Responses to ORR's 30th September 2024 consultation on the periodic review of HS1 Ltd 2024: Draft Determination

Link to consultation webpage: [Periodic review of HS1 Ltd 2024: draft determination | Office of Rail and Road]()

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CONSULTATION RESPONSE

ASLEF Response – ORR - Periodic review of HS1 Ltd 2024 (PR24)

1. The Associated Society of Locomotive Engineers and Firemen (ASLEF) is the UK's largest train driver's union representing over 22,000 members in train operating companies, freight companies as well as London Underground and light rail systems.

2. As Our members both domestic and international services on the infrastructure, we welcome the opportunity to respond to the Office of Rail and Road's (ORR) draft determination for control period 4 (CP4) of HS1 Ltd's plans under their concession agreement and station leases.

3. Fundamentally we believe that the infrastructure itself would be best served under complete public ownership rather than operated through a concession agreement, particularly as the new Labour Government is taking steps to bring track and train together under Great British Railways (GBR). This would enable greater control and continuity across the maintenance, renewal, upgrade and operation of infrastructure across Great Britain, particularly with the interfacing infrastructures managed by Network Rail, DB Cargo, Eurotunnel and Eurostar.

4. However, as HS1 Ltd is entering the midpoint of the 30 year concession which was awarded to two Canadian public pension funds for £2.1bn in 2010 and sold on for £3bn in 2017 to another investment consortium, we acknowledge the reality of the current concession model and acknowledge the work that the ORR has undertaken to avoid some potentially damaging decisions made by HS1 Ltd in their initial plans. We will highlight below our thoughts and views on some aspects of the draft determination.

Adjustments to Proposed Charges

5. Freight usage on HS1 infrastructure has been in decline on HS1 since its peak in 2014-15, despite innovative usage of HS1 when traffic volume was at a lower level due to the pandemic, we have seen three consecutive years of declining freight services. This slowdown is due, in part, to the manager of the interfacing rail freight terminal, DB Cargo, struggling with high electricity charges which has contributed to the scrappage of its Class 90s and financial pressures from its parent company compounding a slow down in contracts. There is however the potential for greater growth of freight services with the potential for gauging work to develop the loading gauge to unlock freight capacity and opportunities via the channel tunnel along Dollands Moor – Ashford – Maidstone – London Corridor.

6. The plans to try and unlock international freight capacity and freight paths on HS1 infrastructure go hand in hand with the Labour Government's plan to fix the foundations and grow the economy, as we know how important rail freight is to the UK economy and the environment, contributing around £2.5bn per year

to the economy and with one freight train able to carry the equivalent of up to 129 HGVs. As such we welcome the ORRs proposals to reduce costs which would enable a reduction in charges for operators in CP4 with the proposed charges for freight operators being reduced by over 50% from HS1's initial plans. In HS1's Five Year Asset management Statement for Control Period 4 (5YAMS), they are projecting a reduction in half of the number of freight services per year from 400 to 200, with this number staying stable through the period, we believe this is unambitious and does not match the UK Government's intention to grow rail freight so we welcome the ORR's intervention as this could enable a growth in freight traffic, particularly if gauging development along the Dollands Moor route is undertaken. Further to this point it is worth noting that presently DB Cargo is running services between Dollands Moor and Dagenham to maintain competency and route knowledge for drivers based at their South Kent Hub, highlighting a readiness to grow freight services and offer short term planned spot hire if required.

7. We note that under point 6.12 the ORR views HS1 Ltd's forecast for freight traffic as reasonable, whilst this is understandable when working with the current available information on traffic volume and agreed freight service contracts, we do hope the adjustments to the charges for freight operators and developments from the UK Government around rail freight growth contributes to a revision of this forecast, subject to the views taken of the freight operators, particularly GB Railfreight and DB Cargo to the draft determination.

8. Further to freight traffic, under 6.12 it is noted that the passenger operators believed HS1s forecast was pessimistic although did not provide further evidence. There has been talk of Virgin Group and Evolyn[1] looking to run international services on HS1 infrastructure to rival Eurostar, this coupled with the previous government's rail freight growth target and any updates to this target, could see both of the passenger and freight forecasts needing adjustment, which in turn could have knock on impacts on the results of the cost policy on CP4 charges. Particularly around stations, if an increase in passenger operators could lead to other stations being brought back online for international services (Ebbsfleet & Ashford). As noted above under point 7, we understand that the ORR and HS1 Ltd are working with the current facts presented to them, we expect the passenger operators to elaborate on their pessimism to better outline their view on future passenger traffic.

Route Renewals

9. It is unfortunately a sad reality of the state of rail infrastructure works in Great Britian, that under point 4.42 the ORR agrees with HS1 Ltd's plans for the mid-life ballast renewal in year 4 of CP4 but notes that it is likely to slip and take longer than planned to deliver. This is the reality we have seen across the railway under the stewardship of multiple Conservative led governments. We hope that with a new government and the introduction of GBR and a 10 year

[1] https://www.euronews.com/travel/2023/11/13/new-eurostar-rivals-could-increase-services-and-cut-costs-for-travellers

infrastructure plan will deliver an actual pipeline of infrastructure works, this can create benefits in the delivery of renewals on schedule and at reduced costs as supply chains should be well established for similar works and staffed in anticipation of future contracts for works. As noted under point 4.46 HS1 Ltd and NR(HS) are finalising plans for the ballast renewal and we hope that the change of government can help progress these plans to being realistically deliverable on time.

10. As was highlighted by the RMT campaign, 'Rail Cuts Cost Lives'[2] following the cuts in funding for renewals in Network Rail's CP7 funding, there are serious safety concerns around delaying renewals, so we hope that working with their partners in Network Rail / GBR, HS1 Ltd will be able to make progress on ensuring that their renewal plans do not slip. As noted in point 7.60 we would also expect HS1 Ltd to address the risks that any delays to the planned ballast renewal could have and to address this in its final 5YAMS.

Station Renewals

11. We welcome the recommendation in point 4.55, it has unfortunately become a far too regular occurrence for accessibility at stations to be impeded by lift and escalator faults and failures. We hope that following the ORR's intervention in March this year, HS1 Ltd will make progress on gathering, analysing and actioning data on lift and escalator, mechanical and engineering assets.

Signalling Upgrade

12. As noted in point 4.125 the shift of some renewals from CP3 to CP4 has the potential to delay the signalling upgrade plans and due to the interconnected nature of this upgrade involving rolling stock owners and operators, we understand the lack of certainty that could be placed on this aspect of the draft 5YAMS. We welcome the call from the ORR for a rolling programme of signalling renewals planned around asset life expiry and obsolescence status, we know the importance of a rolling programme of infrastructure works to guarantee supply chain availability and reduce costs. HS1 Ltd's planned timeline should enable operators to plan ahead and ensure that their rolling stock is compatible with the digital signalling system ahead of its planned delivery.

[redacted]

11/11/2024

[2] https://www.rmt.org.uk/campaigns/rail/rail-cuts-cost-lives/

DB Cargo (UK) Limited
[Redacted]

[Redacted]

Dear *[Redacted]*,

PERIODIC REVIEW OF HS1 LTD 2024 (PR24)
DRAFT DETERMINATION: RESPONSE

This letter constitutes the response of DB Cargo (UK) Limited ("DB Cargo") to the Draft Determination "Periodic review of HS1 Ltd 2024 (PR24) issued 30th September 2024.

Whilst it is recognised that the consultation document covers a multitude of different issues, DB Cargo's response mainly concentrates on its key concern, which relates to the charging framework for freight traffic, together with the principles that have been used to derive the proposed freight access charges from the relevant costs.

Introduction

1.1. DB Cargo has operated overnight freight services on High Speed 1 ("HS1") for more than a decade. It remains firmly of the view that the line presents a unique opportunity of a fast link from the Channel Tunnel to London, thereby enabling the transit of international rail freight to/from the UK via the Channel Tunnel to be accelerated and consequently helping to attract modal shift from road to rail. HS1 also presents the UK's only realistic opportunity to accommodate larger gauge traffic to/from Continental Europe, which further promotes the growth of international rail freight through the Channel Tunnel.

1.2. A significant reduction in the volume of freight traffic operating over HS1 during CP3 triggered a volume re-opener, resulting in a hike in access charges, as the ORMCA2 charge was increased dramatically. This was sufficient to expose the viability of the remaining international freight flow, which ceased operation in July 2024. It is proving a challenge to provide a competitive international rail freight product incorporating HS1 and the Channel Tunnel.

Key concern

2.1. In DB Cargo's view, the fundamental issue in ensuring that the regular operation of international rail freight services on HS1 not only recommences but grows over time, relates to the price of access. The current access charges for HS1 are significantly higher than the equivalent charges that apply to freight services on the national railway network operated by Network Rail Infrastructure Limited.

2.2. DB Cargo welcomes the approach of HS1 and ORR as outlined in the Draft Determination in the re-allocation of certain fixed costs from freight to common costs (Conclusions on Charges 6.62 (d) Common costs page 66). DB Cargo believes that this would otherwise result in access to HS1 being unaffordable and would discourage rail freight from using HS1.

2.3. Given that international rail freight services have no firm rights for access on HS1 and merely utilise spare capacity overnight which is reflected in the short-term nature of the track access contracts offered, the inclusion in access charges of advanced payments towards renewal costs over a 40-year period is an approach not faced by DB Cargo elsewhere. This includes infrastructure where it has a higher degree of certainty in respect of access rights and long-term access contracts.

2.4. Specific opportunities have been identified to reduce costs. ORR has proposed adjustments which result in a material reduction in the access charges for operators in CP4, particularly for freight operators. DB Cargo is encouraged to see a 55% reduction in access charges when compared to those outlined in HS1 Ltd's Five Year Asset Management Statement ("5YAMS").

2.5. DB Cargo remains firmly of the view that Ripple Lane Exchange Sidings should be transferred to Network Rail Infrastructure Limited and become part of the national network. The infrastructure is not 'high-speed', is used significantly more by domestic freight services than it is by those operating on HS1 and is already maintained and operated by Network Rail Infrastructure Limited in any case. The transfer of ownership of the facility would ensure that such maintenance and operation is subject to the same efficiency targets that Network Rail Infrastructure Limited is expected to achieve for other freight-only infrastructure on the national network. It would reduce significantly HS1 Limited's freight specific costs, as well as reducing overall railway industry costs as a whole.

Other issues

3.1. DB Cargo notes that HS1 has reduced the renewals charges significantly compared to those as set out in HS1 Ltd's 5YAMS. HS1 has looked more widely for opportunities to make the HS1 network more efficient and more resilient to change.

3.2. DB Cargo notes that £90m has been set aside to fund ballast renewal in years 4 & 5 of CP4. HS1 will need to work closely with operators to develop an engineering access footprint which minimises disruption to traffic flows, including freight.

3.3. DB Cargo is keen to engage with HS1 regarding ERTMS introduction, which is to be delivered as a specific upgrade, rather than a renewal. Figure 4.2 (page 41) indicates some challenging timescales and there will clearly need to be decisions taken and progress during CP4. Investment will be needed for life-extension of class 92 locomotives to meet haulage requirements prior to deployment of ECTS on HS1. Whilst it is acknowledged that cl.92s have limited haulage capability over HS1, it is unlikely that a TVM430 capable and affordable alternative will be available prior to re-signalling.

...

3.4. DB Cargo was interested to read comments concerning the Operations and Maintenance underspend in CP3 (5.39 page 49).

3.5. DB Cargo understands that for illustrative purposes a level of 200 freight trains per annum has been assumed (Table 6.9, page 70). This is helpful in illustrating the level of charges and a welcome adjustment in comparison to those outlined in HS1 Ltd's 5YAMS. However, it should be remembered that freight services have ceased to operate (July 2024) and this level of operation is not based on a traffic forecast provided by DB Cargo.

3.6. Other important factors for the recommencement and growth of rail freight services on HS1 include:

• the capability to operate rail freight services at 100 kph as well as 120 kph or higher (This is a key requirement for rail freight to achieve the original objective for freight on HS1 set by the House of Commons Committee on the Channel Tunnel Rail Link Bill that "the Link should be capable in every way of carrying as much freight as possible").

• the availability of suitable and sufficient capacity throughout the day (including availability of overnight capacity not being unreasonably constrained by engineering work).

• an affordable performance regime. (DB Cargo notes that the current payment rates will not immediately be subject to recalibration).

Conclusion

4.1. DB Cargo is extremely concerned by the loss of international freight services over HS1, which in part is a consequence of the level of access charges currently applied. DB Cargo is encouraged that the Draft Determination seeks to deliver a fairer and more affordable level of access charge to the HS1 network. Time will tell if this is sufficient for freight operators to provide a competitive and economically viable product.

Thank you for the opportunity to comment on the Draft Determination.

Yours sincerely,

[redacted]
Regulatory Specialist

Department
for Transport

[redacted]
Web Site: www.dft.gov.uk

11 November 2024

Dear [redacted],

Thank you for the opportunity to set out Government views on your draft determination entitled “Periodic Review of HS1 Ltd 2024: Draft Determination” (published 30 September 2024). We would like to recognise the extensive work and engagement that has gone into the Periodic Review process, including regular stakeholder workshops, site visits, senior steering groups and bilateral meetings.

Overall View
Overall, the Department thinks that the draft determination presents a good outcome that meets our objectives for the Periodic Review. The Department welcomes the ORR’s assessment that HS1 have produced a good 5-year plan, and furthermore we welcome the adjustments the ORR has identified to bring costs down from the levels suggested in the HS1’s plan. These lower costs for Operation and Maintenance, the renewals annuity and the Long-Term Charge mean lower charges for operators without compromising the high safety and renewals standards.

This is the first Periodic Review where the ORR will review both the route and stations, following the transfer of the regulation of HS1 stations from DfT to the ORR in July 2022. We believe this transfer has produced a positive outcome with better use of public resources.

The Department’s Objectives for PR24
The Department had three objectives for PR24. We made these known in our response to your initial consultation entitled “Approach to PR24”. The Department believes the Periodic Review has met these objectives as follows:

Efficient outcome which is good for passengers and freight: The draft determination demonstrates that the ORR reviewed and challenged HS1’s plans and proposed efficiency challenges in several areas, such as a proposed £3m reduction in Operations and Maintenance costs, a £3.8m reduction in renewals annuity, a £2m reduction in stations annuity and a roughly £600k reduction for freight costs. We believe that the efficiencies the ORR identified in these areas are achievable. We recognise the uncertainty in predicting renewals in the 40-year plan, but we believe the evidenced led approach to identifying efficiencies in this area is a good outcome. An increase in cost efficiency in the management of the HS1 asset is a good outcome for passengers and freight.

Financially sustainable, affordable HS1 system: By reducing costs the Periodic Review supports affordability in the system. The Department welcomes that the draft determination sets charges below HS1's 5YAMS, which had already generally reduced charges to below CP3 levels. We believe this is a good outcome for passenger and freight operators which goes some way in ensuring the system is financially sustainable and affordable. The Department particularly welcomes the reduction in HS1 freight costs. Freight growth is a Government objective and lowered charges is an incentive to encourage growth. We encourage the industry to continue to work together to find ways to further incentivise freight growth.

Value of the asset is protected: The draft determination has indicated that while HS1's plans have demonstrated best practice in asset management in some areas, there are areas where HS1 has opportunities for improvements. We expect that the ORR would continue to monitor HS1 as they develop further in their asset management maturity. The Department particularly welcomes the ORR's support for the route and stations operations, maintenance and renewal works for CP4, which gives us confidence that the asset is being maintained and renewed to the appropriate standard. We also welcome the ORR's support of the cost policy which better predicts longer term renewals, and we are pleased this has been used for both route and stations. We further welcome the ORR's challenge regarding the deliverability of the ballast renewal in CP4; and note that this is the biggest renewal to date on the HS1 system.

Comment on specific decisions
In addition to the above, the Department would like to comment on the specific draft determination conclusions:

Asset Management – Chapter 4
The Department is content with the conclusions the ORR present relating to asset management activity. We welcome the evidence of best practice in the key areas, and we look to the ORR to monitor HS1 as they develop the identified opportunities to improve on their asset management capabilities.

Cost Assessment – Chapter 5
The Department is happy to see the use of HS1's cost policy which we have supported previously and how it has helped reduce overall costs. We particularly welcome the ORR's support of the introduction of this cost policy and its application for stations. We note and support the ORR's recommendation that there are opportunities to improve "cost policy" calculations at future periodic reviews.

Charges – Chapter 6
The Department supports the ORR's decisions on charging, particularly the removal of the underfunding factor from the route annuity and the proper allocation of freight costs. While we are optimistic around future Escrow Investments, we suggest that caution should be exercised in the assumption that there will be significant new escrow investments at the beginning of CP4 We also suggest that caution should be exercised about the rate of return the ORR have assumed. We think 4.2% may be too high and

unachievable in CP4. We believe the HS1 suggested rate of 3.2% may be more achievable. We recognise that a reduction in the interest rate assumption would have a slight impact on charges. But we believe a more accurate assumption now would remove the risk of underfunding provision for future renewals which would then have to be corrected in a future Periodic Review.

Thank you again for your work on the Periodic Review throughout the process and for the opportunity to comment on the draft determination. The Periodic Review has taken place against a background of financial pressures, and the Department is pleased that CP4 charges will be below those at CP3, while the asset continues to be maintained to a good standard. We look forward to working with you and the industry to prepare for the start of CP4.

Yours sincerely,

[redacted]

[redacted]

Good afternoon

Thank you for sharing the PR24 Draft Determination with us.

We have read through the draft determination and are satisfied with the ORR's review thus far and have no further comments.

Many thanks.

Kind regards

[Redacted]
Regulatory Contracts and Access Manager

[redacted]

[redacted]

11 November 2024

Dear [redacted],

Eurostar International Ltd (EIL)'s response to the ORR's Draft Determination of the Periodic Review of HS1 Ltd 2024 (PR24)

1. Thank you for the opportunity to respond to your consultation on your Draft Determination of the PR24 for HS1.
2. We warmly welcome the overall findings and directions set out in the Draft Determination. This is an important review, in the wake of the Covid pandemic from which the rail industry is still recovering, and in expectation of growth in high-speed rail, including on HS1, from both existing and future new operators. The ORR identified the specific challenges the system faces and responded with a strong set of decisions, building on the already positive foundations set out in HS1's 5YAMS proposals. The imperative to push for more efficiency in all areas to contribute to the financial sustainability of high-speed travel in the UK and support future growth, while not compromising high levels of safety and performance, has been well recognised.
3. We are particularly pleased that the ORR addressed the following issues:
   - the explicit recognition that some contractual terms contained in the Operator Agreement between HS1 and its main supplier Network Rail (High Speed) Ltd (NRHS) for route O&M management drive inefficient costs is an important signal that contractual arrangements, no matter how long-standing, cannot undermine an efficient cost determination but require the contractual parties to work together towards more efficient arrangements;
   - the scope for improving asset management maturity driving further efficiencies that need to be priced in immediately since renewals annuities are based on a 40-year forecast;
   - the obligation on NRHS to at least part fund efficiency enabling investments itself and the scope for further O&M efficiencies;
   - the need to amend the Passenger Access Terms in some important areas to improve the way in which charges are levied and allocated; and
   - the allocation principles of station asset renewals costs to station users beyond train operators currently paying LTC.
4. Within this response, we comment on areas where we feel that the ORR could have gone further. These should not be taken as criticism of the overall draft determination, whose conclusions and outcomes we largely welcome, but as highlighting potential further challenges of HS1's and NRHS' plans.

Eurostar International Ltd
[redacted]

eurostar.com

PR24 must set the right conditions to enable financial recovery and future growth of the UK's only high-speed system

5. This periodic review is specifically important to determine the parameters for the UK high-speed system following the historic fall in volumes over 2020-22 caused by the COVID-19 pandemic and the historically high levels of inflation. It must set the foundations not only to allow the system to recover from these historic shocks but importantly, also to enable future growth, both from existing and from new operators. It is more important than ever that HS1 generates and realises ambitious efficiencies and passes these on to train operators through lower charges, to enable and support economically sustainable traffic growth.

6. The cost pressures on our business have been mounting, not easing, since the pandemic:

   - We were forced to take on significant additional debt during the pandemic, which will take several more years to repay.
   - Our cost base since 2019 increased by almost […] on a train-km basis, […], not least driven by above-inflation infrastructure cost increases.
   - After a brief uplift in late '22/early '23 following the easing of Covid-19 international travel restrictions, the return to more usually seen patterns of international travel and the cost of living crisis mean that passengers will not, and are not able to, pay more for their tickets. […]
   - […][1]

7. This situation left train operators with few resources to prepare for future unexpected crises, and at the same time find headroom to invest in future growth. Yet it is the desire for growth that is the common denominator for all system stakeholders, and we have already committed to significant investments for future growth:

   - We announced in May 2024 plans to acquire up to 50 new trains to increase the current train capacity by 30%, to operate across our network of London and continental routes.[2]
   - We have invested substantially in readying St Pancras International (SPI) for the arrival of the new European Entry and Exit system (EES) originally expected to be introduced by the EU this year.[3]

8. More investment is needed to expand capacity at SPI, and our continental stations, to accommodate the much-desired growth of cross-channel traffic, to accelerate intermodal shift and the growth of sustainable international travel. This is however not possible if margins get absorbed by infrastructure access charges that have increased significantly over the last five years, especially on HS1.

9. In this environment all parts of the system must find efficiencies. HS1 and NRHS must not be uniquely shielded from the economic and commercial risks facing the system as a whole. The Draft Determination is therefore an important enabler for future growth contribution by effectively holding HS1 to account.

The Draft Determination is a key milestone towards a more efficient HS1

10. We welcome the Draft Determination's package of proposed changes to HS1's cost envelope, which together drive the proposed […] reduction in regulated international track access charges (Operations, Maintenance and Renewals Charge, OMRC) and 20% reduction in EIL's stations Long Term Charges (LTC), compared to charges set out in HS1's final 5 Year Asset Management Statement (5YAMS).

11. The Draft Determination sends a strong signal that HS1 and NRHS must strive for efficiency in all areas and cannot contract this regulatory obligation away. In the remainder of our response below we highlight areas where our analysis suggested further scope existed for stronger efficiency challenges.

[1] […]
[2] https://mediacentre.eurostar.com/mc_view?language=uk-en&article_Id=ka4Rz000007RgGrIAK#:~:text=%2D%20Milestone%20investment%20will%20enhance%20capacity,a%20successful%20year%20for%20Eurostar, accessed on 24 October 2024.
[3] […]

12. We also welcome the ORR's willingness to amend the Passenger Access Terms (PAT) to improve the charging terms, on which we will continue to engage with all stakeholders to refine the proposed amendments, as well as its recognition that more station users should contribute to the cost of renewing stations assets.

13. However, we remain of the belief that the ORR's proposals could and should go further and that there is the need to allocate greater shares of common asset renewals costs to other groups of station users, particularly HS1s retail estate. Not doing so leads to train operators continuing to be overcharged and the resulting LTC therefore representing an inefficient charge.

14. We remain ready to work with the ORR to further explore how the important principles that the Draft Determination established can be further and more fully embedded in this and future periodic reviews.

