justification. [Redacted]

*Comparison to historic performance*

Figure 1 shows ScotRail's PPM performance from the beginning of CP5 (March 2014) with Figure 2 illustrating the corresponding average number of trains planned per day. [Redacted]

[Redacted]

Network Rail's Technical Authority has completed analysis of the implications for train performance of the [redacted] funding scenario presented in Network Rail Scotland's initial submission, compared to a renewals funding level assumed (by Network Rail's Technical Authority) to deliver levels of performance and sustainability that are consistent with CP6. [redacted]

Network Rail Scotland has taken a logical approach to estimating the performance impact of different funding scenarios, using a sequence of steps. It worked from assumed changes to its renewals plan to the resultant change in asset condition and an estimate of the impact on train services. To complete the analysis in a limited timescale, Network Rail's Technical Authority took a top-down approach which has then been endorsed by Network Rail Scotland.

Network Rail has recognised that, in general, assumptions made in its analysis have been optimistic [redacted]. To address the impact of optimistic assumptions, Network Rail has made qualitative adjustments, [redacted].

# Annex 2: Supplementary advice on Network Rail's cost variability work

## Context

There have been significant changes in the level and composition of traffic on the rail network since the beginning of the pandemic. This includes a marked fall in the volume of passenger train services, which Network Rail expects to be at 83% of pre-pandemic levels in Scotland for the duration of CP7. This has raised questions around how this affects network costs and the implications for funding. This annex focuses on the impact on Network Rail's costs, rather than whole industry costs or Network Rail's income.

Assessing the implications for funding of the changed traffic levels is subject to considerable uncertainty. Future service levels are uncertain, as is their mix (e.g. passenger and freight traffic). Even if service levels could be forecast with confidence, the implication for costs is difficult to predict.

Network Rail has provided information on what cost reductions it might expect from the assumed decline in train services. Network Rail commissioned studies and produced a summary paper on cost variability that considered the relationship between network usage and cost. These studies (summarised below) used different methods and examined different cost categories.

In Network Rail Scotland's initial CP7 business plan submission (which it provided to us and Transport Scotland on 31 March 2022), it set out the work it was carrying out using its engineering cost model to generate cost variability estimates. Network Rail's Vehicle Track Interaction Strategic Model (VTISM) is an engineering model that links inputs such as track and vehicle characteristics to outputs such as whole-life costs. This is used to set the Variable Usage Charge (VUC). This model is the current means through which we and Network Rail assess Network Rail's Short Run Marginal Cost (SRMC).

Network Rail's modelling assumed passenger services at 83% of pre-pandemic levels throughout CP7 and freight traffic 6.4% above the end of CP6 level by the end of CP7. [Redacted]

That analysis has been supplemented by further studies: Steer's 'cost scalability to traffic levels' and the 'cost variability studies review' carried out by Network Rail and its consultants.

This annex provides ORR's view on Network Rail's methodology, assumptions and analysis relating to the relationship between network usage and costs.

## Method

The three main assumptions that underly Network Rail's estimate of the gross cost savings are:

- Rail network costs are mainly fixed rather than variable. For example, a tunnel must be maintained to the same standard regardless of whether a train travels through it once every hour or day.
- While passenger traffic has declined since the onset of the pandemic, freight traffic has increased and freight tonne miles in CP7 are expected to be higher than the forecast end of CP6. Heavy trains cause relatively more line 'wear and tear' than light ones. Maintenance and repair costs are therefore disproportionally driven by changes in levels of freight compared with passenger traffic.
- Much of the savings flowing from reduced passenger traffic will not be realised within the next control period (CP7). For example, less traffic on a line may extend track life from 20 to 25 years. However, some of the resulting savings will not be achieved until later control periods.

We consider that these assumptions of the interaction between traffic and the costs of the rail network to be reasonable because they reflect the underlying properties of the network assets and how they affect the relationship between traffic changes and cost changes.

It should be noted that although costs might be expected to reduce after a decline in train services, this reduction might not be immediate. Rather, it would take time for the full cost reduction to materialise. The numbers shown below are theoretical (based on modelled assumptions), and 'real world' and local effects would be expected to have an impact. Furthermore, in order to deliver these savings Network Rail would need confidence that the decline is unlikely to be reversed for a reasonable amount of time.

The modelled cost reductions are all based on the network maintaining its existing capabilities. Scottish Ministers may choose to change the capability of the network in their HLOS. But Network Rail Scotland has not been asked to do this at this time.