15. The remainder of our response provides further detailed comments in the following areas:

1 - Route renewals – welcome proposals, further reduction opportunities

Cost policy is effective, we support its further evolution

16. We fully supported HS1's cost policy and welcome the ORR's endorsement of this policy as an important step forward in the modelling of future cost requirements that are 6-40 years into the future. It has been effective in mitigating the imposition of cost burdens on today's users for highly uncertain costs being forecast very far into the future.

17. We welcome also the ORR's technical scrutiny and challenge of the methodology and HS1's input and modelling choices and anticipate that HS1 will address the ORR's findings in its further evolution of the policy for future review periods.

18. We are concerned by the tendency in HS1's approach, identified by the ORR, of finding greater risks for nearer term projects and greater opportunities only for renewals activity much further into the future, meaning that nearer term projects' costs are inflated, not reduced, as a result of this policy. Given the risk and contingency uplifts already built into the underlying base costs, as recognised by the ORR, the cost policy for all time horizons should be expected to result in net opportunities not additional risk uplifts.

19. Whilst the ORR proposes to address any double counting of risk through a top-down efficiency reduction of 4%, this should be addressed in the cost policy itself going forward, by starting from the premise that risk is already factored into the base cost thus obviating the need for any further risk uplifts.

We welcome the proposed changes to the annuity calculation methodology

20. We were fully supportive of HS1's incorporation of a traffic volume weighting into the annuity calculation as well as its proposed move to using CPI for cost indexation and welcome the ORR's endorsement of these modelling changes.

21. The traffic volume weighting is an important step to ensure intergenerational equity, i.e. that the same costs are borne by today's passengers as by future passengers, and a move from RPI to CPI avoids adding further costs to today's users based on an inflation measure that has been proven systematically to overstate inflation and has been abandoned by many, if not most, regulatory regimes in the UK.

22. While we welcome the ORR's recognition that HS1 had overstated its real WACC and its proposed correction, we note the counterintuitive effect this has on the international OMRC, which is to increase them slightly.

23. We support the ORR's proposal to remove specific modelling conditions that were imposed in the CP3 model, namely an uplift to recover previous underfunding and the "no negative escrow balances" condition for all 40 years. CP3 closed with higher escrow balances than forecast, suggesting that the previous underfunding concerns were not repeated in CP3 and illustrating again the great level of uncertainty attached to forecasting renewals costs even over a five-year time frame, let alone a 40-year time frame. We agree that pre-funding such uncertainties is inefficient.

Efficiency targets from CP5 are welcome but should be strengthened and extended to CP4

24. The ORR proposed two efficiency adjustments to be applied to route renewals costs:

- a 9% efficiency adjustment for specific asset groups in which the ORR found that HS1's asset management was not yet sufficiently mature; and
- a 4% efficiency adjustment across all route renewals to correct for the double counting of risks at different stages of the renewals forecasting process.

25. We welcome the ORR's recognition of the principles behind these adjustment proposals, namely that

- HS1's asset management is not yet as efficient as it should be; and
- that the cost estimates for renewals are inflated by repeated pricing in of risks and contingencies as well as markups in recognition of cost risks that we believe are overstated.

26. In relation to both, however, we believe there is still scope for further efficiency adjustments, based on the limited information that has been shared with train operators to date. We have not been given access to the TOTEX models we requested so we must rely on the ORR carrying out the detailed root and branch review and to challenge HS1's and NRHS' figures. Whilst we are obviously comfortable that that ORR has undertaken this analysis and arrived at appropriate outcomes, from a HS1 transparency point of view we would still welcome the opportunity to analyse this data ourselves and see this as a key requirement of the Control Period review moving forward.

27. With regards to adjusting for HS1's less mature asset management of specific asset groups, it must be acknowledged that HS1 has had the asset management responsibility for these assets for 15 years. It is in many ways concerning that after such a long period of time the ORR still finds HS1's management of a large part of its asset base to be lacking in maturity, and even more concerning that HS1 had not been planning to progress the maturation of its asset management for certain asset groups for some time.

28. We are therefore wholly supportive of the ORR's position that the improvement of asset management must be accelerated since insufficiently mature asset management is driving inefficient renewals costs, and possibly O&M costs, today, and to translate it into an efficiency adjustment from CP4 onwards, to set appropriate incentives for HS1 to push for real and tangible improvements and efficiency gains immediately.

29. The ORR based its 9% adjustment on evidence of the scale of efficiency gains achieved for track and the Overhead Catenary System assets. We believe that this understates the true scope for efficiency gains in other asset groups:

- Firstly, the ORR explained in paragraph 4.40 that the efficiency gains for track were more than 10% of total track costs, whereas the ORR proposes to apply the 9% adjustment only to the specified asset groups and only from CP5.
- Secondly, it is not unreasonable to assume that track asset management had already been more mature at PR19 than other asset groups, and while track asset management matured noticeably, management approaches for other asset groups did not.

30. With regards to eliminating double counting of risk contingencies, we already commented above that the cost policy in its future iterations must factor in that risk markups are already firmly embedded in the underlying costs.

31. While we agree with the ORR's recommendation in principle that base costs should be "cleaned" to avoid double counting of risks, we also agree with the ORR's observation that risk and inefficient costings in the base cost is likely to be too embedded into the underlying input data, which often draws on historical data that are simply indexed for future periods, which makes such data cleaning exercises extremely difficult if not impossible. Hence any further modelling steps must also correct for these inbuilt biases.

32. We believe that there is scope for a greater efficiency adjustment, not just for double counting of risk and contingency uplifts but also for overhead cost markups and management fee levels.

- For example, while the ORR deemed a lower management fee of 6.6% to be more appropriate for NRHS' O&M activities, the ORR did not comment on the 10% management fee NRHS levies on renewals projects. Since this is levied on top of direct management and other overhead costs, it is not clear what risk if any NRHS is taking on renewals that justifies this significantly higher management fee.
- In our response to HS1's Draft 5YAMS[4] we challenged the level of risk and indirect cost overlays added to the renewals cost envelope, and HS1 did not respond directly to our comments in their final 5YAMS. […].[5]
- As regards cost overlays to renewals, we do not understand what […] and would welcome clarification. […] It is not clear what costs this line is intended to capture […].

2 – Route O&M budgets – welcome proposals, further reduction opportunities

33. We welcome the overall efficiency adjustment of £3m per year of NRHS' O&M budget. This is a clear recognition that NRHS is not yet realising the full potential of efficient asset management that was expected to result from initiatives such as its target operating model, the delivery integrator programme or various R&D initiatives.

34. Furthermore, its over performance across CP3 indicated its ability to generate higher levels of savings and these revealed efficiencies should now be baked into the CP4 cost envelope. An increase in the cost envelope for the first two years of CP4 is simply not justifiable and would undo the efficiency achievements of CP3.

35. We also consider that there is further scope for efficiency savings, which we discuss below.

Contractual terms must not undermine the determination of an efficient cost envelope

36. We particularly welcome the ORR's recognition that a number of aspects contained in the Operator Agreement between HS1 and NRHS, namely the RPI+1.1% annual cost uplift and the 8% management fee, are driving inefficient cost levels, and that it would not permit these to be passed on to operators.

37. It is an essential principle that the ORR's obligation to determine an efficient cost level for HS1 cannot be undermined by a supplier contract. To give full effect to this principle, the ORR should review the entire agreement for provisions that may drive inefficient costs or set adverse cost or performance incentives and compensate for any such provisions in its final determination.

NRHS should fund efficiency enablers by reinvesting its net profits into its own business

38. We welcome the ORR's reduction of NRHS' O&M cost budget for efficiency enablers and agree with its argument that efficiency enablers should be funded by NRHS itself since it is an investment in the value of its own company.

39. Nevertheless, we believe that 100% of the efficiency enablers should be funded by NRHS. NRHS generated sufficient profits over recent years to fund more than 100% of the enablers it claimed.

[4] Paragraphs 97-99 of the Route annex to EIL's response to HS1's Draft 5YAMS consultation, submitted in April 2024.
[5] […]

40. NRHS' statutory accounts[6] indicate it generated after tax profits of almost £20m in CP3 from 2020/21-2022/23 (accounts for 2023/24 are not yet available). In April 2021 it changed its dividend policy to pay out up to 100% of its after-tax profits as dividends to its parent company Network Rail Infrastructure Ltd (NRIL) and has done so in every year of CP3.

41. These profits, rather than being paid out as dividends, should be reinvested into NRHS, including to fund efficiency enablers. They would be more than sufficient to fund the full amount of efficiency enablers claimed by NRHS worth £14.7m for CP4.

42. NRIL is […][7] Given this, NRHS' profits should be reinvested into NRHS for the benefit of the high-speed system rather than be used to cross subsidise the domestic rail network.

All efficiency opportunities identified by Rebel should have been taken into account

43. The Draft Determination provisionally found that some of the efficiency opportunities identified by the HS1 commissioned benchmarking report by Rebel had been incorporated into the CP4 budget, e.g. the reduction of indirect staff levels, which we warmly welcome.

44. It is not clear from the Draft Determination if and how it incorporated Rebel's most significant efficiency opportunity, […]. This was not adopted by NRHS and while we recognise the implementation may take some time, we have not seen any persuasive arguments why it should not be implemented.

HS1 should not add costs to its proposed budget […]

45. HS1 had put forward a cost budget that was lower than its CP3 budget in real terms, which we welcomed. However, HS1 has commented in bilateral meetings that […]

46. We disagree with this approach and principle. Any cost increases claimed by HS1 must only be permitted by the ORR if they are absolutely necessary, fully evidenced and carefully scrutinised. For example, [...].

3 - Outperformance sharing regime needs amending not abolishing

47. The Draft Determination suggests that no party regards the existing outperformance sharing regime as effective and that it could therefore be abolished. This does not properly reflect our position.

48. While we are not opposed to NRHS retaining real efficiency gains within-period as an efficiency incentive, as long as they are then factored into future charge control periods, an important prerequisite, a reliable distinction between efficiency gains and savings because of avoided work, currently does not exist.

49. The outperformance sharing mechanism is currently the only way in which train operators are refunded for avoided work, for example as a result of lower than forecast volume levels, as was the case in 2020/21 and 2021/22.

50. In those years, NRHS achieved particularly high levels of outperformance against the regulated budget, as documented in the ORR's annual HS1 performance reports. NRHS confirmed […].[8]

51. Train operators did not receive a share of these savings because the outperformance sharing mechanism only applies to years 3-5 of a control period. As a consequence, NRHS received a windfall it was not required to share let alone refund, due to the same historic shock of the pandemic that plunged train operators into significant financial crises.

52. Therefore, we do not unconditionally support the removal of the outperformance sharing regime, and train operators should at least be refunded OMRC-A1, the costs directly associated with the operation of trains,

[6] Source: NRHS' statutory accounts filed with Companies House, available here: https://find-and-update.company-information.service.gov.uk/company/04434562/filing-history.
[7] […]
[8] [...]

for trains that were scheduled but subsequently cancelled, before the outperformance sharing mechanism can be considered.

53. Failing the introduction of an effective refund mechanism, the outperformance sharing regime should be changed to apply to the entire control period, to avoid the perverse incentives set by the current annual system that omits the first two years of a control period.

54. We understand that […]. Yet there is no corresponding clause that gives train operators the opportunity to trigger a review in case of unforeseen cost reductions, as happened during 2020/21 and 2021/22. There is therefore an asymmetric protection for HS1 and NRHS against unforeseen cost shocks but not for train operators. This asymmetry needs to be recognised and rebalanced, which is why we have proposed the Wash Ups for all of IRC, OMRCA-1 and OMRCA-2/B.

4 - Performance Regime should not be narrowed, but the performance risk premium should be reduced

55. The ORR suggests that NRHS' contract risk premium could be reduced in exchange for train operators absorbing "*more risk from delay payments themselves*".[9] We disagree that this would be a reasonable approach. The current regime, until a better system to incentivise good performance in case of disruption is found, should remain as it is. Furthermore, we believe that the performance risk premium proposed by NRHS for CP4 is too high.

Waiving HS1's/NRHS' liability for some types of disruptions would have counterproductive effects

56. We disagree with the proposal to remove infrastructure manager liability for certain types of performance risk.

57. The fundamental purpose of the HS1 Performance Regime is to incentivise all parties on HS1 to avoid disruptions, and when they do happen, to recover from them as quickly as possible. There can be no suggestion that the performance regime should be removed where disruptions are clearly within HS1's and NRHS' control.

58. The suggestion made by the ORR appears to be that the performance risk premium, which covers NRHS' exposure to performance payouts for disruption causes deemed to be outside of their control, can be removed if NRHS' liability for performance payouts in such cases is waived. This, in our view, would likely have counterproductive outcomes for NRHS' incentives regarding recovery from disruptions.

59. The ability of the HS1 system to recover from major performance incidents is already a documented subject of concern for the train operators. While not perfect, the existing regime sets at least some financial incentives for NRHS and HS1 (and train operators) to minimise delays, irrespective of the cause of the disruption.

60. We are concerned that any softening of this approach could lead to increased numbers of Schedule 8 disputes, with the focus being more on party responsibility and evasion of financial outcomes as opposed to incident management, lessons learned, and improvement of future performance.

61. Even with the measures firmly in place, we have had concerns with HS1's and NRHS's collective approach in respect of […]

62. The Schedule 8 disputes related to the above incidents have taken […]. Currently the only escalatory dispute resolution process available under the PAT for unresolved Schedule 8 disputes is expensive and time-consuming for train operators. This is the main reason that EIL have proposed the introduction of the Delay Attribution Board (DAB) for Schedule 8 dispute resolution (please see PAT changes below).

63. Notwithstanding the above, it is not correct to categorise specific delay causes as being wholly outside of the control of NRHS/HS1, and this point has been discussed with all parties during the relevant Schedule 8 related meetings during the CP4 process.

[9] Paragraph B22 of Annex B, Efficient Cost review, to the Draft Determination.

64. As operational performance has shown, […], and this has been noted in the Schedule 8 results for CP3.

65. It should also go without saying that for every disruption irrespective of the original cause, the speed of recovery is largely within NRHS' control for the efficient and effective operation of the system as a whole, and it is imperative that NRHS is given incentives to have processes in place to facilitate this recovery.

66. Excluding certain delay causes entirely from the performance regime could therefore have the consequence of absolving NRHS from some of its own responsibilities.

67. In addition to the above adverse incentive effects, such a change could generate significant additional costs for train operators which are unlikely to be outweighed by the saving of the performance risk premium:

- Potentially avoided HS1 Schedule 8 penalty payments to train operators. These are already not designed to wholly compensate train operators for their losses during and consequent to a major performance incident, but we believe that having them does still act as an incentive to NRHS to manage incidents as effectively as it can, and the penalty payments can at least soften the commercial impact of said incidents for train operators.
- A diversion of management and operational resources to manage an anticipated higher number of disputes, particularly around incident root cause.
- Additional legal costs for potential dispute resolution procedures.

68. In short, unless a better performance incentivisation scheme is found, we do not support the transfer of some performance risks to the train operators as ORR appears to suggest.

NRHS's performance risk premium appears to be overstated

69. We accept that NRHS are entitled to levy a performance risk premium at a reasonable level. However, based on our own analysis of performance regime payouts in CP3 we believe that the performance risk premium claimed by NRHS has been overstated, particularly with regards to its risks related to […].

70. We understand that NRHS bases its analysis of risk on […]. NRHS gave as a reason for its […].

71. This however ignores the reality that not all delay minutes trigger a performance payout, which is as intended by the regime. Our analysis shows that Performance Regime penalty payments in CP3 to date have only been made to train operators in respect […].

72. For comparison, during CP3, Schedule 8 penalty payments of approximately […]. This suggests that even when allowing for an unrepresentatively low penalty payment level due to lower traffic volumes during Covid, the premium for […] related performance risks should have significantly reduced for CP4 and not increased.

73. If NRHS indeed bases its CP4 performance risk premium for […] but does not, as appears to the be the case based on the sums in the HS1 5YAMS, include any weighting for the total actual performance payouts triggered by these delay minutes, then it is clear that the performance risk is overstated.

74. It would include minor […] incidents that would never trigger Schedule 8 payments. The faster recovery from […] and reduction of delay minutes per incident is evidence that positive action that NRHS have taken since 2016 to reduce the risk and impact of […] has been reasonably effective.

75. An average of one […] incident per annum triggering an approximate average Schedule 8 payment of […] per annum for CP3 should not translate to an expectation of funding Schedule 8 […] risk for CP4 at […] for five years. We request that the ORR review the risk premia and adjust these where necessary.

76. In addition, we do not agree with NRHS' and HS1's characterisation of cost reductions offered to train operators at the start of the pandemic (2020/21), namely […].

77. Firstly, it could only ever have requested […], with the attendant cost risks for train operators above. Secondly, the severe reduction in traffic volumes had significantly and unexpectedly reduced NRHS' exposure to performance risk, such that the performance risk premium that had been set on an assumption of pre-pandemic traffic volumes was now unnecessarily high.

78. Rather than proactively offering the refund of an appropriate share of the performance risk premium in light of its reduced risk exposure, NRHS requested unacceptable terms, […], which was unsurprisingly rejected by the train operators.

5 - R&D is a key enabler of future efficiency but must be governed carefully

R&D benefits must be realised quickly through swift implementation

79. Investment in R&D, innovation and new technologies are important enablers to achieve step changes in performance and efficiency. We share the ambition formulated by […].

R&D funds must be ring fenced and unused funds rolled over from CP to CP

80. We welcome the ORR's confirmation that the R&D budget will be ring fenced and rolled over if not fully used up within the budget period. We understand that this also applies to unused R&D funds potentially left at the end of CP3. Please can the ORR confirm whether any unused funds from CP3 will be netted off against the budget priced into the CP4 cost envelope.

Strong governance is important to guide optimal use of R&D funds

81. To maximise the benefits to the system as a whole from R&D activity strong governance processes must be established and enforced. Not only to ensure that projects are prioritised correctly to meet the ambitions set out by the ORR, but also that funds are used for genuine R&D activity benefitting users of the HS1 route, and not activities that should be funded out of other sources, e.g. the O&M fixed fee or other NRHS or HS1 sources. We expect that the ORR will take an active role, for example as part of its annual performance monitoring activities.

6 - Passenger Access Terms (PAT) - a key element to create a level playing field

82. We welcome the ORR's recognition of the issues of principle at stake regarding the proposed changes to the PAT. The PAT governs all interactions between HS1 and train operators regarding track access, including, importantly, volume and cost risk allocation and payment terms. The ORR-led system discussions following the publication of the draft determination have been a welcome opportunity to discuss and clarify further if and how proposed changes can be implemented and prompted further thoughts.
83. We welcome many of the ORR's "minded to" positions but there are some areas where we believe that the ORR could have gone still further.
84. We summarise our views in a table annexed to this response.
85. We have more detailed feedback on the following change proposals, which we discuss below:
    - The definition of pass-through costs
    - Levying AIRC on spot bid services
    - OMRCA2/B annual wash up
    - OMRCA1 refund for trains not operated
    - Delay Attribution Board (DAB) as dispute resolution body for delay attribution disputes

Pass-through cost definitions

86. HS1 had proposed a widening of some of the existing pass-through cost definitions and the introduction of some new categories. These were being subject of some discussions at an ORR-led stakeholder session following the publication of the ORR's Draft Determination.

87. We agree with the ORR that the guiding principle must remain that costs should be defined as pass-through only in exceptional circumstances, to give HS1 the strongest possible incentives to generate efficiencies over all costs over which it has a least a degree of control.

88. We consider that for external costs incurred in relation to business rates advisory such as success fees and the escrow investment project, it is more appropriate to have cost recovery agreements struck directly between HS1 and train operators on a case-by-case basis. This is because these are not costs that are incurred on a regular basis, and no additional pass-through cost provisions for these costs should be included in the PAT.

89. HS1 explained that in case of insurance costs, […] We had not previously been aware of this having been the case and had not previously seen […]. HS1 committed to provide further detail on these. Until we receive this information, we must reserve our position.

90. As a general matter of principle, all pass-through costs need to be properly detailed, so their scope is transparent to train operators.

AIRC basis of charging

91. HS1 had proposed as part of its […]

92. This statement is incorrect. Either HS1 wishes to apply

- the AIRC to "*any train that runs*", in which case it would not charge AIRC on prepaid FWT services that are subsequently cancelled; or
- it wishes to apply the same charging principle as is currently in place for OMRCA1, which the ORR intends to change to avoid overcharging (also see separate section on OMRCA1 refundability below).

93. It is also inconsistent in principle with the changes to other elements of OMRC recovery, notably for OMRCA2/B wash up, for pass-through cost wash up and for OMRCA1, which all aim to allocate and charge costs more closely aligned with the share of actually operated services.

94. For this reason, there should be no change to the PAT to permit HS1 to charge AIRC on spot bid services. At the very least such change must be accompanied by a refund mechanism for trains that are not operated. Furthermore, the PAT must clarify that the domestic underpin applies to the AIRC charges as it does to other charges elements.

OMRCA2/B annual wash up

95. We welcome the ORR's intention to approve this proposal that was in principle supported by passenger train operators and would align the charging regime more closely with reflecting more accurately the actual usage share of HS1 (subject to the Domestic Underpin).

96. To date, deviations from planned train volumes that occur after the First Working Timetable (FWT) has been submitted (submitted 6-12 months in advance) do not get reflected in the charges. In other words, except for a limited range of reasons within HS1's control, all elements of the pre-paid charges for services included in the FWT are non-refundable.

97. It has been recognised by HS1 itself, in the case of pass-through costs recovered through OMRCC, that this was not reflective of relative actual usage of the HS1 line and proposed a change whereby the full annual pass-through costs get washed up at year end to be adjusted for actual traffic shares. We also support this change (see table in Annex 1).

98. We also proposed that variable charges, OMRCA1, should be 100% refundable if a pre-paid train ends up not operating for any reason. We discuss this further below and are pleased that the ORR recognised in principle that it raised the possibility that train operators are overcharged.

99. For the same reasons, we propose an ex-post wash up for the fixed cost elements of OMRC, namely OMRCA2/B, to align the apportionment of these costs better with the relative actual usage of the HS1 line (subject to the Domestic Underpin).

100. We acknowledge, however, that any additional wash up introduces additional uncertainty over the total level of charges eventually charged to train operators in a particular year.

101. For this reason, we had proposed that a wash up for the fixed cost elements is only carried out if traffic deviates by more than 10% from originally forecast FWT train volumes. This was intended to find a balance between the need for accurate cost allocation on one hand and certainty over charges on the other. We are however open to the alternative of a default annual wash up if it can be implemented in a way that gives sufficient information to train operators in-year to build up the necessary provisions in their budgets.

102. We recognise and accept that the introduction of the annual wash up as proposed by HS1 effectively removes any volume risk for HS1 for the recovery of its fixed costs: to date HS1 was exposed to the potential for over- or under-recovery of fixed costs where no VRO is triggered. For example, if train volumes are 3.5% higher or lower in every year of CP4 than forecast in the charges model, the charges are never re-set and HS1 over- or under-recovers OMRC-A2 and -B compared to the regulated budget. We accept that this proposal removes this volume risk for HS1. It should be borne in mind when assessing other risk allocations (e.g. for international travel to fall to 0, see below) and determining risk and contingency premia or management fee levels.

103. HS1 asked that […]

104. As part of the ORR-led discussions following the publication of the Draft Determination, HS1 provided further detail for how it envisages to implement the wash up and to which we will provide our feedback separately and continue to engage with all system stakeholders.

OMRCA1 refund

105. We welcome the ORR's recognition that there are clear instances of overcharging where OMRCA1 is paid for FWT services that get subsequently cancelled and for additional spot bid services that replace them.

106. We welcome the ORR's proposal to introduce a level of netting off OMRCA1 charges, but we feel that it should go further still and that a refund of OMRCA1 for all cancelled FWT services is warranted. It should not be limited just to the netting off in a single day, and it should also permit a refund for cancelled FWT services if that takes the total number of operated trains below the originally reserved number of FWT services.

107. As explained above in the context of the outperformance sharing regime, we consider there needs to be an effective refund mechanism where costs avoided due to reduced train services should be refunded to train operators. As we have previously noted in this response, our understanding is that […], but there is no symmetric protection of train operators' reasonable interest to be protected against overcharging if train services do not operate at the forecast levels.

108. This is most pertinent with regards to costs and charges that are deemed to recover costs that are directly related to the operation of a train. If a train does not operate, these are avoidable costs and should not be recovered.

109. We explained in our response to HS1's draft 5YAMS that we believe that the non-refundability of OMRCA1 (except for some limited circumstances in the control of HS1) is not consistent with the Rail Regulations which defines direct charges as those recovering costs directly related to the operation of a train. If a train does not operate these costs are, by definition, avoided, so if they are charged regardless, this amounts to an over-recovery of direct costs.

110. We observe that direct charges are fully refundable for all cancelled trains on the French network (SNCF Reseau), and that the Variable Usage Charge (VUC) charged by Network Rail is levied on the "actual" volume

of usage, according to access agreements available on the ORR website. HS1's approach appears to be an outlier in this regard.

111. We would welcome the ORR to provide its view on our argument and HS1's response to it, both included in our response to HS1's draft 5YAMS.

112. The ORR and HS1 justified the non-refundability of OMRCA1 for cancelled FWT services by the fact that resources would have been planned in advance that could not be avoided at short notice. This, including further information provided in subsequent conversations, raises several questions:

- Further bilateral discussions revealed that […] This raises an important question why additional OMRCA1 charges related to the O&M costs are justified for spot bid services, but refunds are not.
- With regards to renewals related costs recovered through the OMRCA1, a train that does not operate does not contribute to the wear and tear of the assets and therefore should not be obliged to pay these charges. Paying a renewals annuity for traffic dependent renewals for trains that did not operate is an overcharge borne by today's users to the benefit of future users.
- The FWT is submitted 6-12 months in advance. Updates and amendments to the FWT are made via submission of Eurostar's periodic Working Timetables, which are valid for multiple weeks or months depending on timetable period. NRHS may well be capable of making adjustments to staffing levels, work programmes, and costs with this amount of notice.

The Delay Attribution Board (DAB) should hear delay attribution disputes

113. As noted above, the application of Schedule 8 has resulted in a number of lengthy previous disputes between train operators and HS1/NRHS. EIL proposed the introduction of the DAB as an independent industry expert body to hear Schedule 8 disputes, in exactly the same way as the Access Disputes Committee is listed within the PAT as the independent industry arbiter for capacity allocation disputes.

114. We believe that engaging the DAB would introduce additional industry-wide expertise to Schedule 8 disputes that have so far been handled in an insular fashion. It would likely benefit the system with an established and accepted body hearing and determining this information, establish precedents for all parties and increase transparency and deter spurious claims rather than encourage them.

115. In the current situation, given the cumbersome and costly nature of the HS1's PAT dispute resolution process, there is a greater deterrence to bring disputes and a greater likelihood of negotiated settlements, which is unhelpful in setting precedents for future situations of a similar nature and likely in HS1's and NRHS' favour.

116. We disagree with the ORR that this change needs to be based on industry consensus. There is an obvious benefit to the system as a whole in terms of better working practices and efficiency, which should not be vetoed by an Infrastructure Manager on the grounds that it would cause some additional administrative preparatory work.

PAT change proposals deemed to be outside of the PR24 scope

117. We note that the ORR deemed some of EIL's change proposals to be outside of scope of the PR24 process. Given the imbalance in negotiating power between HS1 and train operators, there can be no realistic prospect to engage HS1 to consider any changes that may not improve HS1's position even if they are in the best interest for the HS1 system as a whole. We would therefore invite the ORR to reconsider whether these conditions do not fall within the remit of its PR24 determination.

118. We have already commented on the outperformance sharing regime above in section 3. We remain of the view that this is an important performance incentive and unless changed sets perverse incentives that rewards potentially inefficient asset management practice, and therefore falls within the ORR's remit.

119. Furthermore, we consider that the change proposals to the invoicing and payment terms are necessary to set HS1 appropriate incentives to improve and uphold high administrative standards with regards to billing and invoicing and to avoid unintentional over or under charging.

120. There is currently no financial incentive for HS1 to invest in higher performance standards since the current payment terms oblige operators to pay all invoices within 14 days, and failure to do so may put operators at risk of being denied access to the HS1 line. It cannot be expected that HS1 would show any willingness to revise such one-sided terms without being compelled to do so by a regulatory authority.

7 - Stations asset management maturity must improve further

121. We are heartened by the ORR's recognition that asset management for stations needs to improve. It reflects our own experience on the ground in our day-to-day interactions with HS1. HS1 must take a more proactive and strategic role in its leadership of stations asset management. Recent interactions have again revealed the reactive and passive nature in which HS1 has been managing stations assets to date. For example, we discovered […].

122. In our response to HS1's draft 5YAMS we indicated that we did not have sufficient transparency on whether […]. It has since been confirmed that these do form part of the renewals escrow. However, we understand that when renewing HS1 did not […].

123. We received an asset register from HS1 only after repeated requests and with much delay. However, it does not fully meet our needs as it appears that it is […].

124. As a consequence, we identified that some assets that in our view fall to HS1 were missing from that list […].

125. […]

126. As the ORR highlighted, despite QX not being directly regulated by the ORR, the costs for maintenance and repair are very much a result of HS1's asset management approach, and its management of O&M activities and renewals affect each other. Where any costs (QX or LTC) are higher than what they should be as a result of ineffective asset management practice, train operators should also have a way to be compensated for these costs of inefficiency.

8 - LTC costs and annuity modelling have improved significantly

127. As for the route renewals budget, where the ORR found that immature asset management approaches contributed 9% of inefficiency to certain asset classes, we welcome the ORR's recognition that incorporating these efficiency savings cannot be postponed until HS1 has improved its asset management approach but have to be incorporated into the regulated cost settlement now to set appropriate efficiency incentives for HS1.

128. The 4% cost reduction to eliminate potential risk and contingency double counting is equally relevant, but we are not persuaded that there is not a greater potential for higher reductions, for similar reasons as for the route renewals cost envelope.

129. The 5% reduction for three specific CP4 projects in recognition of benefits from these projects also flowing to other users is welcome. As we explain further below in the next section regarding stations cost allocations, we consider that the principle of "beneficiary pays" should have been adopted more consistently across all common station area renewals.

130. With respect of these specific scope reductions, we welcome further clarifications how the ORR intends to monitor HS1's compliance with this reduction and requirement to part-fund these projects from other sources. We are not aware of any renewals projects to date that experienced budget overruns in which the renewals panel denied HS1 the full cost recovery including budget overruns. Can the ORR please confirm that HS1 will be held to account that it should raise 5% of the budget for the three specified projects from other sources and not from the escrow account?

131. We welcome the ORR's changes to the annuity modelling methodology, including the removal of a skewing effect in the cost policy as applied to stations worth 0.5% of renewals costs starting from CP5 and other modelling changes reflecting those implemented in the route model.

132. With regards to train weighting, we welcome that the ORR recognised that a static annuity that was not sensitive to usage volumes was inconsistent with the principle of intergenerational inequity. We continue to believe, however, that to remove all intergenerational inequity, it must be applied to 100% of the LTC not just to assets affected by traffic dependent wear and tear, as it is in the route model.

133. The underlying rationale applies equally to stations renewals as to route renewals. The fact that the LTC annuity is allocated between train operators within year based on floor space differentiates it somewhat from the route renewals annuity that allocates costs based on expected traffic shares. But the fact remains that the stations renewals cost per traffic unit (be that train or passenger), is higher, under the current model, in years with less traffic than in years with higher traffic. There is no good ex ante reason why a passenger today should be expected to contribute more to the renewal of the station's common assets than a passenger tomorrow, irrespective of whether their renewals cycle is affected by usage or not.

9 - All station users should contribute to long term charges for common zone assets

134. We welcome the ORR's review of the cost allocation arrangements in the stations, which we see as being part of a big step forward in HS1 stations regulation generally. The ORR rightly identified that the contractual arrangements and allocation of responsibility for different stations assets is not as transparent as it should be, and we welcome its stock take of the status quo. It represents important progress to address existing inconsistencies regarding the funding of stations asset renewals.

GTR should contribute to common stations renewals, and HS1 needs to be given stronger incentives to drive this change

135. We agree with the ORR that the existing arrangement that does not allocate any common station renewals costs to Govia Thameslink Railway (GTR) are inconsistent with the arrangements that apply to the other train operator users. GTR operates regional rail services out of an exclusive area in SPI station that can only be accessed through the main St Pancras station building. Its passengers therefore are likely to make similar use of the station as users of other rail services into and out of SPI.

136. Not contributing to the common station assets renewals gives GTR a cost advantage and over-allocates costs to the other train operators and their passengers that do contribute. We support the ORR's request that this will be addressed in CP4 and look forward to participating in any future working groups.

137. We are concerned, however, that HS1 may lack suitably strong incentives to invest in this workstream to bring about change. We would therefore request that the ORR review progress on this project as part of its annual HS1 performance reviews, and should it find that no progress is being made, to reduce the renewals annuities for contributing train operators to reflect what should be a reasonable renewals annuity contribution from GTR.

The retail estate should not be exempted from a "beneficiary pays" principle for common station assets

138. The ORR reviewed in detail whether the scope of CP4 station renewals projects extended into areas that should rightly be funded by other station users. It alighted on three projects where it considered this to be the case, namely the renewal of the Uninterrupted Power Supply system, renewal of toilets and vacuum pumps and the installation of heat pumps. It proposed small reductions in the LTC funding for these projects since it believed that other station users may benefit by being able to reduce their own renewals works as a result of these projects.

139. We welcome this approach as an important step forward since it tests in detail whether the scope of each renewals project funded out of LTC is justified and does not cross-fund renewals that rightfully should be funded, or co-funded, by other station users. However, it starts from the premise that the common station assets renewals that are named in Schedule 10 of the HS1 lease are for the train operators to fund through the LTC.

140. Only where it can be evidenced that a specific renewals project saves a third party the renewals work it would have carried out in absence of the LTC funded renewals project does the ORR consider it justified to require third party contributions. This is, in our view, too narrow an interpretation of the contractual arrangements and leads to inefficient cost levels charged to train operators.

141. We believe that the funding of common station assets renewals should follow the same “beneficiary pays” principle that is reflected in other parts of the stations charging regime, for example the stations enhancement policy and condition 102 of the SAC, which we discuss in more detail further below. The ORR’s proposals go some way towards recognising this principle but stop short when it comes to other station users.

142. With regards to QX, condition 102 of the SAC requires that HS1 must “t*ake all reasonable steps to obtain appropriate contributions, by way of service charge, in respect of the use of any Common Station Amenity or Common Station Service, from any person having rights of occupation of any part of the Station under a lease or licence, where the relevant leased or licensed premises enjoy the benefit of or are recipients of such Common Station Amenity or Common Station Service*“ and that HS 1 "*shall ensure that contributions towards the use of any Common Station Amenity or Common Station Service within a particular Zone received are credited against the proportion of Qualifying Expenditure attributable to that Zone*”.

143. […]

144. This requirement was not reflected in the ORR’s documentation of the QX process and even though QX is not regulated by the ORR, it should be included in the ORR’s final determination documentation since it illustrates the expectation that other station users do contribute to common station facilities that they also benefit from (i.e. the “beneficiary pays” principle).

145. […]

146. The current lack of O&M and renewals cost contributions from the retail estate towards common stations amenities and assets leaves HS1 with a considerable windfall since it can recoup the full value of the SPI rental space by passing on the full O&M and renewals costs for all common station assets to train operators.

147. Train operators and their passengers cross subsidise assets that are being used to house a highly valuable shopping and dining destination that attracts not just passengers catching trains to/from St Pancras, while they do not benefit from the positive externalities that their presence creates for the retail estate.

148. The value of this retail estate is reflected in HS1’s margins on their retail and car parking business: for its 2024/25 budget, HS1 reported a 59% EBITDA margin[10]. This is suggestive of an overallocation of costs to other functions, namely stations renewals and QX charged to train operators.

149. A very clear example in which HS1’s retail business benefits from common station assets is where it places pop up retail units within the common station area. For example, the clothes retailer Reiss had for some time in 2024 a pop up for its children clothes range just opposite the entry to the queuing area for the international zone, taking up valuable space that otherwise could have provided waiting or seating space for passengers waiting for the check-in of their train to open. We are not in principle opposed to this flexible use of the common station area, but it does illustrate why this mixed use must also be fully reflected in funding contributions from all station users.

[...]

150. […]

151. […]

[10] HS1 Lender Presentation July 2024.

Environmental sustainability working group

152. We welcome further opportunities to increase cooperation with HS1 on key sustainability issues, where we are already enjoying productive cooperation. We therefore welcome the recommendation to establish a working group which will better structure cooperation in this area. In addition to the topics suggested for this working group, we would add climate adaptation. This is a key aspect of sustainability and requires parties to make best efforts to share relevant information and analysis and develop mitigation measures where appropriate.

As always we are available to discuss any aspect in this response further with you.

Yours sincerely

[redacted]

[redacted]

Head of Economic Analysis
Eurostar International Limited

Annex 1 – Overview of PAT change proposals deemed within scope of PR24 by the ORR

We welcome many of the ORR's "minded to" positions but on some we believe the ORR could have gone further. We summarise our views in the table below. Where we have more detailed feedback, this is provided in the body of the main response.

PAT change proposal	ORR minded to position	EIL view
Performance regime: HS1 can invoice operators who request a recalibration for the costs of doing so	Not approve	We had supported this change previously to avoid spurious recalibration requests.
Performance regime: allow for recalibration to take place during CP4, from September 2025	Approve	We support this proposal
Performance regime: HS1 can reopen the OMRC-A2/B calculations to reflect changes in performance risk resulting from recalibration	Approve only for recalibration that has been deferred from PR24	We disagree giving HS1 any new rights to reopen the regulated cost envelope and welcome that the ORR did not permit this beyond the single deferred recalibration. However we welcome the limitation of this right to reopen the cost envelope only for the recalibration that was deferred from PR24.
Possessions regime: update possessions allowance to reflect extended and standard possession allowance for CP4 and the number of possessions	Approve	We agree that this is necessary to enable HS1 carry out more significant CP4 renewals works.
Possessions regime: unused extended possession allowances can we rolled over year-on-year	Approved only for roll overs agreed and set out in the Engineering Access Statement	We agree that the Engineering Access Statement is an essential element to avoid uncontrolled and disproportionate roll overs that can jeopardise train operators' timetabling.
VRO: Update the definition of a subsequent Review Event threshold to refer to the volume forecast for the relevant year in the preceding VRO	Approve	We support this change but for the first VRO it should also refer to the volumes in the original charging model.
VRO: simplify the definition and clarify approach	Approve	We have no further comments.
VRO: cessation of freight triggers a reapportionment of fixed freight costs to train operators	Approve	We disagree. The volume risk for freight operations should not be transferred to passenger operators.
VRO: change the trigger from 4% to 10%	Not approve	We remain of the view that a higher trigger is proportionate to balance better the need for adjustments for a fair cost allocation, HS1's cost risks and certainty of charges and cost risks for train operators.
VRO: Operators should approve volume forecasts HS1 Ltd uses to execute a VRO if these are above the FWT.	Approve	We welcome the ORR's support though would ask for clarification that HS1 cannot override operators' FWTs and train forecasts for use in a VRO.
OMRCA2/B annual wash up based on actual traffic shares	Approve without trigger	We support this proposal in principle and have been engaging in detail with the

PAT change proposal	ORR minded to position	EIL view
		ORR-led stakeholder working groups. We continue to prefer a trigger threshold. Further details are in the main body of our response.
The APAt term in the wash up provisions is restricted to inflation indexation differences only. Separate terms are created to wash up OMRCA2 and OMRCB.	Approve	We agree to enhance clarity of the contractual charging terms and remove any grey areas.
Pass-Through Costs wash-up: full annual pass-through costs are washed up	Approve	We support this change. It reflects better the apportionment of costs based on actual traffic shares.
Pass-through Costs definitions: expand the definitions of a range of pass-through cost categories for ancillary costs	Approve inclusion only of energy management costs, REGOs, REACT and N-1 schemes.	We support the limited expansion of the existing definitions and the principle that HS1 should have strong incentives to control all its cost effectively and efficiently, so costs should be defined as pass-through only in exceptional circumstances. We provide further comments in the main body of our response, in light of ORR-led system discussions following the publication of the Draft Determination.
Pass-through cost definitions: add a new category for escrow investment project	Approve	Having received further information during the consultation period that […], we prefer to find a separate cost recovery agreement with HS1 rather than costs being recovered as pass-through or element of the HS1 O&M regulated cost stack. This allows HS1 to recover all reasonably incurred costs and train operators having the opportunity to review costs before agreeing to them.
AIRC: AIRC to be charged also on spot bid services	Approve	We disagree. We explained our views in the context of HS1's consultation on the ERTMS early design study. Further details are in the main body of our response.
The OMRCA1 wash up approach is changed so OMRCA1 applies to the ex-post volume of trains; that OMRCA1 is refunded if volumes are below FWT.	Approve where difference between actual trains and FWT is positive	We welcome the ORR's recognition that without this change, operators are being charged twice for one service where an FWT service is replaced by a spot bid service. We provide further details in the main body of our response since we continue to believe that direct cost charges can only be levied on trains that have actually operated.
Remove the floor to inflation indexation for OMRC so negative inflation (deflation) is passed on to the operators' charges.	Approve	We agree.
The DAB is used as the relevant dispute resolution body for delay attribution disputes to improve the efficiency and effectiveness of dispute handling.	Not approve	We do not understand the ORR's rationale for not approving this proposal. Following further system discussions we provide further comments in the main body of our response.

Annex 2 – Comments on ORR's analysis of cost allocation arrangements for HS1 stations

	ORR position	EIL comment
1	The charges diagram for QX references "some maintenance in retail areas" as not being chargeable to QX.	Can the ORR please specify what costs are exempted from QX. This is relevant to understand what assets are regarded as being the responsibility of third parties and not part of the common station assets.
2	The charges diagram for QX makes no reference of condition 102 of the SAC, which requires HS1 to make all reasonable efforts to recover contributions from third parties towards common QX where third parties benefit from common station amenities and services	This is an important reflection of the "beneficiary pays" principle guiding much of the stations charging regime. Even though QX is not regulated, it is important that HS1 is held to account to comply with this condition of the SAC. It also raises the question if there are any reasonable grounds in principle why LTC should be treated any differently in terms of cost allocation to QX.
3	Paragraph 4.29 sets out some of the factors that were considered where the relevant infrastructure interacts with other leases or sub-leases (and notes that a list of core considerations will be developed for use in subsequent periodic reviews).	Can the ORR specify which agreements it considered in its analysis, and how it satisfied itself that it covered all relevant third party agreements? Furthermore, did the ORR also consider other HS1 business (eg car parking) as part of this analysis?
4	The ORR references Schedule 10 of the HS1 Lease as the basis on which all assets listed there are funded from LTC levied on train operators that signed the station access conditions.	The list of assets in Schedule 10 is very general and gives no clear guidance regarding assets with mixed or exclusive usage. It is insufficient as a definitive basis that requires HS1 to charge 100% common station asset renewals solely to train operators via the LTC.

HS1 RESPONSE TO ORR PR24 DRAFT DETERMINATION

11 November 2024

Introduction

We welcome the ORR's positive draft determination (DD) for PR24, which recognises the improvements we have made since the previous periodic review and our constructive collaborative working with stakeholders during the PR24 process. The ORR found that our plans are of good quality and manage uncertainty more efficiently than in previous reviews. In particular, the ORR supported the Cost Policy we have developed for forecasting long term renewals costs and our setting charges to account for expected traffic growth which have led to a significant reduction in the renewals annuity.

We agree that we are in a much better position for CP4, with outcomes that support operator affordability while continuing to meet our asset stewardship obligations. The potential introduction of new operators would further reduce per train costs and improve outcomes for passengers through increased competition.

The DD proposes a number of adjustments to reflect opportunities for further efficiency. The ORR notes that each of the adjustments is a relatively small percentage of the total costs, reflecting the overall good quality of the plans. We have accepted most of the DD recommendations but there are some areas where, although we understand the intent of the ORR proposals, we do not consider they would deliver the identified efficiencies, or duplicate efficiencies already identified in our plans. We have outlined these in this document. We also note in this context that NR(HS) has identified separate concerns and will make these representations to the ORR for its consideration.

In terms of the ORR’s minded to conclusions on proposed changes to the Access Terms, we have fundamental concerns about some of the proposed amendments. The following changes to the Access Terms would impose substantial risks on HS1 Ltd:

- Inflation floor: We are very concerned by the ORR’s proposal to remove the floor to indexing OMRC by inflation which prevents deflation being applied to operators’ charges. This will create a misalignment with the costs we incur from NR(HS), which could result in HS1 having to absorb significant cost with no measures to prevent this. The ORR does not seem to have taken this into account and it is in direct conflict with ORR’s statement that HS1 should recover its full costs. This is not a proportionate and reasonable proposal.
- Annual fixed cost wash up: Unless mitigations are put in place, the proposal would expose HS1 to new risks, including credit risk for amounts owing between operators and risk of under recovery of OMRCA2 in the scenario where international services are planned but none are run. If these events materialised, this would have a significant adverse impact on HS1’s income. It is not proportionate or reasonable for HS1 to be exposed to these risks. If the ORR proceeds with this approach, the wash up approach would need to be amended to work effectively and HS1 needs to be funded for the additional costs to develop, implement and run the process.