## Studies

Network Rail and its consultants have considered several studies on cost variability, including some commissioned specifically to inform this advice. These studies use different methods to examine different cost categories to reveal the expected change in costs from a decline in passenger traffic. They each have different strengths and weaknesses.

Network Rail appointed consultants to peer review our statistical analysis of Network Rail's maintenance costs and consider other statistical studies (both domestic and international). The review determined that the Short Run Marginal Cost (SRMC) was the appropriate measure to use to identify cost changes flowing from a decline in passenger traffic. This is because, by using SRMC, we can isolate the consequences of the decline in passenger traffic, holding other things constant (e.g. asset capability, input costs, engineering and management practices, etc.).

These **statistical studies** are based on networks experiencing normal traffic levels (in the sense that they are based on a network taking account of all cost drivers, not just traffic). They have the advantage of using the actual costs experienced by networks with different traffic volumes. However, the costs are for networks which have evolved along with their traffic levels over decades and will have adapted their infrastructure and activities accordingly. In reality, Network Rail is today operating a network that is rapidly adjusting to a significantly different level of traffic since the pandemic. As such, interpreting the results from the model and studies requires us to recognise their limits.

**Benchmarking studies** are generally designed to compare different areas, regions or countries; they are generally not designed to inform the effect on costs of changes in traffic. Network Rail has experienced a significant change in train service levels, not a minor change. As such, it may be difficult to try and use benchmarking models to understand the change in costs for different traffic levels. Our study suffers from some of the limitations applicable to other statistical approaches, although it has the advantage of being based on Network Rail's costs rather than studies of other networks (e.g. overseas rail networks).

The **Steer study** complemented ORR and Network Rail's consultants' findings by considering the effect on operational, support, maintenance and renewals (OSMR) costs of a change to service levels. It did this by holding specialist workshops, where they analysed activities to find out which ones are affected by passenger traffic volumes. They estimated how costs would fall for a 10% decline in passenger traffic and constant freight volumes. This has the advantage of being based on Network Rail's actual network. However, it was very reliant on engineering opinion rather than empirical data and explicit specification of cost-volume relationships.

Network Rail also ran its **engineering cost model** to estimate the effect of a 17% decline in passenger service levels and an increase in freight service levels of 6.4% above the end of CP6 level. This model takes an engineering-based bottom-up approach as opposed to a statistical top-down approach. It is also a model which has been in use, and regularly refined, for a considerable time. As such, it may provide a reasonable starting point for the track, civil and signalling cost changes that might be expected. However, it is unlikely to capture cost changes which arise from the network adapting over time to the

new patterns of traffic and, like any model, is a dependent on the underlying assumptions.

***Application of study findings***

The studies used different methodologies and considered different cost categories. To make the numbers more comparable, Network Rail adjusted its findings to reflect the actual forecast changes in freight and passenger service levels which equated to a 10% decline in equivalent million gross tonnes per annum (EMGTPA). They also included the Steer assumptions for cost variability for operations (mid-point £4 million) and support (mid-point £3 million) for studies which did not incorporate these elements. The effect of the Steer assumptions on operations and support costs is not fully included in the numbers in Network Rail Scotland's submission, but Network Rail Scotland has agreed that they should be fully included, so our numbers [redacted] do fully include the effect.

Network Rail has said that the engineering model assumption, [redacted] probably underestimated the potential gross savings given the evidence from the studies.

[Redacted]

However, Network Rail considered that around one third of the potential long-term, gross savings identified in the statistical studies would occur after CP7 and, furthermore, that adjustments were required for the capacity or capability of the network. [Redacted] However, our view is that the way Network Rail has combined the effects of the different studies could be improved upon and the analysis needs to be interpreted with caution. It will need to refine this estimate of the impact of reduced services on costs as it develops its CP7 business plan.

**Other factors**

The savings Network Rail has identified are gross savings. There are also other factors to be considered:

- Network Rail would need to identify how it will deliver these savings and make sure that there is no double counting between these savings and the ones Network Rail has already identified.

- [Redacted]

**Conclusion**

There are considerable difficulties in trying to accurately estimate the cost effects in CP7 of a decline in passenger train services as there is a lot of uncertainty about the relationship between cost and train services. This is further complicated by the projected growth in freight traffic in CP7 and, beyond CP7, where there might also be a recovery in passenger train services. Due to the long-lived nature of rail network assets, the lifetime cost optimised response may involve limited cost reductions, even if CP7 traffic were below pre-pandemic levels.