For asset management, costs and charges, the main areas where we have not implemented the DD conclusions are:

- NR(HS) O&M efficiencies:
    - We have reviewed our asset management plans in light of the ORR's DD but cannot identify where further acceleration of asset management maturity beyond our plans could deliver additional, self-financing O&M cost efficiencies during CP4. However, with proportionate funding, efficiencies with longer payback periods can be explored.
    - NR(HS) does not think efficiency opportunities can be delivered through addressing contractual issues and notes this level of funding which be insufficient to deliver the services set out in our plans. HS1 supports NR(HS) being appropriately remunerated for services provided and risks it faces. NR(HS) will be providing new evidence to the ORR and we encourage the ORR to consider this. There will be no efficiency applied to the NR(HS) O&M costs in our November 2024 5YAMS.
- Renewals cost efficiencies: The DD has applied a 9% reduction to renewals costs for specific asset types (route civils; signalling and telecommunications; station lifts and escalators; and mechanical and electrical) and a 4% reduction to base costs across all asset types. We have examined these adjustments and do not believe they are appropriate:
    - The 9% adjustment is based on the efficiency realised in CP3 by moving from simple cyclic renewals to models based on asset condition data for the track asset group. For track assets, we moved from using manufacturers' recommendations on asset life, which were known to be conservative, to forecasting renewals requirements using the sophisticated track deterioration model developed in CP3. As our forecasts of the renewal requirements for the other asset types are not similarly conservative (they are either from risk-based modelling or asset life forecasts based on previous experience, and they have been challenged through the PR24 assurance process) it is not appropriate to assume a similar saving can be made in addition to the efficiencies already identified in our plans.
    - The 4% reduction in base costs is to account for possible double counting of risk and other factors. We have derived our cost estimates at a granular level and do not believe a blanket reduction across all assets is appropriate. The intermediate steps we applied to reduce route costs, before application of the Cost Policy, duplicate some of the issues raised by ORR. We believe that the P values selected are already sufficiently optimistic. Conclusions for route renewals should not be applied to stations renewals as these were estimated using SPONS or rates assured by DfT in PR19.
- Annuity modelling: The DD applies a range of small adjustments to the annuity modelling, in addition to the renewals cost efficiencies noted above. We have concerns about two of these adjustments:
    - The higher escrow returns assumption of 4.3% is not realistic given the uncertainty around the timing of the work to find solutions to enable higher returns and reflects generally short term forecasts which are not appropriate. We do not propose to use this rate but we will update our interest rate assumptions to reflect our latest forecasts.
    - Allowing small negative escrow balances in later years in the annuity modelling could set a precedent for acceptance of negative balances in earlier years and risk costly financing of renewals in the immediate control periods.

By applying our innovative new cost policy and weighting the escrow assumptions by expected future traffic volumes, our plans adopt a much less conservative approach to renewals than the ORR's PR19 determination. Combining these changes with the DD proposed changes to renewals costs and other modelling assumptions would materially increase the risk of future escrow underfunding at the time of the next periodic review. This would lead to unhelpful higher charges for operators at the same time as other significant costs are likely to be incurred (e.g. anticipated international station capacity enhancement and ERTMS implementation); it may also occur in the sensitive initial years of new operator operations.

We consider that less optimistic assumptions on renewals cost efficiencies and escrow returns would reduce this risk. Therefore, we can accept negative balances in the modelling provided the ORR confirms it would not allow negative balances unless a sensitivity analysis is undertaken and not in the two control periods immediately following a periodic review.

- Ballast renewal deliverability challenge: We have further reviewed our plans and believe that the delivery profile set out in our May 2024 5YAMS remains realistic. We have documented how the risk of delay has been considered and how we are mitigating against it. We will include this in our November 2024 5YAMS update.

We have discussed each of these points in this document and provided further explanation and additional evidence. Appendix A1 provides a brief summary of our position on each of ORR's DD conclusions and how we will take them into account in our November 2024 5YAMS. The resulting costs and charges will be set out in detail in our updated 5YAMS.

In this response document, we also discuss developments since the May 2024 5YAMS that will be reflected in our November 2024 5YAMS and that need to be taken into account in the ORR's Final Determination. These include:

- The Government's announcement that Employer National Insurance Contributions, which will have an impact on HS1 internal and subcontract costs, NR(HS)'s O&M price and renewals costs.
- Updated forecasts for passenger operators, given indicative volumes suggest forecasts for Year 1 are optimistic which will lead to under recovery of costs, particularly OMRCA1. We will use the domestic operator's volumes (not the domestic underpin volume) to allocate OMRCA1 charges in the Charging Model for full cost recovery.
- The revised outlook for freight volumes on the HS1 network. Due to market conditions and uncertainty, the most appropriate forecast is zero. We will use a shadow model with a forecast of 200 trains per year to calculate an indicative freight charge. We will also revise the Ripple Lane (domestic sidings) charge to reflect updated volume forecasts.

The DD recommended that we make a number of CP4 commitments in addition to those set out in our May 2024 5YAMS. We have accepted these, noting that some have been amended where an alternative approach is needed to deliver the objective, and have made five further commitments beyond what was recommended in the DD. We have recorded these in Appendix A2 and will reflect them in our November 2024 5YAMS.

The rest of this response sets out our thoughts on the ORR conclusions and, where appropriate, confirms that we will be adopting them in our 5YAMS. Where this is not the case, we present our alternative proposal and supporting rationale.

Please note that some parts of our submission contain confidential and commercially sensitive information. This information has been redacted, as shown by [●], in this public version.

We are preparing the revised 5YAMS for submission at the end of the November. This will reflect our position on the ORR's DD conclusions as set out in this response document. We will continue to engage with the ORR and stakeholders to support the ORR in making its Final Determination in early January 2025.

Contents

1 Asset Management Activity

1.1 Asset Management Strategies

1.1.1. Conclusion - the structure of the documents was in line with best practice

We welcome ORR's recognition of the improvements we have made since PR19 and the assessment that our asset management documents are in line with best practice.

Since the submission of our May 2024 5YAMS, HS1 Ltd has achieved ISO55001 certification for route and station asset management.

1.1.2. Conclusion - Track and Electrification asset groups represent best practice

We welcome the ORR view which recognises the investment and improvement made in CP3. We plan to continue to improve in CP4.

Paragraph 4.13 of the ORR DD notes that the electrification asset group is going through a step change in maturity at the end of CP3. It also notes that R&D projects have yielded technology that allows detailed data on asset degradation which the ORR expects to see rolled out and used to build mature data models in CP4. Our position is that the electrification discipline has the *potential* to go through a step change in maturity, subject to successful R&D trials that have taken place in CP3 and will continue into CP4. In CP3 we trialled several potential solutions to research our approach to transformation of this discipline, and there is a need to fully evaluate options for HS1 in an area where external research for high-speed assets is low.

This has not, therefore, contributed to a maintenance benefit as yet. As we are still in the research phase, the data output is not sufficient to build models similar to the track deterioration model, nor would such models have the same benefit.

1.1.3. Conclusion - there are opportunities to accelerate step changes in maturity in other asset groups

ORR concluded that there is a need to accelerate the rate of change in asset management maturity for signalling and control systems; route civils; stations lifts, escalators and travelators (LETs) and stations mechanical, electrical and plumbing (MEP). These asset groups should accelerate plans for gathering and modelling data.

Our plans to improve our asset management maturity are detailed in our SAMP and SASs and reflected in our CP4 commitments and NR(HS)'s One Plan. We believe that these plans are appropriate and proportionate. We have made specific plans for improving the collection of asset data and commitments to improving deterioration modelling.

Our SASs include plans to improve collection of data across the assets. This includes the installation of remote condition monitoring (RCM) on the following assets:

- Points, switches and crossings;
- Civils;
- Overhead contact system (OCS); and
- Stations (civils, lifts and escalators).

We are also planning to gather data using more machine-based and automated systems throughout CP4. This includes a range of potential solutions across the different assets, including:

- Use of drone technology on key buildings and civils assets;
- Fibre optic sensing on key points;
- Fitting sensors to maintenance vehicles to automatically collect condition information, such as forward-facing video and laser-based systems; and
- Extending vibration monitoring to gather greater insights on route M&E assets.

Our 5YAMS includes a CP4 commitment to produce an asset maintenance data and information system strategy for the deployment and integration of EAMS, GIS, and BIM systems. NR(HS)'s digital road map demonstrates how we will use this data more effectively by the end of CP4, through the deployment of EAMS2, the integration with a GIS system, and how data collected from RCM will inform risk-based maintenance and renewals investment decision making. This data will support improvements to asset deterioration models.

In CP4 we have committed to developing condition index metrics which will be used to monitor asset condition and then can be modelled for future maintenance and renewals scenarios. In the SASs we have committed to this for the following assets in CP4:

- Buildings and civils;
- M&E;
- OCS; and
- Stations (civils, lifts and escalators).

Our 5YAMS plans have been through rigorous assurance and challenge and we have not identified any areas for further asset management step changes to be introduced that meet the Re-build scenario that HS1 system stakeholders supported.

In Annex A of the DD, ORR notes that the limited size of the HS1 network should allow for clear, concise, agile management of an unpredictable risk such as climate change. ORR believes that this opportunity is currently being missed by the omission of a specific climate change adaptation or weather resilience SAS. We believe it would be beneficial to include a weather resilience strategy in each of our SASs as we update them in CP4 and have included a commitment to do this in Appendix A2; this will be reflected in our November 2024 5YAMS.

1.2 Renewals

Route and station renewals

1.2.1. Conclusion - planning for renewals over 40 years has improved significantly since PR19

We welcome ORR recognition of the significant improvements we have made in long term renewals planning since PR19.

1.2.2. Conclusion - there is an opportunity for efficiency in 40-year renewals plans, through asset data maturity

ORR recommends that improvements in asset management maturity, particularly for route civils; signalling and telecommunications; station lifts and escalators (LETs); and station mechanical, electrical and plumbing (MEP) , be accelerated; and that it is appropriate to assume a benefit from this in the 40-year plans now. The ORR notes that we achieved around 9% of efficiencies in CP3 by moving from simple cyclic renewals to models based on asset condition data for the track asset group. Based on the efficiencies realised on CP3, ORR proposes a 9% efficiency adjustment (that is, a 9% reduction in renewals costs) for the four assets groups noted above from CP5 onwards.

As noted by the ORR, the majority of the saving in CP3 was related to track assets. For track assets, we have moved from using manufacturers' recommendations on asset life, which were known to be conservative, to forecasting renewals requirements using the industry-leading track deterioration model developed in CP3. Our forecasts of the renewals requirements for the four other asset types identified by the ORR are not based on simple cyclic renewals based on manufacturers' recommendations. Therefore, it is not appropriate to assume a similar saving can be made. We explain this for each in turn below.

For **route civils** assets we use a risk-based modelling approach which is appropriate for the age of the asset. The risk-based approach is less conservative and improved condition modelling would not necessarily decrease renewals volumes (resulting in efficiencies), there is a risk that it could increase volumes. In addition, civils renewals volumes have already been challenged and reduced through PR24 assurance.

Renewals of **signalling and telecommunications** assets are largely driven by obsolescence so condition modelling would have limited impact on our approach. We have plans to improve our obsolescence strategy in CP4 and included a commitment relating to this in our May 2024 5YAMS. The bulk of CP5 renewals are for points operating equipment. We challenged the CP4 forecast robustly and volumes were reduced. We would need to assess the impact of this before considering a reduction in volumes for CP5. The introduction of ERTMS limits opportunities to deliver renewals efficiencies beyond CP5.

For station **LETs**, we have a small number of assets with a good understanding of when they will require renewal based on previous experience. It is difficult to see how efficiency will materialise for these assets through asset management maturity. The most cost efficient approach to installing data capture and monitoring equipment on station assets is to install it as part of a renewal. We have been installing this equipment on all new and renewed LET station assets for the last year and will continue this approach in CP4. Improved data collection will give maintenance benefits but could either increase or decrease forecast renewals volumes and therefore would not necessarily deliver renewals cost efficiencies.

Station **MEP** assets have been modelled to a relatively granular level and we believe planned renewals are appropriate. It is difficult to see how efficiency will materialise for these assets through asset management maturity. MEP asset performance data is being collected on a number of assets. Improved data collection will give maintenance and short term repair benefits but would not necessarily decrease forecast renewals volumes and so would not necessarily deliver renewals cost efficiencies. We commit to reviewing the MEP asset data monitoring plan for opportunities to improve it.

We have provided further commentary by asset category and time horizon in Appendix A3.

As a result of the above, we do not propose to apply the ORR proposed 9% efficiency to renewals in the other asset categories.

Route renewals

1.2.3. Conclusion - ORR supports the CP4 route renewals plans (noting deliverability challenges on CP4 ballast renewal)

We welcome ORR's support of our CP4 renewals plans and ORR's confidence that the increase in the volume of renewals in CP4 is deliverable with the improved governance now in place.

Paragraph 4.33 states that *"The mid-life ballast replacement programme will renew around half of the network track"*. Total HS1 track-km is 280. The ballast renewal programme covers 83 track-km (45 in CP4, 38 in CP5) which is around 30% of total HS1 track-km. The statement should be amended in the ORR's Final Determination (FD).

1.2.4. Conclusion - there are opportunities to review deliverability challenges for CP4 ballast renewal

ORR concluded that the volume and type of ballast renewal is appropriate and is satisfied that the cost estimate reflects the likely cost to deliver this work efficiently. ORR supports the ongoing work by HS1 and NR(HS) to finalise plans for this renewal but concluded that the project programme is likely to slip and recommended that we consider more realistic delivery profiles and set out the risks of delays in our November 2024 5YAMS update.

We have worked with NR(HS) to document how this risk has been considered through the PR24 process and how we are mitigating against the risk of delay; this will be included as an addendum to the Renewals Strategy in our November 2024 5YAMS. The addendum covers and expands on the work undertaken prior to the ORR DD, the lessons learnt during CP3, development work in progress and validation of delivery risk. The four-year on-site delivery campaign spans both CP4 and CP5 (Year 4 of CP4 to Year 2 of CP5) with a three year planning window in Years 1 to 3 of CP4. Following this further review, we continue to believe the ballast delivery profile set out in our May 2024 5YAMS remains an appropriate and realistic profile.

We also considered the impact of a delay in the delivery of ballast renewals (using the ORR's proposed profile) on the renewals escrow balance over CP4 and CP5 (see Part A of Appendix A4). There is limited impact on the escrow balance as the funds for the works remain in the escrow and are available to use when the works take place at the later date.

While there are still challenges to be resolved, significant progress has already been made to begin readiness work, establishing a strong footing to address challenges early in CP4. The Renewals Strategy addendum sets out lead indicators of success covering access, procurement, engineering requirements, testing and delivery, and achievements to date for each of these. It also summarises key development and design outputs for Years 1 to 3 of CP4.

We commit to develop, socialise and implement a stakeholder engagement plan for the ballast campaign in Year 1 of CP4, continue the development works and update system stakeholders of progress towards delivery in accordance with the plan.

Station renewals

1.2.5. Conclusion - ORR supports the CP4 station renewals plans (noting scope clarifications on a small number of projects)

We welcome ORR's view that the volumes, timings and costs of station renewals are reasonable.

1.2.6. Conclusion - there are opportunities for efficiency through scope review on specific projects

ORR identified three projects at St Pancras International station, where they believe there is a complex interaction between the scope of the project and other works funded by third parties, such as retail units and the NRIL Thameslink box. ORR concluded that there are likely to be opportunities for efficiency in the scope of these projects, and that an efficiency challenge of 5% (£150k) across these three projects is appropriate.

We do not believe that the ORR's application of an efficiency challenge for the three projects identified is appropriate. The HS1 assets specified in these projects are independent of the assets of other users of St Pancras International station. Therefore, HS1 renewal of the specified assets will not yield any savings to third parties operating at St Pancras International.

The projects are:

- Uninterruptible Power Supply (UPS)

  There are no directly electrically supported interfaces between HS1 station systems and adjacent operations, facilities and buildings including St Pancras Chambers and Hotel, the TfL station, and the Thameslink box. The St. Pancras station UPS units are designed to provide security of local electrical power supply condition but there is no direct full system control, support or reliance between each neighbour and their systems. Each property owner/operator is directly in control of their own assets and systems.

Any interfaces between station systems and external systems are purely for exchange of data/ telemetry information. There is no physical supporting of third-party systems (such as those in the Thameslink box) directly from any HS1 station UPS unit, other than to protect St. Pancras station systems and the station safety environment. That is, a computer room UPS that supports the HS1 station data equipment may indeed connect to the Thameslink box shadow fire panel that is situated within the HS1 station control room but this supply does not mean that the Thameslink box can reduce the renewal of its own system as the HS1 supply is to support the shadow fire panel and thereby protect the HS1 asset not the Thameslink box fire system asset. NRIL will still renew the Thameslink box systems when planned and the HS1 supply to the shadow fire panel has no impact on that renewal.

- Heat pumps, to replace boilers and chillers

  The connections from the HS1 station heating and cooling system to third party systems are for take-off purposes only, meaning that a short stub service connection is provided to the third party, which is not a large material additional system. This means that the delivery of the station heat pump project will not save any third party from delaying or deferring any renewal of their own heating and cooling systems or assets. The change to the station heating and cooling will potentially increase the cost to third party users as they will need to increase their own system operating specification to adapt to the change to lower temperatures, slower heat transfer and greater pumping pressures needed to deliver the agreed operating temperatures.

  The HS1 station system only provides cooling or heating provision via a heat exchanger and does not have a direct link to the Thameslink box heating or cooling service and does not impact on the Thameslink box system renewal.

- Toilets and toilet vacuum pumps

  The renewal of any food and beverage retail unit that has toilet facilities is wholly funded by the retailer at fitout or refurbishment. In some cases, the retailers have funded an individual vacuum system for their own food and beverage unit [●] to ensure that they maintain an optimised system for service. Both systems are then connected to the sewer via a common station gravity connection. All other retail units that have a toilet facility, as well as public and back of house toilet facilities, have a connection to either a station vacuum system or a gravity sewer. Changes to the vacuum system are not impacted by the number of toilet facilities as the original specifications and sizing of the systems have either (i) not been impacted by changes to the station operation or (ii) where impacted, the retailer has paid directly for an independent system [●]. The station is required to provide a sanitary connection. The station is designed to have a reduced amount of direct sewer connections which necessitates the requirement for the evac vacuum system. This is covered in the service charge of the unit.

When scoping future renewals projects, we will provide clear evidence that interactions with third parties have been considered within the project scope. We will add this as a regular part of our governance for all station projects.

1.2.7. Conclusion - there is an opportunity to improve estimating and governance

ORR concluded that there is an opportunity to improve estimating and governance, to ensure work is done at the right time and to reduce unplanned outages. In this conclusion, the ORR made two specific recommendations that we respond to in turn:

1. ORR recommends that HS1 accelerate gathering and use of data for LET and MEP assets which should help to improve estimating the timing, scope and cost of stations renewals.

   It is not possible to commit to ORR's recommendation as set out in the DD.

   For LETs, HS1 has installed monitoring equipment on LETs that were renewed in CP3 and set out an improved LET monitoring plan in the SAS which implements asset monitoring equipment/ systems as we renew LETs across CP4. It is not possible to commit to implementation beyond this plan as it is costly to retrofit the monitoring equipment and systems outside of renewals. HS1 can commit to reporting on the progress of the improved LET monitoring plan outlined in the SAS in the HS1 AMAS throughout CP4.

   MEP asset performance data is already being collected on a number of assets. We commit to reviewing the MEP asset data monitoring plan for opportunities to improve it. We will report back in the Year 1 AMAS.

2. ORR recommends that the governance of stations renewals should be reviewed including sharing best practice from route renewals.

   We agree with this recommendation. We commit to reviewing the governance of stations renewals in Year 1 of CP4. The focus of the review will be to align the governance of stations renewals to the governance of route renewals, for example, better use of leading indicators and better packaging of works.

We have included these three commitments as CP4 commitments (see Appendix A2) and these will be reflected in our November 2024 5YAMS.

1.3 Maintenance

1.3.1. Conclusion - ORR supports plans for maintenance activity in CP4 (noting efficiency opportunities)

We welcome ORR's support of our plans for maintenance activity in CP4.

1.3.2. Conclusion - agile changes made in CP3 demonstrated best practice

We welcome ORR's conclusion, which recognises maintenance efficiency improvements for more critical assets and significant agility in asset management improvement in CP3.

1.3.3. Conclusion - there are opportunities to optimise maintenance strategies in less mature asset groups

ORR concluded that improvements in the approach to assets with lower asset management maturity could produce more optimised maintenance plans and reduce costs associated with maintenance.

We support NR(HS)'s approach to maintenance as set out in the SASs. However, HS1 does not have complete visibility of NR(HS) maintenance plans due to commercial sensitivities.

NR(HS) has made commitments over CP4 that will support asset management maturity and increased efficiency in maintenance. These include the introduction of RCM, and the use of machine-based technology to support better asset data gathering. The deployment of EAMS and GIS will also support more efficient asset management. The track deterioration model developed in CP3 uses a more mature asset management approach, but this has not yet resulted in maintenance reductions.

1.4 Engineering access

1.4.1. Conclusion – ORR supports CP4 access plans (noting deliverability challenge on CP4 ballast renewal project)

We welcome ORR's conclusion that our estimates of access are reasonable.

1.4.2. Conclusion – there is an opportunity to improve mid-life ballast plans, for deliverability

ORR concluded that, because of the operators' sensitivity to changes in the access plans, HS1 Ltd should consider how different ballast delivery scenarios might impact access requirements; and how this could be accommodated by the system.

As noted in Section 1.2.4 (ballast renewal), we have outlined for the ORR how the risk of delay to the ballast delivery programme has been considered through the PR24 process and how we are mitigating against the risk of delay. This covers and expands on the work undertaken prior to the ORR DD, the lessons learnt during CP3, development work in progress and validation of delivery risk.

It is on this basis that we believe our proposed ballast delivery profile remains appropriate and realistic. In our updated 5YAMS, we will therefore retain the CP4 access plans presented in our May 2024 5YAMS.

1.5 Research and Development (R&D)

1.5.1. Conclusion - ORR is supportive of the CP4 R&D fund

We welcome the ORR's support for the level of R&D funding for CP4 and the recognition that CP3 R&D delivered significant benefits relative to cost.

We are pleased that the ORR recognises the effective use of R&D funding in particular disciplines, specifically the use of LiDAR and optical recognition predominantly on OLE assets. However, it should be noted that while these projects did provide a positive, agile change to asset management in the longer term, this benefit was potentially outweighed by the transformational effect on operations and maintenance for this asset.

1.5.2. Conclusion - ORR is supportive of the proposed R&D funding mechanism and governance

We welcome ORR support of our proposed R&D funding mechanism and governance for CP4. We are pleased that ORR views the transfer of stewardship of the fund to NR(HS) as improving efficiency and has confidence in the assurance that will be given to stakeholders.

Asset management responsibilities are split between HS1 and NR(HS). Our proposals for governance of the CP4 R&D fund are appropriate and efficient for the proposed use of the fund as set out in the Joint R&D Strategy, in which most of the R&D activity is focused on supporting NR(HS) operations, maintenance and renewal activities.

Paragraph 4.89 of the ORR DD states that *"Details of the operators' role need to be agreed between HS1 Ltd and operators before the start of CP4"*. This is being developed by NR(HS) as part of the CP4 Readiness Plan. As part of this process, HS1 is planning to host a lessons learned session with stakeholders in November. Further detail is provided in Section 1.5.3.

1.5.3. Conclusion - there is opportunity to prioritise R&D funding to accelerate asset data maturity

ORR has concluded that we could accelerate improvements to asset management maturity in some asset groups, which should deliver efficiencies and benefits earlier in CP4 and that this may involve reprioritising R&D projects or reviewing their scope. ORR has concluded that there is sufficient R&D funding in CP4 and sufficient flexibility to support this acceleration.

HS1 supports this approach. The acceleration of schemes that deliver asset management maturity continues the approach NR(HS) has been trialling in CP3.

It should be noted that, while positive steps have been achieved to identify technological solutions to asset management interventions for high speed assets during CP3, such as automated OLE inspection mechanisms, success beyond initial trials into working implemented solutions and embedment phases remains work in progress.

The general purpose of R&D schemes is to undertake trials and achieve resolution of the pre-defined problem/opportunity statement, noting that the specific nature of R&D precludes tangible benefits being derived from all trials. It is common that initial trials fail until a successful solution is achieved. Our CP4 R&D strategy enables us to take an agile and balanced approach to managing the portfolio, which includes continuing CP3 trials to implement and embed, sighted and/or new innovation opportunities to trial on UK high speed rail, PhD research and seeking beneficial resolution to problem statements. Taking a blended approach allows us to scan the horizon and make use of R&D in an agile and flexible way, making both investments for immediate benefit within CP4 and longer term system benefit.

We have found in CP3 that the quality of technology may be 'ready' for the typical rail industry but the higher quality and/or tolerances essential for a highspeed railway are not currently available or attainable, which is the current blocker to success of R&D on HS1 being more readily realised. Reflecting on this, we have matured the definition of CP4 R&D for high speed from that of typical R&D to fit the bespoke nature of HS1 in the UK market. We have proposed to define R&D for CP4 as "Trialling, developing and embedding technology, process, or ways of working that have not been previously applied in the High Speed 1 System".

We support NR(HS) managing the R&D fund in CP4 and they will utilise the funding in an agile way as set out within the R&D Strategy, prioritising schemes regularly to provide system benefit. Changes to governance arrangements are required to ensure that R&D trials are undertaken at a fast pace and also successfully implemented and embedded. NR(HS) will outline the forward delivery framework for R&D to target areas of opportunity and continue to hold a technical R&D forum, where SMEs can engage on ideas, benefits and challenge statements to utilise R&D funding effectively. NR(HS) will report on progress of delivery against the R&D portfolio to HS1 on a quarterly basis and within its AMAS. The framework will set out the improvement opportunity, expected benefits and proposed level of funding to be spent by year of the control period. NR(HS) will have overall governance authority over spending arrangements for the R&D portfolio in order to achieve the outcomes for the system.

HS1 will work with NR(HS) to review and agree the revised R&D definition and governance arrangements with ORR prior to the commencement of CP4.

Success of the R&D portfolio, and a prioritised and targeted approach, requires resource to support the R&D programme, the production and conclusion of business cases, reprioritisation of schemes targeting asset management maturity and implementation and embedment following successful trials. In CP3, resources have been funded directly from the CP3 R&D portfolio; however, NR(HS) was requested to fund resources from within the NR(HS) O&M AFP in CP4. The ORR DD rejected the funding of the R&D enabling resource (Section 2.2.5); if this remains the case in the FD, NR(HS) will fund this resource from within the £4m of R&D funding.

Comments on Annex A of the ORR DD

- Paragraph A.32: This paragraph states that the ORR *"proposed an R&D fund to facilitate a step change in track deterioration modelling"* which is incorrect. For the R&D fund allocated to HS1 during PR19, the only guidance given was that it should deliver long-term cost savings for train operators. There was no explicit requirement for the R&D fund to facilitate step changes in deterioration modelling. The track deterioration model developed in CP3 was <u>not</u> funded though the R&D fund; it was part of our renewals capability development programme and was therefore funded from escrow (see Section 13.4 of our May 2024 5YAMS). It would be helpful to understand if this clarification of the actual funding mechanism for track deterioration modelling would have an impact on the DD conclusion on reprioritisation of R&D funding.
- Paragraph A.51: The R&D fund is being used to inform our thinking in the areas mentioned such as drones for inspection and sensors for real-time condition monitoring for selected assets and areas of HS1. Our view is that these R&D projects should not focus on specific products as we would consider this to be part of implementation rather than R&D.

- Paragraph A.69: No R&D funded projects in CP3 have yet led to full implementation; this is built into the PR24 plans for delivery in CP4. The named projects, LiDAR and optical recognition, were not agile process projects and have not yet been implemented. In addition, it should be noted that what has worked in CP3 would not necessarily have the same transformative impact in other asset areas.

1.6 Operations and Train Performance

1.6.1. Conclusion - ORR supports the CP4 operations plans

We welcome ORR support of the CP4 operations plans which were comprehensively reviewed and updated, with stakeholder engagement, during CP3.

1.6.2. Conclusion – there are opportunities for further improvement - ORR expects a commitment by HS1 Ltd to demonstrate improvements in operations, around managing recovery

ORR requested that we include a commitment to demonstrate, by the end of CP4 Year 1, improvements around managing the recovery of train services following an incident. We understand that this recommendation relates to NR(HS)'s operational strategy and plans for changes to maintain high levels of train performance and improve incident response and recovery.

NR(HS) has already made significant progress since its 5YAMS submission in May 2024 with the appointment of Service Delivery Managers (SDMs). All five SDMs will be fully trained by the start of CP4. The 2024 Olympics and Paralympics provided an opportunity to test the Service Delivery Concept ahead of the SDMs starting in-post. This was successful, resulting in NR(HS) achieving high levels of performance with just 0.90 seconds delay per train recorded during the period.

We agree with this request for a commitment. We expect NRHS to demonstrate that changes around managing recovery of train services have been made and benefits are being realised by the end of CP4 Year 1. We commit to reporting on this progress in the Year 1 CP4 AMAS.

This commitment is included in Appendix A2 and will be reflected in our November 2024 5YAMS.

1.7 Safety

1.7.1. Conclusion - ORR supports the CP4 safety strategy

We welcome ORR support of the CP4 safety strategy.

1.7.2. Conclusion - there are opportunities for further improvement - ORR expects a commitment by HS1 Ltd to report on 'safety by design' in CP4 annual reporting

We recognise the increasing opportunities to mature our approach to safety by design, as we start to undertake more design work in CP4. We will commit to reporting on safety by design in our AMASs throughout CP4. This commitment is included in Appendix A2 and will be reflected in our November 2024 5YAMS.

1.8 Environmental sustainability

1.8.1. Conclusion - ORR supports HS1 Ltd's priorities on environmental sustainability

We welcome ORR support of our environmental sustainability priorities.

1.8.2. Conclusion – there are opportunities to improve - ORR expects a commitment by HS1 Ltd to lead a working group with stakeholders, on barriers to environmental sustainability

Following examination of the HS1 corporate environmental strategy, ORR recommended that HS1 Ltd commit to lead a working group in Year 1 of CP4, with involvement from DfT, suppliers and other relevant stakeholders, to seek a way forward on the issues of zero emissions vehicles, renewable energy, circular economy and biodiversity.

The ORR's recommendation covers work in four different areas which need different approaches for overcoming barriers. We respond to these in turn.

For **EV fleet infrastructure**, this objective requires involvement of DfT as the owner of Singlewell depot. We agree a working group with NR(HS) and DfT would be useful to discuss possible solutions to introduce charging infrastructure at the site. We commit to holding the working group in Year 1 of CP4 and reporting on it in our Year 1 AMAS.

For **renewable energy initiatives**:

- Solar panels: since the May 2024 5YAMS, we have made progress with DfT in establishing a possible mechanism for third party funding. Therefore, a working group is not needed as it would be more effective and efficient for HS1 to lead on the initiative. We commit to reporting back on progress in the Year 1 AMAS.
- For wind and hydro: a working group would not be effective at this stage. We think the focus should be on successfully delivering the solar panels initiative before turning to wind and hydro.

For **circular economy**, HS1 and NR(HS) commit to exploring options to integrate circular design principles and sustainable procurement into future projects, and expand our existing circular economy plan to reflect this. As the asset owner, HS1 will involve DfT in this workstream if required. We will report progress in our annual ESG reports under the 'Resource Use and Waste Impacts' section, with key updates provided after Year 2 of CP4 (2026-27 ESG report).

For **biodiversity**, HS1 and NR(HS) have planned work in this area and will be able to take this forward together, so this does not need a working group. We provided supplementary information to ORR in July 2024 outlining this. We commit, by the end of Year 1, to conducting a biodiversity re-baseline survey and to producing a management plan to achieve net gain. The management plan will have regard to priorities set in Local Nature Recovery Strategies and the Government's Environmental Improvement Plan. The outcome of this work will give HS1 and NR(HS) the information needed to take a future business decision on implementation of management techniques. We commit to reporting on this at the end Year 1 of CP4.

Annex D of ORR's DD noted our commitment in relation to scope 3 emissions. We commit to developing supplier engagement targets by Year 1 of CP4 and liaising with key suppliers to monitor their progress on delivering against these targets in CP4. We further commit to incorporating supplier-specific data into our annual Carbon Footprint Analysis by the end of Year 2 of CP4 to develop an updated scope 3 emissions baseline. We will report on the progress for this commitment in our annual ESG reports.

These commitments are included in Appendix A2 and will be reflected in our November 2024 5YAMS.

1.9 Signalling Upgrade (ERTMS)

We welcome ORR's acceptance of our proposals.

2 Cost Assessment

2.1 Renewals

2.1.1. Conclusion - ORR supports the CP4 renewals costs

We welcome ORR support of our CP4 renewals costs.

The ORR will be aware of the Government's recent announcement in the 30 October 2024 Budget that, from April 2025, employers' National Insurance Contributions (ER NICs) will increase from 13.8% to 15%, and the threshold at which businesses begin paying ER NICs will be lowered from £9,100 to £5,500. This is an uncontrollable impact that will increase NR(HS) staff and sub-contractor costs for renewals works. Due to the diverse scale of renewal types and where they fall in the control period, we propose that the ER NICs impact on CP4 renewals costs is managed via the project change control process under the 'exceptional' category. Therefore, we will not adjust the CP4 renewals cost in our November 2024 5YAMS.

2.1.2. Conclusion - ORR supports HS1 Ltd's introduction of its 'cost policy' for renewals in CP5-CP11

We welcome ORR support of our cost policy for CP5 to CP11 renewals and the recognition that it is generally consistent with best practice and a significant improvement on PR19 cost estimating.

2.1.3. Conclusion - ORR supports HS1 Ltd's approach for splitting costs between variable and fixed

Our charging models split renewals and maintenance costs between "wear and tear related" and "non wear and tear related" based on engineering judgement. We welcome the conclusion that our engineering judgements were reasonable overall.

ORR's independent judgement suggested a slightly different split for a small number of asset types. The ORR DD adjustments and our response are summarised below.

Table 1: ORR adjustments to fixed and variable cost splits

Asset type	ORR adjustment	HS1 response
Underbridges	Move from 100% non wear and tear to 25% wear and tear/ 75% non wear and tear	Agree
Acoustic barriers	Move from 75% wear and tear/ 25% non wear and tear to 50% / 50%	Agree
Embankments	Move from 25% wear and tear/ 75% non wear and tear to 50% / 50%	HS1 embankments are designed to modern standards and constructed from engineering materials. We do not believe that running trains that the embankments have been designed for will affect the rate of deterioration of the embankments. We will retain the 25%/75% split as used in our May 2024 5YAMS.
Points operating equipment	Move from 50% / 50% to 40% wear and tear/ 60% non wear and tear	Agree

Asset type	ORR adjustment	HS1 response
Contact wire	Move from 100% wear and tear to 90% wear and tear/ 10% non wear and tear	HS1's contact wire is designed to modern standards and a higher tension than NRIL. To date weather (heat / wind) has not caused any significant deterioration of the wire and it is not forecast to impact renewals in the future. We will retain the 100% wear and tear split as used in our May 2024 5YAMS.

2.1.4. Conclusion – there are opportunities for efficiency (cost savings) through asset management maturity

As noted in Section 1.2.2 above, the ORR DD concluded that the volume of renewals in the 40-year plan is likely to reduce as asset data and models become more mature in CP4. The DD applied a 9% efficiency to renewals in the route civils; signalling and telecommunications; station LET; and station MEP asset groups, starting in CP5.

We set out our thoughts on this conclusion in Section 1.2.2. It is important to note that if the 9% reduction had been applied to the base cost, the Cost Policy scoring workshops may not have scored the Cost Policy confidence and complexity levers in the same way (i.e. if an adjustment is applied to the base costs, subsequent parts of the process would also need to be revisited for the reasoning to remain valid).

We are also concerned that applying the 9% reduction to renewals costs, combined with the other proposed DD adjustments to the annuity, would increase the risk of future escrow underfunding and higher charges with detrimental impacts for operators. We set this out in more detail Section 3.1.4 and Appendix A4.

2.1.5. Conclusion - there is an opportunity to improve the ‘cost policy’ calculations at future periodic reviews

ORR recommends that the cost policy methodology is improved before the next periodic review to include probabilistic risk. ORR analysis indicated that there was a small skewing of the stations renewals cost estimate, increasing it by approximately 0.5%. The DD applied a 0.5% reduction to station renewals costs starting in CP5, to correct for this.

The Cost Policies for route and stations were developed during PR24 and supported by stakeholders. We will commit to further development of the Cost Policies during CP4, evolving them into integrated cost models, linking volumes and HS1 outturn renewal costs, considering probabilistic risk application and methodology improvements.

In our November 2024 5YAMS we will apply a 0.5% reduction to station renewals costs starting in CP5 as recommended in the ORR DD. As we develop the station Cost Policy into the integrated cost model, we will review the existing levers which may support a more optimistic forecast of station renewals in the longer term (CP8 to CP11). We do not believe there are significant step change opportunities for station asset renewals in the CP5 and CP6-7 time horizons due to the constraints of the built environment in which the assets sit (specifically the complexity of St Pancras) and the assets to be renewed in those time horizons.

2.1.6. Conclusion - there is an opportunity for efficiency through better 'base cost' data at future periodic reviews

ORR noted that we followed a logical process to create base cost data, for example obtaining actual costs for similar work undertaken by NRIL or supply chain estimates, but that this may already contain realised risk, inefficiencies and supplier costs, which are difficult to strip out. ORR noted that this may create a double counting of risks or other factors when these are applied later in the Cost Policy. ORR applied a 4% efficiency adjustment to all renewals, starting from CP5.

Our position is that the current outcome of the Cost Policy is a reasonable indicative cost for the route and stations renewals workbank for CP5 to CP11. We do not believe that it is appropriate to apply a 4% efficiency overlay to renewals costs for the following reasons.

For **route renewals**:

- Our base costs estimates are made up of direct costs plus indirect costs. Each category of indirect costs has been calculated as a percentage of direct costs. We have not applied a blanket percentage uplift but have used values which are specific to the asset, sub-asset and the type of renewal. We do not believe applying a blanket 4% reduction across all assets is appropriate.
- As set out in Section 13.5.2 of the May 2024 5YAMS, before application of the Cost Policy to route renewals, we applied four intermediate steps to reduce the CP5-CP11 cost. These intermediate steps duplicate some of the issues raised by ORR and we would not have applied them in the same way if the rates had been adjusted prior to their application. Intermediate steps 1, 2 and 4 normalised the:
    - Indirect costs, where a common project stage was chosen, further into the project lifecycle where scope is more certain, therefore reducing the percentage;
    - Design cost overlay to be a simple or complex renewal; and
    - Fixed PMO cost (not a percentage overlay against each renewal) for each control period.
- We believe that the P values selected, coupled with the intermediate steps, are already sufficiently optimistic. It should also be noted that between our Draft 5YAMS and our May 2024 5YAMS submissions, based on dialogue with the ORR, we revised some of the 'P' values to be a minimum stretch in CP8 to CP11, further reducing costs to reflect an optimistic outlook. Overlaying a further 4% efficiency would be overly optimistic.

For **stations renewals**, we did not use NRIL or supply chain estimates in deriving base costs. We used SPONS estimating cost guides to create the rates, or we used rates that were assured as appropriate base costs in PR19 by DfT and their external consultant review. It is therefore not appropriate to apply conclusions on route renewals to stations renewals.

We have provided further commentary by asset category and time horizon in Appendix A3.

As a result of the above, we do not propose to apply the ORR proposed 4% efficiency to renewals from CP5.

We also set out in Section 3.1.4 our concern that applying overly optimistic assumptions on long term renewals costs, combined with the other DD adjustments to the annuity, increases the risk of future escrow underfunding and higher charges with detrimental impacts for operators.

2.2 Operations and Maintenance

2.2.1. Conclusion – ORR supports HS1 Ltd's own costs

We welcome ORR's support of our own costs, the conclusion that they are consistent with our duties under the Concession Agreement and at a level which was deemed efficient.

HS1 will need to increase HS1's own cost for CP4 in our November 2024 5YAMS because of the Government's 30 October announcement on changes to ER NICs (see Section 2.1.1). This uncontrollable cost increase will affect HS1 staff costs and technical support/consultancy costs, and we are investigating which HS1 subcontract costs will be affected. This also has an impact on NR(HS)'s CP4 costs, outlined in the next section on NR(HS)'s O&M costs.

If the ORR also makes certain decisions in the FD, there will need to be further increases in HS1's own costs. These would be for:

- If the ORR decides to impose an annual fixed cost wash up with possibility of mid-year wash ups (which HS1 does not support), this would impose additional costs on HS1 to develop, implement and run (see Section 4.1.4).
- If ORR decides HS1 should explore a change in the contractual framework to move to the DAB (which we do not think is necessary), the funding for the additional costs for undertaking the assessment to inform any decision (see Section 4.4).

We will provide further justification and detail on these cost estimates to the ORR in our November 2024 5YAMS.

2.2.2. Conclusion - ORR supports the proposed criteria for pass-through costs

We welcome ORR's conclusion that the pass through costs in our May 2024 5YAMS are reasonable.

In our May 2024 5YAMS, we set out our proposals to amend the definition of pass through costs in the Access Terms to support the most efficient approach to recovery of costs incurred by HS1. Further detail in relation to this is set out in Section 4.1.3.

2.2.3. Conclusion - ORR supports NR(HS) base costs for operations & maintenance (noting opportunities through efficiencies and markups, below)

We welcome the ORR's conclusion that NR(HS)'s base costs i.e. activity levels and unit rates at the start of CP4, were reasonable and that risk allowances, profit margins and efficiencies had been estimated by NR(HS) using clear, logical processes.

As noted above in the section on HS1's costs, the Government decision to increase the ER NICs is also an uncontrollable impact on NR(HS)'s staff, consultancy and subcontractor costs. NR(HS) and HS1 will need to revise the NR(HS) O&M budget to reflect this in our respective November 2024 5YAMS submissions. We expect NR(HS) to provide further justification and detail on these cost increase estimates in its November 2024 5YAMS.

2.2.4. Conclusion – there are opportunities for efficiency in operations and maintenance costs, through accelerating asset management maturity

The ORR DD concluded that there are opportunities to improve efficiency through acceleration of changes in asset management maturity (as discussed in Section 1.1.3) and that better understanding of assets could generate savings to NR(HS) operations and maintenance costs in CP4. Based on underspends in CP3 and planned efficiencies in CP4, ORR estimated that NR(HS) could deliver approximately £2-3m per year more efficiency from its operations and maintenance spend.

We have reviewed our asset management plans in light of the ORR's DD and cannot identify where additional self-financing O&M cost efficiencies from further acceleration of asset management maturity could be derived during CP4 beyond those already incorporated in our plans.

Our SAMP and SASs detail our plans to improve our asset management maturity. These are reflected in our CP4 commitments and NR(HS)'s One Plan. The SAMP describes our strategy for maturing our asset management approach over CP4 and how we intend to move from predominantly time-based interventions to risk-based interventions where appropriate. The efficiency benefits from this approach are already embedded into our 5YAMS. We are unclear how further efficiencies could be made.

As set out in Section 1.1.3:

- Our SASs include plans to improve data collection across the assets. This includes the installation of RCM and plans to gather data using more machine-based and automated systems.
- Our 5YAMS includes a CP4 commitment to produce an asset maintenance data and information system strategy for the deployment and integration of EAMS, GIS, and BIM systems. This data will support improvements to asset deterioration models.
- We have committed to developing condition index metrics in CP4 which will be used to monitor asset condition and then can be modelled for future maintenance and renewals scenarios.

Once condition index metrics are established, these can be used to monitor the deterioration of asset components. This will naturally lead to a move away from the risk-based modelling approach used for PR24 towards more refined asset models in PR29. For civils assets we do not believe a 'step change' (interpreted as a high cost, comprehensive data driven model) is proportionate for the asset modelling.

We agree with the ORR's recommendation to manage the civils assets in smaller groups of similar asset types of earthworks, retaining walls, bridges etc. These would benefit from some high level whole life cost models developed through CP4 to support simple spreadsheet deterioration models. We are unclear how the models could introduce O&M cost savings.

We note however that, with proportionate funding, efficiencies with longer payback periods can be explored. We do not plan to implement a step change in our asset models in CP4. We will, however, continue to evolve the models we have. As stated in the SASs, we will be improving the buildings and civils; track; ballast; sleepers; overhead contact system and mechanical and electrical asset models. The improved asset data we will be gathering will improve our asset modelling capabilities as committed to in the SASs. We believe this is reasonable and proportionate to achieving the performance levels and maturing the efficiency of the system over CP4.

2.2.5. Conclusion – there is an opportunity for efficiency through contractual mechanisms

ORR concluded that the current contractual arrangements are not incentivising efficient behaviours in the system. ORR estimates total efficiency opportunities of £14.7m over CP4 (£3m per year). The main efficiency opportunities are:

- Contract risk: changing risk funding from P80 to *"between NR(HS)'s P60 and P80 values"* would save around £1.65m (out of £4m) over CP4
- Outperformance mechanism: this is not incentivising efficient behaviours and none of the HS1 system stakeholders are supportive of it. Removing it would allow the reasonable profit margin to be reduced from 8% to 6.6% by removing the risk/reward imbalance, saving £3.7m over CP4
- Protection from inflation: the provision in the OA for RPI +1.1% inflation on NR(HS) is excessive; removing the +1.1% would save £2.9m over CP4
- Enabler costs: ORR concluded that it is not reasonable to pass on costs for training or developing people up to the standard already achieved by comparators (e.g. other NR(HS) asset groups, or NRIL), as the benefits stay with NR(HS). Removing these would reduce enabler costs by £6.5m over CP4 (out of a total of £14.7m enabler costs)

ORR concluded that the O&M budget should be adjusted by £3m per year, and that this can be achieved either by accelerating improvements in O&M/asset management or by addressing some of the contractual issues. ORR asked HS1 to set out how to meet this challenge in the November 2024 5YAMS.

NR(HS) has noted the level of O&M funding proposed in the ORR's DD for it to deliver the current 5YAMS commitments and performance levels (i.e. those required for the agreed Rebuild scenario), is likely to be insufficient such that the O&M contract would become unprofitable by the end of CP4. NR(HS) does not think the efficiency opportunities can be delivered either through accelerating improvements in O&M/asset management (as outlined in the section above) or through addressing contractual issues. Therefore NR(HS) will not be revising their O&M Annual Fixed Price (AFP) in the November 2024 5YAMS submission.

HS1's view is that NR(HS) should be appropriately remunerated for providing the O&M services needed to meet the Asset Stewardship obligations under the Concession Agreement and the risks that NR(HS) faces. We understand that NR(HS) is making representations to the ORR to support its position on the pricing of its AFP. We encourage the ORR to review the additional evidence and take this into account in its FD.