However, what is clear is that a high proportion of Network Rail's costs are fixed and do not vary very much with a change in usage, at least over the short to medium term. [Redacted]

Either way, Network Rail will need to incorporate more fully the effect of the lower levels of traffic projected in CP7 as it develops its plans.

## Annex 3: Consistency between information shared by Transport Scotland regarding the draft content of the HLOS and Network Rail Scotland's initial CP7 submission

### Context

In our advice on the development of Scottish Ministers' HLOS and SoFA we committed to providing you with supplementary advice on how Network Rail Scotland's initial submission, which was on a [redacted] basis, compares to an early draft of specific HLOS requirements provided by Transport Scotland. This is particularly important as some of the draft requirements relate to improvements to the rail network, which are unlikely to be delivered in a [redacted] scenario.

Network Rail Scotland has provided us (and Transport Scotland) with its review of each draft HLOS requirement, and its expectation of whether these would be delivered based on the expenditure plans in its initial submission, noting any proposed clarifications or suggestions for alternative wording.

The information provided has been helpful in informing this supplementary advice. In this annex we have outlined some key themes from our work and highlighted specific areas of concern where we consider it will be most challenging to resolve any potential differences between your draft HLOS requirements and Network Rail Scotland's business plans. We have provided a more detailed breakdown of our views on each draft HLOS requirement to Transport Scotland.

### Basis of the HLOS

The periodic review is concerned with the economic regulation of the infrastructure manager (Network Rail). It is important that the HLOS is focussed on the outputs that Scottish Ministers require from Network Rail and that these align with the funding that will be provided to Network Rail through the SoFA. The current draft HLOS requirements include some references to entities other than Network Rail, for example ORR or RSSB (which are not funded through the SoFA). Guidance to ORR can be provided separately, through Statutory Guidance from the Scottish Ministers to the ORR.

### Items not currently costed in the initial submission

Network Rail Scotland has highlighted several draft HLOS requirements that it did not include in its initial submission, and it would require additional funding to deliver. We have provided a list of these as part of our working level discussions with Transport Scotland officials.

Examples include where there is an overlap between ScotRail Trains' responsibilities and Network Rail's responsibilities (for example in the installation of automated ticket

barriers) or where the requirements are additional to those in the CP6 HLOS (for example having a cyber security strategy).

Scottish Ministers will need to determine if these requirements should be removed from the final HLOS or whether additional funding should be provided to deliver them. If further funding is to be made available, Ministers should consider which funding route would be most appropriate (for example through access charges, the network grant, the enhancement grant or through ScotRail Trains' grant funding).

**Specific areas requiring further discussion**

There are also some specific areas of concern we would like to highlight:

*Performance*

We discuss the challenges in setting stretching but achievable performance targets in more detail in our supplementary advice on the impact of the plan on train performance and what different train performance options might mean for funding in Annex 1.

Network Rail Scotland's plan to achieve the CP6 HLOS target of 92.5% PPM by the end of 2023-24 will be challenging to deliver. [Redacted]. The passenger performance target was a key HLOS requirement for Scottish Ministers in CP6 and, as we highlight in Annex 1, there are a lot of variables to consider when specifying the performance outputs of the rail network in Scotland during CP7. This is likely to require further discussion as part of the PR23 process.

*Gauging*

As highlighted in our recent Annual Assessment of Network Rail (April 2021 – March 2022), since publication of the CP6 HLOS, Network Rail Scotland has taken steps to improve gauging and there is now an agreed client remit document which outlines the key deliverables, actions and milestones toward this objective. However, with only two years of CP6 remaining, it is accepted that the CP6 HLOS requirement will not be delivered in full. Instead, it is agreed that this requirement will be incorporated with works needed for the rolling programme of decarbonisation, new rolling stock introduction and freight growth.

[Redacted} Network Rail has confirmed that the cost of maintaining the existing gauge on routes in Scotland is included within its initial submission and that it will implement full renewals in CP7 in line with the gauging strategy. [Redacted]

As noted above, Transport Scotland will need to determine if this requirement should be removed from the draft HLOS or whether additional funding should be provided. Given the challenges in CP6, we would advise that engagement with Network Rail

on the gauging strategy is stepped up in the weeks prior to finalisation of Transport Scotland's HLOS, to ensure that Network Rail has the capability and funding to deliver Scottish Ministers' specified outputs.

**Next steps**

Given the potential disparities highlighted above, we recognise the need for close working between Network Rail, Transport Scotland and ORR in the coming months. We remain committed to engaging with Network Rail's and Scottish Ministers' representatives prior to publication of your HLOS in November.