We have not been in a position to review the detail of NR(HS)'s representations before the response deadline. There is also a certain level of confidential evidence that is available to the ORR and not HS1 (the Operator Agreement is not an 'open book' contract). Therefore, we are not able to comment fully on the findings on contractual inefficiencies.

We have reviewed the ORR's recommendations on the enabler costs with NR(HS) in detail. HS1 supports the £6.5m funding for enablers in the NR(HS) AFP which will enable a digital step change to deliver more efficient O&M. Removal of these enabler costs would put at risk the delivery of efficiencies in CP4. Table 2 breaks down the £6.5m total cost into its components and sets out the benefits of each.

Table 2: Enablers in NR(HS) Annual Fixed Price

Enabler	Value over CP4	Description and benefits
Transformation Programme	£0.31m	This is a CP4 year 1 only cost, for closing out and embedding the business change associated with the NR(HS) evolution programme from CP3, which includes the revised ways of working detailed in the Asset Management strategy. The outputs enable the delivery of efficiencies in CP4.
Infrastructure - GIS Capability	£0.55m	Implementation of a Geospatial Information System (GIS) to integrate with the new Asset Management system (EAMS2). HS1 has made a CP4 commitment to deliver an integrated solution combining EAMS2, GIS and BIM to deliver the efficiencies in Asset Management. GIS will improve visualisation, supporting a system approach to addressing performance issues and better maintenance planning. As with EAMS2, the data and intellectual property will be held by the HS1 system not NR(HS). If this enabler is self-invested by NR(HS), it would retain the data and IP resulting in additional costs for the system at the end of the NR(HS) contract.

Enabler	Value over CP4	Description and benefits
People Strategy	£4.52m	NR(HS) requires specialist skills to operate, maintain and renew the only European-design high speed railway in the UK. Maintaining staff competencies is a challenge and the system needs to invest in competency management and training to ensure this is sustainable over the long term. NR(HS) does not have any ability to spread these overheads over other contracts since there are no other high speed lines in the UK that can utilise these competencies. Therefore, NR(HS) cannot be compared to other large infrastructure maintenance organisations in the way ORR has set out. Additionally, this investment includes the insourcing of externally provided training, which is offset by £1m of efficiency. This funding will also support the delivery of training and handbooks to upskill the NR(HS) workforce in readiness for digital working methods allowing the realisation of future asset management efficiencies.
Provision for general safety/sustainability	£0.24m	This provision is for implementing safety and sustainability initiatives and ideas generated by NR(HS) frontline staff, targeting direct problems and challenges experienced on the network. The ORR accepted this provision in PR19, and we have reported on the benefits through the AMAS during CP3. This provision is a continuation in CP4.
Head of Innovation	£0.64m	This role is to lead the delivery of the joint NR(HS)/HS1 R&D Strategy for CP4. The role will work with both internal and system stakeholders to ensure the R&D portfolio delivers benefits for the system.

Enabler	Value over CP4	Description and benefits
Additional Services becoming BAU	£0.06m	Additional Services are defined as services requested by HS1 Ltd that did not form part of the NR(HS) CP3 5YAMS at PR19. The additional cost to deliver these services during CP3 was reimbursed by HS1 Ltd in addition to the Annual Fixed Price but now forms a BAU activity in CP4. This cost is for an Additional Service under the Operator Agreement for the maintenance of an invasive weed at Stratford during CP3, which will continue into CP4 and beyond. The ORR accepted this provision in PR19 for Additional Services in CP2 becoming BAU in CP3.
CP4 Exit Adjustment	£0.17m	This is a phased balancing adjustment with an associated efficiency of £130k. This efficiency would be removed if the enabler is withdrawn.
Total	**£6.5m**	

3 Charges

3.1 Renewals charges (including annuity calculations)

3.1.1. Conclusion - HS1 Ltd's annuity models were fit for purpose and aligned with good practice

We welcome the ORR conclusion that our annuity models are fit for purpose and aligned with good practice.

3.1.2. Conclusion - ORR supports HS1's traffic weighting adjustment to the route annuity and has applied a partial traffic weighting to stations annuity

We welcome ORR support for our proposal to apply a traffic weighting adjustment to the calculation of the route annuity. We support the ORR's conclusion to apply a partial traffic weighting adjustment to the stations annuities on the same 'user pays' and intergenerational equity principles. We agree it is appropriate to use the same traffic forecasts as for route as the index for future growth in demand. We will reflect this in our November 2024 5YAMS.

In the DD, the ORR asks for updated views on the traffic forecasts. It is important to revisit the traffic forecasts for CP4 used in the route charging model. These need to be the most up to date forecasts to ensure HS1 recovers its costs in full (OMRCA1 in particular) and to avoid unnecessary Volume Reopeners (VRO).

For both the passenger operators, the services that are likely to be operated in the first year of CP4 (based on their FWTs and factors that could affect future service volumes) will be lower than our forecasts set in 2023. As noted below in Section 3.2.2, we need to incorporate SETL's volume forecasts into the Route Charging Model, so these lower volumes for both operators have a larger impact. Based on these indicative volumes, this could lead to an under recovery of [●] per annum of OMRCA1. It also increases the likelihood of a VRO at the end 2025. Therefore, we will engage the passenger operators to confirm updated traffic forecasts for CP4 to incorporate into our November 2024 5YAMS.

Regarding freight forecast volumes, since our May 2024 5YAMS in which we forecast 200 trains per year over CP4, there has been a change in the outlook for freight services expected to be operating on the HS1 railway network. Over CP3, a number of factors resulted in a reduction in freight volumes, triggering a freight VRO in early 2024 which increased access charges. Because of this, along with overall service quality for international freight flows and the impact of EU exit, the freight operator DB Cargo has not run services on the HS1 railway network since mid-2024. DB Cargo continues to engage with customers concerning potential international flows, including those which would access the HS1 railway. This dialogue is insufficiently mature to be able to forecast future volumes for freight with any certainty. Incorporating an unrealistic volume forecast that does not materialise would result in stranded OMRCA1 costs that HS1 cannot recover. Therefore, in our November 2024 5YAMS we will revise the freight forecast volumes from 200 to zero per year for CP4. This forecast is supported by DB Cargo. This will not affect the 40-year traffic forecasts used to weight the annuities.

We note that DB Cargo freight services are operating in and out of the domestic side of Ripple Lane. The November 2024 5YAMS will include forecast volumes provided by DB Cargo for these train path movements in the total domestic freight volumes used to calculate the Ripple Lane (Domestic Sidings) charge.

3.1.3. Conclusion – ORR has removed the underfunding factor from the route annuity

We support the ORR's proposal.

We note in Section 3.1.4 our concerns that the ORR's DD adjustments to long term renewals costs and annuity modelling, if all applied, increases the risk of future escrow underfunding and higher charges to the detriment of operators.

3.1.4. Conclusion – ORR has allowed small negative balances towards the end of the 40-year annuity model

The ORR concluded that the annuity modelling should allow small negative balances in the escrow modelling because of the uncertainty in renewals profile in later years, which is expected to be smoothed as plans develop and improved asset management planning should allow for more efficient profile of renewals expenditure. It also notes that there will be further changes to amend the annuity at future periodic review if necessary.

The renewals profile provided for the 5- to 40-year periods are indicative and we agree that these would be smoothed as we get closer to those periods and have more certainty on the works and delivery. However, the profile will not be completely smoothed and renewals expenditure will increase over time as the asset ages. Therefore, the ORR must be very careful about setting precedent that in future periodic reviews it is accepted that negative balances are allowed closer to the immediate Control Period, increasing the risk of underfunding renewals in the immediate control periods. Such a circumstance would require HS1 to finance these works. HS1 does not necessarily have the ability to raise incremental funds to finance renewal work, as this was never the intention on concession. Should a circumstance require HS1 to finance these works, if it is possible to raise funds, this is likely to be costly and result in increases in future charges to recover this to the detriment of the operators. We understand that the ORR's position is that allowing negative balances in the modelling close to the immediate control period is not appropriate – we ask that ORR make a clear statement on this in its FD.

There is also a risk that allowing negative balances leads to an annuity that is too low to fund future renewals, requiring future charges to be increased. We are particularly concerned about the risk of large adverse swings in charges in future control periods given developments that will be occurring, including:

(i) other significant costs operators will face such as anticipated international station capacity enhancement and ERTMS implementation which will compound the cost impact on operators and affect their growth plans or service delivery; and

(ii) the potential entry of new operators that will plan to compete on the charges established for CP4 and could be in the sensitive initial years of operation where material changes in charges could disproportionately affect them, dampening competition;

which could impact on the services and experience for passengers.

We therefore think it is important that the ORR confirm in its FD that the adjustment to allow small negative balances is only supported if:

- A sensitivity analysis of the impact on escrow underfunding is undertaken and indicates the risk is appropriately balanced between short term affordability and future escrow underfunding. We have performed this analysis (see immediately below).
- It is strictly not allowed for the modelling to have negative balances in the next two immediate Control Periods (e.g. CP4 and CP5) to mitigate the risk of costly renewals financing.

Escrow sensitivity analysis

HS1 has conducted a sensitivity analysis of the escrow balance based on the ORR's combined adjustments to long term renewals costs and modelling assumptions (see Appendix A4A4). We considered this important because the ORR applies a number of adjustments to the renewals costs and modelling assumptions in addition to adjustments HS1 had already incorporated. Taken together, the route and stations annuities have been reduced by £23.2 million and £3.0 million per annum respectively (see the waterfall graphs in Appendix A4A4).

We believed our May 2024 5YAMS proposals struck an appropriate balance between meeting our asset stewardship purpose and funding the necessary works in a sustainable economic way, while supporting operators' affordability. The sensitivity analysis indicates these further adjustments by the ORR affect this balance and there is a risk of future underfunding leading to an increase in charges in the next Control Period. For example:

- If the ORR's assumptions were optimistic (i.e. the ORR's renewal cost and annuity assumptions are reversed) – the combined route and stations annuity costs for CP5 could increase by £4.0 million (or 11%) per annum in real terms relative to CP4, or 31% in nominal terms.
- As a worst-case scenario – where the ORR's assumptions are reversed and there is an additional 20% increase in renewals costs (e.g. the Cost Policy was too optimistic) – these costs could increase by £13.0 million (or 36%) per annum in real terms relative to CP4, or 60% in nominal terms.

This would occur alongside significant increases in charges for ERTMS implementation and anticipated international station capacity enhancement in CP5. It may also occur in the initial years of new operators on the network when their ability to compete will be sensitive to adverse impacts on charges.

Overall position

We are concerned about the risk to underfunding if all the ORR's DD adjustments are applied. However, we are not incorporating all of these adjustments to the annuity in our November 2024 5YAMS since, following further analysis, we do not think these efficiencies can be achieved. These include the long term renewals cost efficiencies (4% base cost (see Section 2.1.6), 9% accelerated asset management maturity (see Section 2.1.4)) and the escrow returns assumptions (see Section 3.1.5).

Excluding these adjustments lowers the risk of escrow underfunding if the other DD adjustments are applied and brings back balance between sustainable funding of renewals and operators' affordability.

Therefore our overall position is to accept the use of small negative balances in later years in the annuity modelling, provided that the ORR confirms that sensitivity analysis will be undertaken before allowing negative balances in future periodic reviews and strictly no negative balances are allowed in the next two immediate control periods.

3.1.5. Conclusion – ORR has assumed restrictions on escrow returns will be addressed

The ORR concluded that we should be able to generate greater returns on escrow investments and increase the annual investment returns from 3.30% to 4.30% (in nominal terms) over the 40-year period. This assumes that HS1 Ltd and DfT will find a solution to enable higher returns from the start of CP4.

Changes to the provisions governing escrow investment in the Concession Agreement and Station Leases are led by DfT with assistance from HS1.

As noted in our May 2024 5YAMS, two possible enhancements have been identified to improve returns:

- The first enhancement would increase the number of banks that could take deposits (and therefore allow us to continue to make Authorised Investments).
- The second enhancement would expand the scope of Authorised Investments so that we are able to diversify and increase returns. This would require further exploration and complex analysis by DfT, with HS1's assistance. There is currently no certainty that a solution can be found which meets DfT's risk requirements.

Our May 2024 5YAMS assumed that DfT would implement the first enhancement by the start of CP4 (we regard this as a stretching assumption) but not the second enhancement. As there is considerable uncertainty around the timing of the second enhancement – and whether it will be possible at all – it is unrealistic to assume that it will be in place during CP4. We therefore do not propose to use the ORR's escrow return assumptions in our 5YAMS.

Regarding escrow interest rates, the comparator rates referred to in paragraph 6.36 of the ORR DD are not like-for-like. The ORR comparators are generally short term forecasts which are not appropriate for HS1 escrow account interest rate forecasts. Our assumptions reflect long-term forecasts for interest rates for short-term deposits. We have reviewed the escrow interest rate assumptions in our May 2024 5YAMS and propose to update them to reflect more recent forecasts (following the same forecasting methodology as previously used) as follows:

- CP4: 3.45% (a mix of forward rate returns based on forward rates starting 8 months from now)
- CP5-CP11: 3.70% (based on the 40-year SONIA spot yield)

The ORR DD notes that the efficient costs of implementing changes to the Concession Agreement and Station Leases should be borne by operators. We welcome this confirmation. As set out in our May 2024 5YAMS, we consider that, given the uncertainty around this project, treating this as a pass through cost for CP4 is the most appropriate cost recovery mechanism. The DD noted that ORR requested further evidence to explain our cost estimate of £0.2 million. We provided this to ORR in early September based on initial quotes from external lawyers and estimated time to complete the work. However, it should be noted that the project scope is likely to evolve from that on which we based this cost estimate.

3.1.6. Conclusion – ORR has corrected for errors in cost of capital calculations in CP4

We have updated, and corrected, our WACC to show a March 2024 WACC of 7.00% (nominal pre-tax). The May 2024 5YAMS used our March 2023 WACC. We believe that the ORR rates in Table 6.4 of the ORR DD are for FY24. The table below compares the HS1 and ORR FY24 rates.

Table 3: Update to ORR DD Table 6.4 for HS1 FY24 WACC rates

WACC category	HS1 - FY24	ORR view -FY24
Nominal vanilla	6.00%	6.07%
Nominal pre-tax	7.00%	6.59%
Real (2% assumed) vanilla	3.92%	2.48%
Real pre-tax (2% assumed)	4.90%	2.99%

We have accepted the ORR proposal to use a real vanilla WACC of 2.48% in the calculation of CP4 charges. This update will be reflected in the charges set out in the November 2024 5YAMS.

3.1.7. Conclusion - the use of a bespoke WACC for specified upgrades should continue for large specified upgrades

We welcome the ORR conclusion that a bespoke WACC should continue for large specified upgrades and that a single cost of capital should be set for smaller upgrades in CP4.

The ORR DD notes that, for smaller upgrades in CP4, we should use our most up to date assessment of our cost of capital and that this is the 2.48% vanilla WACC proposed for the ERTMS Early Works project. While we agree that the ERTMS Early Works cost of capital is an appropriate comparator, we note that the 2.48% rate is incorrect. For this project we agreed on a nominal cost of capital rate of 5.70%. This was LIBOR + 0.75bp which was the cost of HS1 revolving credit facility used to fund this small scale project in the short term.

For any small specified upgrades in CP4, we propose that the rate should be the cost of the HS1 revolving credit facility at the time, consistent with the agreed approach for the ERTMS Early Works. This is currently LIBOR + 0.75%. This will be reflected in our November 2024 5YAMS.

The ORR DD also notes that we need to be clearer about the criteria for what constitutes a small specified upgrade. Our proposed definition is an upgrade with a cost of less than £700k with an AIRC repayment window of one year. This definition will be included in our November 2024 5YAMS.

3.1.8. Conclusions – annuity payments

The ORR's DD conclusion on the CP4 annuities for route and stations reflect the adjustments that ORR DD proposes. After reviewing the DD and on further analysis, it would not be appropriate to make some of the adjustments proposed by the ORR, including the renewals cost efficiencies (Sections 2.1.4 and 2.1.6) and assumptions on escrow returns (Section 3.1.5). We are also concerned the ORR's DD adjustments to the annuity, taken together, increases the risk of future escrow underfunding and higher charges, which may compound the impact on operators at a time when other significant costs will be incurred, such as ERTMS implementation and the anticipated international station capacity enhancement. We set out analysis of the escrow balance sensitivity in Section 3.1.4.

Our November 2024 5YAMS will present the annuity calculations based on our revised position taking into account the ORR's DD.

3.2 Determining charges for operators

3.2.1. Conclusion - HS1 Ltd's charging models were fit for purpose and aligned with good practice

We welcome ORR's conclusion on this.

HS1 will need to make an amendment to the Route Charging Model in relation to the calculation of OMRCA1 charges. On further review, we have identified that the domestic underpin is not the appropriate volume for domestic services to be used to apportion OMRCA1 across operators. HS1 is not able to recover OMRCA1 on the domestic underpin shortfall so using this volume would lead to a significant under recovery of OMRCA1. We therefore need to use the volume forecast for SETL volumes over CP4 to ensure full recovery of OMRCA1 costs. We will amend the Route Charging Model to reflect this in our November 2024 5YAMS.

3.2.2. Conclusion - Passenger operator charges – Route

The ORR's DD conclusion on the CP4 charges for passenger operators reflect the adjustments the ORR recommends. As HS1 does not support all of these adjustments (as outlined in the sections above), we cannot support the resulting charges. Our November 2024 5YAMS will set out the passenger operator charges based on our revised position, taking into account the ORR's DD where appropriate.

As noted in Section 3.2.1, we need to amend the Route Charging Model to use forecast volumes for SETL and not the domestic underpin volume to allocate OMRCA1 costs across operators. This will affect the OMRCA1 per km charge for the passenger operators.

3.2.3. Conclusion – maintain the suspension of the capacity reservation charge

We welcome ORR's position that we should maintain suspension of the Capacity Reservation Charge as there is currently spare capacity on the network. As noted in our 5YAMS, we will keep this suspension under review.

3.2.4. Conclusion – ORR has re-allocated fixed costs from freight to common costs, funded by passenger operators

We agree with the ORR's conclusion to re-allocate £0.6m out of the £0.69m five-year total fixed costs for freight, on the basis these should be defined as common costs which are allocated to passenger operators. This was demonstrated by analysis HS1 provided in Section 15.6 in our May 2024 5YAMS. We will update our November 2024 5YAMS to reflect this.

As noted in Section 3.1.2, we need to revise the CP4 forecast for freight volumes on HS1 highspeed network to zero in our November 2024 5YAMS given the uncertainty in the outlook. To set an indicative charge for freight in the event they can resume services on the network, we will create a shadow charging model. This will assume a freight volume of 200 trains per year as this was the most recent estimate of positive volumes.

We will also revise the forecast volumes for domestic freight used to calculate the Ripple Lane (domestic sidings) charge to incorporate DB Cargo's forecast of volumes that will operate on the sidings.

We will present the resulting freight operator charges based on our revised position in our November 2024 5AYMS.

3.2.5. Conclusion – ORR has adjusted the station LTC

The ORR's DD conclusions on the CP4 station LTC for each station reflect the adjustments the ORR recommends. As HS1 does not support all of these adjustments (as outlined in the sections above), we cannot support the resulting charges. Our November 2024 5YAMS will set out the station LTC based on our revised position, taking into account the ORR's DD where appropriate.

3.2.6. Conclusion – Cumulative charges for route and stations

As noted above, our November 2024 5YAMS will present the cumulative charges based on our revised position, taking the ORR's DD into account.

4 Network Incentives

4.1 Changes to Access Terms

4.1.1. Defining chargeable journey distance

HS1 agrees with the ORR that the amendments to introduce a "chargeable journey distance" concept are needed for the PAT and the FTAAs to reflect the charging basis for direct costs. This concept is also needed if the ORR determines to proceed with the proposed changes to the OMRCA1 wash up (see Section 4.1.5). If the ORR takes a different approach to the wash up, the drafting will need to be revised.

4.1.2. Volume reopener (VRO) provisions

We welcome the ORR's position on HS1's amendments to clarify the definition and application of the VRO including the amendment to reflect the recovery of costs over the remainder of the Control Period in line with the approach taken in practice. We also welcome the amendment to the definition of a subsequent VRO threshold.

We welcome ORR's position to include amendments to allow for the reallocation of freight non-avoidable fixed costs in the event there are no freight services. While the ORR has proposed to reallocate certain freight costs to common costs (which we support), the inclusion of this provision in the Access Terms is still needed to allow HS1 to recover Ripple Lane fixed costs in the event of zero freight at Ripple Lane. We agree with the ORR that these are fixed costs in the HS1 system that can only be recovered from the remaining operators on HS1.

We respond to ORR's position on the Performance Regime reopener in Section 4.2.2.

We do not support the ORR's position to use operators' forecasts as the basis of re-apportioning avoidable and common long-term costs following a VRO being triggered. As noted in our May 2024 5YAMS this approach could create a perverse incentive where, in times of uncertainty and volatility in train volumes, operators would likely take positions on forecasts that favour their commercial interests. In such a situation, because the domestic underpin acts as a floor, domestic operators would be unfairly disadvantaged relative to international operators. We recognise this perverse incentive is mitigated where there is a fixed cost wash up that allocates costs based on actual volumes at the end of the year. If the fixed cost wash up is not implemented, the ORR should reconsider this amendment.

We support the timeframe of at least 20 working days for operators to submit their forecasts – this strikes an appropriate balance between (i) giving operators time to prepare forecasts (taking into account the holiday period) and (ii) HS1 needing to promptly execute the VRO and inform operators of their revised charges to allow them to plan accordingly.

4.1.3. Pass through costs

In our May 2024 5YAMS, we set out our proposals to amend the definition of pass through costs in the Access Terms to support the most efficient approach to recovery of costs incurred by HS1. In the DD, the ORR was minded to approve our proposals with the exception of (i) success fees in business rates and (ii) insurance broking fees and professional costs.

Since then, the ORR has led Access Terms discussions with stakeholders. This has provided an opportunity for HS1 to further clarify to train operators the rationale for including these items as pass through costs. Our understanding of the current position on each of these cost categories and our proposed approach are set out in the table below.

Table 4: Pass though costs

Cost category	Current position	HS1 proposed approach
N-1 scheme	Train operators are in agreement that this category is included in the definition of pass through costs.	We will retain these costs as pass through costs in our November 2024 5YAMS. If this is not approved in the FD, we will bill operators separately as set out in the PAT.

Cost category	Current position	HS1 proposed approach
REACT schemes Non-traction energy: Management and bill checking Non-traction energy: REGO costs	Train operators are in agreement that these categories are included in the definition of pass through costs.	We will retain these costs as pass through costs in our November 2024 5YAMS. If any of these cost categories is not approved in the FD, the ORR will need to approve the inclusion of the associated estimate of costs in the HS1 costs component of OMRC, otherwise we cannot recover these costs.
Rates: Success fees paid to ratings advisers	Train operators require HS1 to obtain their agreement before these costs are incurred.	We will retain these costs as pass through costs in our November 2024 5YAMS, including an obligation to obtain operator agreement before costs are incurred. As operators will make the final decision, we will enlarge the category to “Fees, including success fees” to allow operators the ability to select the contractual method they deem most appropriate at the time. If this is not approved in the FD, we would not be funded to carry out this work.
Insurance: Broking fees and professional costs	HS1 is providing further information to train operators and explained that this is a housekeeping exercise to ensure the description of Insurance captures current practice.	We will retain these costs as pass through costs in our November 2024 5YAMS. If this approach is not approved in the FD, the ORR will need to approve the inclusion of the associated estimate of costs (£85k per annum) in the HS1 costs component of OMRC otherwise we cannot recover these costs.

Cost category	Current position	HS1 proposed approach
Escrow investment project	HS1 does not benefit from these changes so requires full funding. HS1/DfT will engage with the operators on costs/budget before starting work on the project and during the project if costs change.	We will retain these costs as pass though costs in our November 2024 5YAMS, including an obligation to engage with operators. If this approach is not approved in the FD, the ORR will need to approve the inclusion of the estimated £200k to the HS1 costs. However, it should be noted that the scope of this work is likely to change from the scope on which this cost estimate was based so this would not necessarily fund all the work needed in this area. In this situation, HS1 would seek operator commitment for the additional funding and if this was not forthcoming might not be able to complete this workstream.

4.1.4. An annual fixed cost wash-up provision

We have fundamental concerns about this amendment to introduce a wash up of OMRCA2 and OMRCB so that at the year of each year these fixed costs are allocated across operators based on actual train volumes run (rather than the current approach where operators are billed in advanced based on FWT volumes).

We have been involved in further stakeholder discussions on the topic since the publication of the ORR' s DD. However there has been no justification or evidence shared with HS1 at any time to indicate that the existing mechanisms for charging and recovering OMRCA2 and OMRCB are not functioning as intended as set by the contractual framework that has been in place since the start of the Concession, and that this proposal is a proportionate and reasonable response.

In particular, this proposal is considerably disproportionate given HS1's further legal analysis has identified that the introduction of a fixed cost wash up as proposed by the ORR could result in increased risk, costs and unintended consequences for HS1 and the HS1 system. This analysis could only be done following our receipt of the ORR's proposal for an annual fixed cost wash up coupled with an explanation for how it should work.

The areas where this change introduces risks, costs and unintended consequences include:

1. New cost risks for HS1 from the introduction of the wash up in two areas

a. Amounts owing between operators

A fixed cost wash up may result in circumstances where the amount of OMRCA2/OMRCB being paid by a train operator in advance is significantly lower than the potential wash-up amount that is expected to become due at the end of the year, with another operator owed a significant amount. Given the bilateral nature of the track access agreements, HS1 would be the party exposed to credit risk of the train operators (rather than other train operators). HS1 would be required to pay a train operator which had overpaid, while facing the credit risk of a train operator that had underpaid, which may include a new operator with limited financial resources. This is not a risk HS1 currently faces under the existing mechanism and HS1 should not be exposed to the risk of non-payment by the train operator when this if effectively a liability between operators.

To demonstrate the possible credit risk impact on HS1, we take Year 1 of CP4 as an example, where charges would be recovered based on 52,800 domestic and 17,800 international volumes. If actual international volumes at the end of the year were 5,500 (similar to volumes during the peak of Covid), this would result in [●].

This risk can be mitigated by implementing the 'pay when paid' mechanism in the wash up (outlined below). If the ORR proceeds with the wash up, it must implement this mitigation as it is unreasonable and disproportionate for the ORR to impose this new risk on HS1.

b. *Under recovery of International OMRCA2*

The fixed cost wash up proposal is based on allocating, at the end of the year, the recovery of the different cost categories across the operators in those categories using their share of volumes run. In the scenario where the international operator(s) plans to run services (i.e. has FWT with volumes) such that a VRO is not triggered, but then runs zero trains in the year, HS1 will not be able to recover the International OMRCA2 costs.

HS1 does not face this risk with the existing approach because HS1 bills fixed costs in advance based on the FWT. Under the proposed new approach, HS1 would be required to return any OMRCA2 recovered over the year to the international operator(s). While this is an extreme scenario, it is possible and would have a significant impact on HS1. [●]

HS1 does not have any certainty that the Interim Review mechanism would address this risk. Under the Concession Agreement an Interim Review can only occur if the ORR agrees that there has been a material and significant change to the circumstances based on which the ORR set the current level of OMRC such that the level of OMRC is materially insufficient for HS1 to meet our General Duty. There is no certainty for HS1 that this would be triggered in all circumstances where there was material under-recovery of OMRCA2. Even if an Interim Review were available to HS1, HS1 would need to absorb the cost of undertaking the Interim Review (which is not immaterial). [●]

This risk can be mitigated by implementing a mechanism that allows HS1 to recover these costs from the international operator(s) even when there are zero services (outlined below). If the ORR proceeds with the wash up, it must implement this mitigation as it is unreasonable and disproportionate for the ORR to impose this new risk on HS1.

These two new costs risks that the OMRCA2/B wash-up provisions would introduce, outlined in (a) and (b) above, are substantial and clearly material to the ORR's determination, and the ORR should ensure that adequate consideration is given to these risks when making its FD. The ORR is also reminded that, under paragraph 8.9 of Schedule 10 of the Concession Agreement, the FD must take into account these representations.

2. Cost certainty for operators

A consequence of a wash-up mechanism based on actual train volumes is that operators will not have any certainty as to the level of OMRCA2 and OMRCB payable (both in terms of a per train per minute level and at an aggregate level) until the end of year wash-up. This uncertainty is increased as the wash-up amount payable by a train operator will, in part, depend on the level of train services operated by other train operators (as some costs are apportioned across train operators based on their share of minutes spent on certain areas of track). As such, train operators will not be able to determine in advance if a particular train service is profitable and modify their operations accordingly. In extreme circumstances (such as those experienced during covid) train operators (particularly new operators) could face significant cost increases at the end of the year as a consequence of the wash up. This may affect their ability to operate services the following year.

A train operator (or a potential new operator) could reasonably argue that it is implicit in the Railways (Access, Management and Licensing of Undertakings) Regulations 2016 (2016 Railway Regulations) that it should be able to determine in advance the cost of running an additional train service and that the proposed wash up is inconsistent with this requirement. Consequently, HS1 is exposed to regulatory risk if the ORR subsequently decides that it agrees with the operator. If the ORR determines to proceed with the wash up it needs to make a clear statement in its FD that it considers this wash up is consistent with the 2016 Railway Regulations

In addition, the ORR will wish to be mindful of its s.4 Railways Act 1993 duties, as they apply to its functions under the Railways Regulations. s.4(1)(g) requires the ORR to exercise its functions in a manner which enables persons providing railway services to plan the future of their businesses with a reasonable degree of assurance, which operators (or a potential new operator) might argue is inconsistent with the proposed wash up approach.

3. HS1 budget implications

Our internal processes are not currently set up to manage such a recalculation of the OMRCA2/B costs at the end of the year on actual volumes. The introduction of a complex wash-up of this nature will require HS1 to dedicate significant management time and resources both in developing the wash-up mechanism and then managing the process for each wash up. For example, a wash up model to reapportion and recalculate OMRCA2/B charges based on actual volumes is very different to any models we currently have; and thought will need to be given to how the process will work in practice and interact with other billing process.

We have not currently budgeted for either of these activities during CP4. Furthermore, HS1 has already incurred significant legal costs in analysing the potential risk and unintended consequences of the proposed wash up. We will also incur further costs for the substantive legal drafting if the ORR determines the wash up should be implemented (this is in addition to the significant costs for legal drafting of the ORR's other Access Terms proposals).

The introduction of a new wash-up mechanism will also create additional opportunities for train operators to identify grounds of potential dispute (as we have seen with the VRO process in CP3 for which HS1 is facing ongoing invoice challenges from train operators). This has further implications for HS1's resources and budget.

As a minimum, HS1 should be allowed to recover the costs for implementing and running the wash up (set out below).

If the ORR can provide justification for why this wash up should be implemented, then several aspects of the ORR's proposed wash up need to be amended to mitigate the risks and cost impacts:

1) The ORR needs to make a clear statement that the charging mechanism and OMRCA2 and OMRCB cost wash up arrangements are consistent with the 2016 Railway Regulations and its duties under s.4(1)(g) of The Railways Act 1993.
2) Frequency of the wash up:
    - An annual basis is the most effective and efficient frequency for a wash up. Due to the seasonality in train volumes, more frequent wash ups on a regular basis would result in the unnecessary transfer of funds between operators and additional administration costs.
    - Given the possibility of a material change in traffic volumes in the year, a mid-year wash up could be allowed for where HS1 uses its reasonable judgement to run an interim wash up if there is a material change in volumes. This is consistent with the provisions in the Access Terms for the existing wash up mechanisms.
    - An interim year wash up should not occur more than once within a year, as more frequent wash ups would be inefficient, ineffective and burdensome on HS1. Even in the presence of material changes, more frequent wash ups would not support operators in their full year forecasting because of the seasonality volumes and volatility in outlook. Also, finalising train volumes with operators can take significant time and resource, which can also lead to lags in performing more frequent wash ups making these ineffective.
    - We do not think a specific threshold for when interim wash ups are trigger is useful as it is too restrictive. It cannot capture all possible circumstances so may result in an interim wash up being triggered unnecessarily or not triggered when needed. If the ORR considers a specific threshold is used, it should be linked to a material change in volumes from the FWT, such as 20-25%.
3) The credit risk for HS1 that arises from amounts owing between operators needs to be mitigated (as outlined above). It is essential that, if HS1 is owed money from an operator(s), it should not have to make any payments to operators in credit before the money owed is paid to HS1. This "pay when paid" principle is similar to that in the Access Terms for performance regime payments between operators and needs to be incorporated in the wash up provisions.
4) The wash up formula needs to:
    - Be consistent with the HS1 structure of charges and how the different costs are apportioned across operators. The ORR's drafting for OMRCA2 and OMRCB is

inconsistent with this as it does not separate out Domestic OMRCA2 and International OMRCA2 or the different common costs, which are all apportioned on a different basis.

- Mitigate the risk of under recovery of International OMRCA2 HS1 that the wash up introduces (outlined above). This risk occurs in the scenario where there is an FWT but zero international services are run, therefore losing HS1 the ability to recover the International OMRCA2. The wash up needs to allow HS1 to still recover this cost from the international operator(s) by:

  (i) adding the amount to the next year's value to be washed up (noting this cannot be used in Year 5 of the Control Period); and/or

  (ii) recover the amount directly from the international operator(s) at the end of the year (which will be needed in Year 5 of the Control Period).

5) The Volume Reopener (VRO) process in the Access Terms needs to be amended to ensure it interacts with the wash up in the most effective and efficient way:

   - Using the updated train volume outlook, the VRO should recalculate both (i) the £ per min charges and (ii) the cost expected to be recovered for each year. For clarity, the costs expected to be recovered for each year should be set out in the FTAA similar to the £ per min charges.
   - For alignment and simplicity with the wash up (which is based on Financial Years), the reapportioned charges should take effect from 1 April rather than December Principal Change Date. This removes any back dating of charges (as the VRO is typically executed in January/February) which is no longer necessary given the wash up for that year will allow for full cost recovery (assuming the risks we identified are mitigated).

6) As noted above, this is a new complex wash up process which does not currently exist. HS1 therefore needs to be funded for the additional resources this wash up requires. This includes costs related to:

   - **Developing and implementing the wash up:** HS1 will need to develop the wash up model (as it is very different to our existing models, as noted above), amend the VRO model, and have these models assured. HS1 will also need to develop and implement how the wash up process works in practice which will require a review of the other wash up, billing and escrow deposit processes in place which may need adjustments to ensure implementation of the wash up does not create inconsistencies and still meets operators' needs. We will need to engage operators during this development and implementation phase, which has resource implications.
   - **Running of the wash up:** The process will require resource to collate the necessary information, run the model and assure the output, engage with operators on the outcome and their questions, and process the invoicing. Given the potential size in values that could be transferred between parties, there is likely to be significant scrutiny from the operators which takes up time and resource. For example, the OMRCC wash up from end of FY2023/24 has not yet concluded, eight months later. The fixed cost wash up will also fall at the same time as the Financial Year end audit process, when HS1 resource will have no spare capacity, therefore requiring additional resource to manage the process which will impact the cost of running the wash up.

We will increase HS1's own costs to reflect these additional costs in our November 2024 5YAMS and provide detail on the cost estimates to the ORR.

4.1.5. OMRCA1 wash-up mechanism for operator cancelled services

The existing Access Terms provisions for charging OMRCA1 are consistent with the Railway Regulations. HS1 sets OMRCA1 at the cost that is directly incurred as a result of operating a train service in accordance with paragraph 1(4) of Schedule 3 to the Railway Regulations. However, we accept the ORR's position on this amendment.

We support the ORR's position that the FWT needs to be treated as a volume floor in the wash up of OMRCA1 for the reasons outlined by the ORR. Furthermore, Covid has demonstrated that there is a certain level of O&M required to meet standards even when volumes are low, of which the associated costs are incurred by HS1. We remind stakeholders that because OMRCA1 is set at the start of the Control Period, and there are no re-openers outside of undertaking an Interim Review, HS1 under recovered OMRCA1 of around £4.3 million in cash terms because train volumes were lower than forecast in the PR19 Determination that set the OMRCA1 (as noted in our May 2024 5YAMS). To avoid similar situations arising in the future, the 5YAMS forecast should really be used as the floor for the OMRCA1 wash up.

While renewals planning is longer term, we note that the renewals portion of the OMRCA1 charge is deposited in the escrow account – i.e. it is not income for HS1. If the FWT floor is removed, consideration will need to be given to how funds deposited into escrow are withdrawn and returned to the operators in the event of an OMRCA1 refund.

If the ORR proceeds with the amendment to the OMRCA1 wash up, then this wash up needs to be done on a same day basis (and then aggregated for the period between wash ups) as currently proposed. The objective of the wash up is to take into account genuine replacements of services cancelled as a result of an operator decision or external infrastructure issue which is outside the control of HS1. Using a longer period for the wash up, e.g. a week or period, would capture additional services run the at a later time as replacement services, but these are not genuine replacements of those cancelled services.

4.1.6. OMRC indexation floor

We are very concerned by the ORR's DD conclusion to remove the floor to indexing OMRC by inflation which prevents deflation being applied to operators' charges. The only reasoning given by the ORR in its DD is that operators should benefit from reducing costs due to negative inflation.

The ORR does not appear to have taken into account that this amendment would result in misalignment with the same provision in the Operator Agreement (OA) between HS1 and NR(HS), which could have significant cost impact on HS1.

As noted in our May 2024 5YAMS, the misalignment means during periods of deflation, the NR(HS) O&M costs (reflected in the O&M price payable by HS1) would not fall, yet HS1's OMRC income which is used to recover these costs would fall. NR(HS) O&M costs are the largest share of HS1's OMRC.

Depending on the extent of deflation and when it occurs in the Control Period, this could result in HS1 having to absorb millions of pounds. To give examples of the potential deflation cost impact on HS1:

- The Office of Budget Responsibility in November 2022 (during the period of significant economic volatility following Covid) had forecast moderate deflation for two consecutive years. If we assume 1% deflation in Year 2 and Year 3 of the Control Period, HS1 could face a cost under recovery of [●] over the Control Period (using HS1's May 2024 5YAMS price for NR(HS)'s AFP).
- The RPI index recorded 1.6% deflation in February 2009. If this occurred in Year 1 of the Control Period, HS1 could face a cost under recovery of [●] over the Control Period (using HS1's May 2024 5YAMS price for NR(HS)'s AFP).

Furthermore, the cost impact is higher when accounting for other O&M costs that do not fall with general price deflation, such as HS1 staff costs and subcontract costs not linked to inflation. HS1 is happy to explain further how these figures were reached if this would assist the ORR.

These are only examples, and the impact on HS1 could be much higher if deflation is larger or occurs for longer periods.

The change to the Access Terms proposed by the ORR in its DD is not able to be simply reflected in the OA as HS1 does not have the unilateral right to amend the OA inflation floor provision. We are also not aware of the ORR having any power to compel NR(HS) to agree to such an amendment to the OA. Consequently, any change could only be done with NR(HS)'s agreement. NR(HS) is unlikely to agree to amend this provision as the largest share of NR(HS)'s O&M costs are staff wages which do not fall even when there is general price deflation. Therefore, the inflation floor provision in the OA provides NR(HS) with protection from a mismatch between O&M costs and income.

Furthermore, the Concession Agreement, OA and Access Terms – including the aligned inflation floor provision and the risk profile based on these – were implemented as part of the original Concession sale. [●]. The ORR's decision fundamentally undermines this and contradicts a key principle of the Concession sale that HS1 is held cost neutral, and on which the sale process was valued and transacted. It also conflicts with the ORR's 2009 Regulatory Statement which notes "In setting OMR charges, [the ORR] expect to have regard to the terms of the Network Rail (CTRL) Limited operator contract", which formed part of the arrangements supporting the original Concession sale and was relied on by current investors when they purchased the Concession in 2016. The ORR's DD does not seem to have taken this into account nor the significant potential cost it is now imposing on HS1.

The ORR's decision is also in direct conflict with the ORR's statement in paragraph 6.60 in the DD that "In reaching our Draft Determination, we have sought to ensure that charges are cost-reflective and send the appropriate signals to users to ensure the appropriate use of the network; and at the same time enable HS1 Ltd to recover its full costs.".

Furthermore, HS1 has no other measures available to protect against this risk.

- HS1 has no control over general inflation index movements. The NR(HS) O&M price is a fixed annual price and this is set for the Control Period (we do not agree the price on an annual basis). It is the cost HS1 must incur, and we have little ability to change this outside of an Interim Review event.

- HS1 does not have any certainty that it would be able to rely on the Interim Review provisions in the Concession Agreement (paragraph 10 of Schedule 10) to provide it with protection against the impacts of a negative inflation event. Under the Concession Agreement, an Interim Review can occur if the ORR agrees that there has been a material and significant change to the circumstances based on which the ORR set the current level of OMRC such that the level of OMRC is materially insufficient for HS1 to meet our General Duty. However, given that any approved OMRC would be subject to the terms of the PAT (which would allow for deflation if the ORR approves the proposed change), it is not clear that the occurrence of significant deflation and misalignment between the NR(HS) O&M price (which will not have materially increased from the 5YAMS) and the amount OMRC recovered by HS1 would trigger an Interim Review. For example, paragraph 10.2 of Schedule 10 of the Concession Agreement anticipates a Notice of Material Change setting out OMR that has become more expensive as a result of the relevant change in circumstances but does not anticipate changes that simply impact on HS1's ability to recover its (unchanged) costs. Even if an Interim Review were available to HS1, we would need to absorb the cost of undertaking the Interim Review (which is not immaterial).

We are concerned that the ORR has not taken into account these points we have previously raised nor provided any detail in the DD as to why it is proportionate and reasonable "that operators should benefit from reducing costs due to negative inflation" while introducing a significant deflation risk for HS1 when the ORR had previously accepted this risk framework. This conclusion appears to be a change to the status quo made for the benefit of one party and to the detriment of another with no clear reasoning as to why that is appropriate.

If the ORR's Final Determination in respect of the OMRC inflation indexation floor is made in the same terms as its Draft Determination, a challenge to the ORR's determination would succeed on several grounds of judicial review, including but not limited to the following:

1. The ORR failed to give adequate reasons for its determination;
2. The ORR failed to take into account relevant considerations, and took into account irrelevant considerations, when making its determination; and
3. The ORR's determination violates HS1 Ltd's right to the peaceful enjoyment of its possessions under Article 1 of the First Protocol ("**A1P1**") to the European Convention on Human Rights (the "**ECHR**").

Failure to give adequate reasons

Under paragraphs 8.5.2 and 8.9.2 of Schedule 10 of the Concession Agreement, the ORR is required to set out an explanation of the grounds on which it has made its determination in both the Draft Determination and the Final Determination. The ORR is also under a public law duty to give reasons for its determination: the Concession Agreement is intended to give effect to the regulatory framework imposed by statute and fairness requires reasons to be given in this context. Reasons should be intelligible and adequately meet the substance of the arguments advanced.

The reasoning given for the ORR's stated position on the OMRC indexation floor in the Draft Determination is wholly inadequate.

First, the ORR's description of HS1 Ltd's position reduces our written responses to the operators' PAT proposals in May 2024 and the ORR's "minded to" decision in August 2024 so as to misrepresent HS1 Ltd's position, indicating a lack of proper consideration and understanding of HS1 Ltd's concerns. As explained above, the misalignment between the inflation indexation floor provisions in the Operator Agreement and the PAT and FAT would create a significant costs risk for HS1 Ltd, and we have no realistic prospects of renegotiating the position in the Operator Agreement. That risk is even higher when accounting for other O&M costs that do not fall within general price deflation, such as HS1 Ltd's staff costs and subcontract costs not linked to inflation.

Secondly, the ORR's stated position makes no attempt to meet these arguments. As a public authority, the ORR must always act reasonably, so merely stating that the ORR thinks it reasonable that operators should benefit from reducing costs due to negative inflation (i.e. EIL's position) without addressing HS1 Ltd's concerns fails to give any indication of why the ORR has preferred EIL's position over that of HS1 Ltd.

The need for adequate reasoning is even greater in circumstances where the ORR's determination would reverse the status quo that has been in place for the last 15 years. The reasoning in the Draft Determination is inadequate, and if the ORR fails to give adequate reasoning in its Final Determination which addresses these concerns, its decision will be unlawful.

Failure to take into account relevant considerations

In the absence of adequate reasons, the ORR has also failed to take into account several relevant considerations when making its Draft Determination in respect of the OMRC indexation floor.

The ORR has a duty under section 4(1)(g) of the Railways Act 1993 to exercise its functions in the manner it considers best calculated to enable persons providing railway services to plan the future of their businesses with a reasonable degree of assurance. However, as explained above, removing the OMRC indexation floor would create significant cost risks for HS1 Ltd in the event of deflation which are outside its control and which HS1 Ltd has no practical means of mitigating. The significant costs risk to HS1 Ltd and the lack of any way to mitigate that costs risk is obviously material to the ORR's determination, however the Draft Determination contains no indication that the ORR has considered these risks.

In its 2009 Regulatory Statement, the ORR stated that "In setting OMR charges, we expect to have regard to the terms of the Network Rail (CTRL) Limited operator contract." HS1 Ltd has a legitimate expectation that the ORR would have regard to the inflation indexation floor terms of the Operator Agreement when making its determination. While the Draft Determination acknowledges HS1 Ltd's position that removing the indexation floor would not reflect the indexation position in the Operator Agreement, there is no indication that the ORR actively considered this (or any of HS1 Ltd's representations) in reaching its stated position.

To the extent that the ORR has proceeded on the basis that HS1 Ltd could renegotiate the Operator Agreement, that is unrealistic and would therefore be an irrelevant consideration. As explained above, NR(HS) is very unlikely to agree to such an amendment given many of its costs (including staff costs) would not fall in the event of deflation, and neither HS1 Ltd nor the ORR has any way to compel an amendment to the Operator Agreement.

The ORR's stated position is that it is reasonable that operators should benefit from reducing costs due to negative inflation. However, that generalised position ignores the fact that the majority of the actual operation and maintenance costs covered by the OMRC charges are fixed or only set to increase, and would not reduce due to negative inflation. If the ORR's position remains the same in its Final Determination, that determination would be irrational and unlawful.

Violation of A1P1 rights

If the ORR decides to require the removal of the indexation floor from the OMRC provisions, that would violate HS1 Ltd's right to the peaceful enjoyment of possessions under A1P1 to the ECHR.

It is well established that contractual rights can be possessions for the purposes of A1P1, and HS1 Ltd's right to the OMRC indexation floor in both the PAT and the FAT is a possession of significant value to HS1 Ltd. A decision by the ORR to require the removal of the OMRC indexation floor would deprive HS1 Ltd of that contractual right contrary to A1P1 to the ECHR.

The ORR's stated aim in requiring the removal of the indexation floor is to allow operators to benefit from reducing costs due to negative inflation. However, as noted above, the majority of the actual operation and maintenance costs are fixed or only set to increase and would not reduce due to negative inflation, such that any decrease in OMRC charges as a result of deflation would be artificial and to HS1 Ltd's detriment. As such, the deprivation of HS1 Ltd's contractual right to the indexation floor would neither be in the public interest nor proportionate to the aim the ORR is seeking to achieve, and there would be a clear violation of HS1 Ltd's A1P1 rights.

Conclusion

HS1 Ltd urges the ORR to reconsider its position on requiring the removal of the indexation floor from the OMRC provisions in the PAT and the FAT in order to ensure that its Final Determination is not unlawful. Should the ORR fail to adequately revise its position, HS1 Ltd reserves the right to challenge the ORR's Final Determination in court.

4.1.7. Restricting wash-up arrangements for certain charges to indexation impacts only

We accept the ORR’s position to amend the wash up mechanism to restrict the APAt term to inflation indexation differences only. This is strictly on the basis that dedicated wash up terms for OMRCA2 and OMRCB are adequately included in the general wash up formula in the Access Terms, which the ORR had done as part of amendments for the annual fixed cost wash up. If the ORR changes its position on the annual fixed cost wash up, ORR will need to make sure amendments to the wash up terms are consistent with its decision on the APAt term.

4.1.8. Other Minded To decisions on Access Terms

HS1 agrees with the ORR’s position on the other Minded To decisions on the Access Terms proposals. These were:

- Pass through cost wash up definition amendment
- Clarification of AIRC billing on spot bids

- Implementation of N-1 scheme in the FAT
- Minor corrections for clarification and consistency
- Not to approve a change in the VRO threshold from 4% to 10%
- Timeframes for reviewing performance incidents
- Amend the term 'Further IRC' to 'Additional IRC' in the FAT
- The list of proposals that were out of scope of PR24.

4.2 Performance regime

4.2.1. HS1 Ltd's proposal not to recalibrate the performance regime in PR24

We welcome ORR's support for our position that recalibration of the Performance Regime should be delayed until the necessary representative data is available (to commence by September 2025), and the amendments to the Access Terms to reflect this approach.

In paragraph 7.44 the ORR summarised HS1's view as being that the commitment cannot be to an end date because of risks of "lack of system wide agreement". In information provided to the ORR on 15 August 2024, we noted there is a realistic possibility that the operators and HS1 *agree* that the recalibrated parameters should not be implemented and that the existing parameters are adequate. So placing the obligation on HS1 to implement the outcome by a certain date may result in a situation where HS1 and the operators agree that it is not appropriate to implement but we must do it so in order not to be in breach of our obligations. The representation of HS1's view should be amended in the FD.

The non-provision of necessary data by operators is also a real risk to the timeframe for a recalibration. There have been past examples where this has been very difficult e.g. in PR19 the recalibration was significantly delayed because of this. The operators face no credible detriment or risk if they delay the process, only HS1 faces the serious implications (e.g. breach of our obligations, consultancy cost risk due to delays) and HS1 has no control over the operators to provide the data. It is unreasonable to place this risk solely on HS1.

It is for these reasons the obligation should be focused on the commencement date for the recalibration.

We note that ORR invited views from operators on our proposal that the recalibration may not be implemented if it is not sufficiently supported by operators. As noted above, there is a possibility that the operators and HS1 decide that the recalibration should not be implemented, so there also needs to be an option in the Access Terms to allow for this. HS1 would only stop a recalibration process where there is agreement across all parties. We do not think it is appropriate to give one operator the ability to veto the implementation of a recalibration – that is why the proposal is positioned so that HS1 as a responsible Infrastructre Manager makes the decision not to proceed.

We note that ORR expects us to consult on any new methods of recalibration or on the provisions for reactionary delay compensation incurred by operators on the HS1 network. We agree and plan to do this.

4.2.2. HS1 Ltd's further proposals for recalibrations during CP4

We welcome ORR's position to allow HS1 to amend and reapportion the OMRCA2 and OMRCB to reflect the adjustment in performance risk-related costs from a recalibration to commence in September 2025. We note this was a condition that all parties agreed to when deciding to delay the PR24 recalibration.

HS1 proposed the amendment of OMRCA2 and OMRCB for mid-Control Period recalibrations more generally, because without this there are perverse incentives for operators if they do not face the cost implications of any change in the performance risk-related costs arising from the recalibration. That is, the operators may request recalibrations where the outcomes could result in an adverse change in performance risk-related costs which, without any adjustment to OMRCA2 and OMRCB, HS1 will have to absorb. We note the ORR's position that changes to the pricing of performance risk resulting from unplanned recalibrations should be covered by the cost envelope the ORR determined for the control period.

The ORR is also minded to not to approve our proposed provision in the Access Terms that gives us the ability to invoice operators for the external costs of a performance regime recalibration when they are the party that requests it. The ORR's justification is that the recalibration benefits all parties, not just the operator requesting it. It is important to clarify that, while it is possible that the operators may benefit from the recalibration, HS1 is unlikely to benefit, as the existing arrangement with NR(HS) means that any changes in performance risk generally accrue to NRH(HS). Yet HS1 incurs the cost of the recalibration, not the other parties. Based on the ORR's reasons, the costs of unbudgeted mid-control period recalibrations should at least be shared across all parties – the operators and HS1. We note this aligns with SETL's view. This will also help mitigate stakeholder's incentives to request unreasonable recalibration requests, which we note EIL supports.

We therefore encourage the ORR to reconsider the proposal so that a provision is included in the Access Terms that gives HS1 the ability to invoice the operators for a share of the external costs HS1 incurs for a mid-control period performance regime recalibration.

4.3 Possessions regime

4.3.1. HS1 Ltd's proposals for CP4 Possessions Allowance

We welcome ORR's support for the revised Possessions Allowance amendments to the Access Terms and we support NR(HS) undertaking to report to stakeholders on the possession allowance usage by category and timing.

The ORR noted that the Possession Allowance would need to be updated to reflect any changes in the ballast renewals plans. As noted in Sections 1.2.4 and 1.4.2, we are retaining the ballast renewals delivery profile as proposed in our May 2024 5YAMS. Therefore, no change to the Possessions Allowances have been made.

4.4 EIL's proposal to use the Delay Attribution Board for disputes

We support the ORR's conclusion not to impose change on the HS1 contractual framework by requiring a move to use the Delay Attribution Board (DAB) for delay attribution disputes (rather than the existing Dispute Resolution Procedures that have been in place throughout HS1's contractual history with the operators).

Expanding on the comments made in our May 2024 5YAMS, prior to any proposed shift to using the DAB there needs to be a thorough assessment of:

- The DAB, to understand if its experience and expertise would be relevant and appropriate for handling disputes about the HS1 system. This includes:
    - how it would distinguish the arrangements for the mainline network from HS1 given the limited number of cases likely to be presented from HS1, and
    - how any potential conflicts of interest from DAB members would be addressed.
- The costs, benefits and risks of making such a change.
- Whether the nuanced incidents that operators refer to would have been demonstrably more satisfactorily settled by the DAB.

Any decisions to make such a change must be considered carefully and with sufficiently detailed assessment. There have not been any such assessments undertaken and it would therefore be unreasonable and unjustified to impose this change as part of PR24.

Undertaking such an assessment will incur material costs, given the magnitude of the proposed change and the extent of engagement, information gathering and analysis needed for a sufficient assessment. To do this, HS1 would require funded specialist industry expertise to help develop a detailed understanding of the DAB, assess how it compares with the current process, assess its member's experience, expertise and processes for handling disputes and potential conflicts. Significant legal resource will also need to be funded to review the wide range of contractual documents in the HS1 system for risks, unintended consequences and amendments needed.

It does not seem efficient for the system to incur these assessment costs when there is no clear indication the current mechanism is not working as intended, or that a move to the DAB would be beneficial, particularly when the ORR is focused on driving system efficiencies. The HS1 system has generally better performance than the mainline network and there are relatively few incidents were delay minutes are assigned. It is not clear if the DAB would lead to more effective and efficient resolution of the disputes likely to arise on HS1 (which are low probability, high value disputes that tend to be resolved through negotiation). We also note the wider industry context where the Government's Railway Reform is reviewing delay attribution systems and processes on the mainline network, which may result in an alternative mechanism replacing the DAB in a few years' time.

Therefore, incurring material cost to consider a move to the DAB at this time would not be a good use of system funds.

The ORR and the operators may consider it is still useful to incur these costs for HS1 to undertake an assessment to explore if a move to the DAB would have net benefits. If this is the decision, HS1 is willing to do this, subject to the following:

1. *HS1 needs to be funded for this exploratory work and undertaking the thorough assessment needed through an increase in HS1's own cost budget for CP4*

   As noted above, HS1 will require funding for industry expertise and the significant legal resource to review HS1's contractual framework, including our contractual requirements with our lenders and shareholders and any limitations that are in place regarding a change to which dispute resolution procedure we use, as well as for legal analysis of the possible implications on risk and unintended consequences.

   This project would be a significant undertaking for HS1 beyond the work we have budgeted to undertake over CP4. If we are not funded for this work, it will have a significant impact on our budget and ability to deliver on other areas.

   We will provide estimates of the costs required for this work in our November 2024 5YAMS. If the ORR decides this should be a workstream, it will need to include these costs in HS1 costs component of OMRC.

2. *The analysis is undertaken later CP4*

   Delivery of this workstream will not be possible in Year 1 given the extent of work to be done for this and the other work HS1 must undertake in the first year of CP4 – for example: anticipated international station capacity enhancement, ERTMS implementation, potential work to ensure the HS1 system can accommodate entry of new operators, performance regime recalibration, the Thameslink Box commitment and business as usual work. (If the ORR proceeds with the implementation of the annual fixed cost wash up, we will also be developing and implementing the this wash up during this time; we require additional budget for this work as well.)

   It would also be inefficient to undertake this review until there is more clarity on the Railway Reform analysis, which is unlikely in the first few years of CP4.

   If the ORR decides this should be a workstream, HS1 would undertake this in the later part of CP4, in time for consideration as part of PR29.

For the avoidance of doubt, HS1 cannot commit to implementing any changes at this stage. The decision can only be made following completion of the assessment. HS1 would also need to be funded for any implementation costs for such a change. The legal costs for amending the contractual framework will not be immaterial (as noted in our May 2024 5YAMS).

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4.5 St Pancras International – contractual inconsistency

Conclusion - ORR expects HS1 Ltd to lead a working group to review network incentive options with stakeholders in Year 1 of CP4

In the DD, the ORR concluded that there are inconsistencies between the contractual arrangements for the St Pancras International station and the Thameslink Box (managed by NRIL), and in the charges between operators who run directly competitive services. ORR recommends that these contractual inconsistencies are reviewed by the affected stakeholders (HS1, DfT, NRIL and operators) to propose alternatives.

The existing contractual arrangements relating to the Thameslink Box and St Pancras International station reflect the arrangements that were implemented prior to the sale of the HS1 Concession in 2010. NRIL and the DfT are counterparties to the agreement that includes the Thameslink box so, consequently, any changes to these contracts will require their consent. Govia Thames Railway (GTR) and DfT would also need to consent to GTR signing an agreement to contribute to station costs and potentially for GTR to enter into a Station Access Agreement.

We reviewed this during CP3, but following advice from the DfT, it was decided not to pursue the issue further as, at the time, the DfT did not contemplate allocating costs to GTR for the use of St Pancras International station.

We support revisiting these discussions, on the basis that a significant number of GTR passengers use St Pancras International and it should therefore contribute to station costs for the areas it uses.

We commit to holding a working group with DfT, NRIL and, where relevant, operators to review the contractual arrangements for the Thameslink Box and St Pancras International in Year 1 of CP4. The working group will consider if alternative contractual arrangements are possible to address inconsistencies in charges between operators that run directly competitive services. HS1 will report back on the outcome of this working group in the Year 1 AMAS (see Appendix A2).

We will update our November 2024 5YAMS to reflect this commitment.

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A1 Summary of HS1 response to ORR DD conclusions

Table 5: Summary of HS1 response to ORR draft determination conclusions

ORR conclusion	HS1 response
Asset management	
The structure of the Asset Management documents was in line with best practice.	Agree. No change.
The strategies for Track and Electrification asset groups represent best practice.	Agree. No change.
There are opportunities to accelerate step changes in maturity in other asset groups.	Not supported. No changes.
We support the CP4 route renewals plans (noting deliverability challenge below).	Agree. No change.
There is an opportunity to review deliverability challenges for the CP4 ballast renewal.	Review undertaken. No change.
We support the CP4 station renewals plans (noting scope challenge below).	Agree. No change.
There are opportunities for efficiency through scope review on specific CP4 station projects (5% efficiency on three specific projects).	Scopes clarified, not supported. No change.
Planning for renewals over 40 years has improved significantly since PR19.	Agree. No change.
There are opportunities to improve estimating and governance for CP4 station renewals.	Accepted, with some amendments. Included in CP4 commitments.

ORR conclusion	HS1 response
There are opportunities for efficiency in 40-year renewals plans, through asset data maturity (9% efficiency in specific asset groups, starting in CP5)	Not supported. No changes.
We support plans for maintenance activity in CP4 (noting efficiency opportunities below)	Agree.
Agile changes to maintenance in CP3 demonstrated best practice	Agree.
There are opportunities to optimise maintenance strategies in less mature asset groups	NR(HS) does not support this. No change.
We support CP4 access plans (noting deliverability challenge on one project, above)	Agree.
We support the CP4 R&D fund	Agree.
We support the proposed R&D funding mechanism and governance	Agree.
There are opportunities to prioritise R&D funding to accelerate asset data maturity	Agree, with revisions to R&D definition and governance needed.
We support the CP4 operations plans.	Agree.
We expect a commitment by HS1 Ltd to demonstrate improvements in operations.	Accepted. Included in CP4 commitments.
We support the CP4 safety strategy.	Agree.
We expect a commitment by HS1 Ltd to report on 'safety by design' in CP4 annual reports.	Accepted. Included in CP4 commitments.
We support HS1 Ltd's priorities on environmental sustainability.	Agree.
We expect a commitment by HS1 Ltd to lead a working group with stakeholders, to address barriers to environmental sustainability.	Accepted with some amendments. Included in CP4 commitments.

ORR conclusion	HS1 response
Cost Assessment	
We support HS1 Ltd's introduction of its 'cost policy' for renewals in CP5- CP11.	Agree.
We support the approach for splitting costs between variable and fixed (noting a small, 2%, adjustment towards variable costs).	Accepted all except two – those accepted are incorporated.
There are opportunities to improve the 'cost policy' calculations at future periodic reviews (0.5% efficiency on station renewals, starting in CP5).	Accepted. Incorporated into 5YAMS.
There are opportunities for efficiency through better 'base cost' data at future periodic reviews (4% efficiency on renewals, starting in CP5).	Not supported. No change.
We support HS1 Ltd's own costs.	Agree. HS1's costs will also be increased for Employers National Insurance Contributions change.
We support the proposed criteria for pass-through costs.	Accepted, noting position on Access Terms amendments for pass through costs.
We support NR(HS) base costs for operations & maintenance (noting opportunities through efficiencies and markups, below)	Agree. NR(HS)'s costs will also be increased for external change to Employers National Insurance contributions

ORR conclusion	HS1 response
We determined the efficient cost for operations and maintenance is c£3m/yr lower than HS1 Ltd's proposal. We identified opportunities to achieve this either through asset management maturity or through contracts.	NR(HS)'s O&M costs will not include an efficiency overlay. Costs will be increased for Employers National Insurance Contributions change
Charges	
HS1 Ltd's annuity models were fit for purpose and aligned with good practice.	Agree.
We support HS1's traffic weighting adjustment to the route annuity and have applied a partial traffic weighting to stations annuity (£0.3m/yr reduced charges).	Agree. Incorporated into 5YAMS.
We have removed the underfunding factor from route annuity (£0.9m/yr reduced charges).	Agree. Incorporated into 5YAMS.
We have allowed small negative balances towards the end of the 40-year annuity model (£0.4m/yr reduced route charges; and £0.4m/yr for stations).	Accepted, provided the ORR addresses our concerns and accepts HS1's position on renewals costs.
We have assumed restrictions on escrow returns will be addressed (£0.5m/yr reduced route charges; and £0.3m/yr for stations).	Not supported. We will update interest rate assumptions for latest forecasts.
HS1 Ltd's charging models were fit for purpose and aligned with good practice.	Agree.
We have corrected for errors in cost of capital calculations (minimal impact on charges).	Accepted. Incorporated into 5YAMS.
We have re-allocated fixed costs from freight to common costs, funded by passenger operators (£0.6m over 5 years reallocated).	Agree. Incorporated into 5YAMS. Amendments made to Freight volume forecasts.

ORR conclusion	HS1 response
Network Incentives	
We have presented 25 proposals for changes to access terms, for consultation.	Do not agree with certain amendments. See Table 6 for detail.
We expect HS1 Ltd to lead a working group to review network incentive options with stakeholders in Year 1 of CP4. This relates to Thameslink box contractual arrangements.	Accepted.

Table 6: Summary of HS1 response to ORR Minded To decision on Access Terms

Proposal	Proposer	ORR position	HS1 comment on ORR Position
Performance Regime: Include a provision that gives HS1 the ability to invoice the operator for the external costs of a performance regime recalibration when they are the party that requests it (Section 18.1).	HS1 Ltd	Minded not to approve	Do not agree. This should be amended so all parties share in the cost.
Performance Regime: Include a provision so HS1 may amend and reapportion the OMRCA2 and OMRCB to reflect the adjustment in performance risk costs from a recalibration (Section 18.1).	HS1 Ltd	Minded not to approve, but only for recalibration that has been deferred from PR24	Accepted.
Possessions Regime: Update the Possessions Allowance definition to reflect the extended and standard possession allowance for CP4. (Section 18.2.2)	HS1 Ltd	Minded to approve	Agree.

Proposal	Proposer	ORR position	HS1 comment on ORR Position
VRO: Update the definition of a subsequent Review Event threshold to refer to the volume forecast for the relevant year in the preceding VRO (Section 18.3).	HS1 Ltd	Minded to approve	Agree.
VRO: Changes to simplify the definition of a VRO and clarify approach (Section 18.3).	HS1 Ltd	Minded to approve	Agree.
VRO: Include a provision that, if freight ceases operating on HS1, it triggers a reapportionment of remaining freight fixed costs across passenger operators (Section 18.3).	HS1 Ltd	Minded to approve	Agree.
Pass through wash up: Change the definition of the pass through costs wash up term so the wash up applies to the total pass through costs in the year (Section 18.4).	HS1 Ltd	Minded to approve	Agree.
Pass through cost definitions: update existing pass through cost categories to include additional items. These are: success fees in Rates; broking fees and professional costs in Insurance; management and bill checking fees; and REGOs in non-traction energy (Section 18.7.2).	HS1 Ltd	Minded to approve energy management and REGOs. Minded not to approve remaining items.	Disagree with position on Rates success fees and Insurance brokering and fees not being included as pass through.
Pass through cost definitions: Update to include the new pass through cost categories for the REACT scheme, N-1 scheme and the escrow investment project (Section 18.7.2).	HS1 Ltd	Minded to approve	Agree.
AIRC: Include provisions to expressly clarify the billing of AIRC on spot bid services and consequential changes (Section 18.9).	HS1 Ltd	Minded to approve	Agree.

Proposal	Proposer	ORR position	HS1 comment on ORR Position
Implement the N-1 Scheme for consistency with the PAT (Section 18.9).	HS1 Ltd	Minded to approve	Agree.
Minor corrections for consistency and clarification in provisions within scope of PR24.	HS1 Ltd	Minded to approve	Agree.
A wash up of OMRCA2 and OMRCB to allocate fixed costs on actual train volumes. SETL suggests an annual wash up. EIL proposes this only occurs when actual volumes deviate by 10%.	EIL and SETL	Minded to approve with no trigger level	Do not agree. Disproportionate and imposes risk on HS1 with significant implications.
The APAt term in the wash up provisions is restricted to inflation indexation differences only.	EIL	Minded to approve	Accepted, only if dedicated A2 and B terms are included in wash up term.
Change the trigger for a VRO from 4% difference in train volumes to 10%.	EIL	Minded not to approve	Agree.
Operators should approve volume forecasts HS1 uses to execute a VRO if these are above the FWT.	EIL	Minded to approve	Do not agree, particularly if the fixed cost wash up is not implemented.
Include dedicated terms for OMRCA2 and OMRCB so these are not washed up through APAt term. EIL proposes the wash up of OMRCA2/B occurs only when volumes deviate by 10%.	EIL	Minded to approve	Accepted, except no to trigger level.

Proposal	Proposer	ORR position	HS1 comment on ORR Position
The OMRCA1 wash up approach is changed so OMRCA1 applies to the ex-post volume of trains; that OMRCA1 is refunded if volumes are below FWT.	EIL	Minded to approve where difference between actual trains and FWT trains is positive - but not in cases below FWT	Accepted.
Remove the floor to inflation indexation for OMRC so negative inflation (deflation) is passed on to the operators' charges.	EIL	Minded to approve	Do not agree. Unreasonable and imposes deflation risk on HS1 with significant implications.
The DAB is used as the relevant dispute resolution body for delay attribution disputes to improve the efficiency and effectiveness of dispute handling.	EIL	Minded not to approve	Agree.
The timeframes for reviewing performance incidents should be extended to allow reasonable time to review, and the governance for the process outlined.	SETL	Minded not to approve	Agree.
Performance Regime: Include a provision that allows for recalibration during CP4, commencing by September 2025 (Section 18.1)	HS1 Ltd	Minded to approve	Agree.
Possessions Regime: Change the number of possessions within the Possessions Allowance (Section 18.2.1)	HS1 Ltd	Minded to approve	Agree.

Proposal	Proposer	ORR position	HS1 comment on ORR Position
Possessions Regime: Allow unused Extended Possessions Allowance to roll over between years	HS1 Ltd	Minded to approve, subject to use of Engineering Access Statement as change control mechanism for rollover	Agree.
AIRC: Amend the term 'Further IRC' to Additional IRC to be consistent with the PAT (Section 18.9).	HS1 Ltd	Additional IRC is within scope of the review. This includes the consequential amendments.	Agree.

A2 CP4 commitments

Table 7: New CP4 commitments based on ORR Draft Determination

ORR Comment	HS1 Commitment text	Commitment date
ORR explicit commitment		
1. ORR recommended that HS1 Ltd accelerates gathering and use of data for lifts and escalators, and mechanical and engineering assets. This should help to improve estimating the timing, scope and cost of stations renewals.	(a) HS1 will report on the progress of the improved LET monitoring plan outlined in the SAS in the AMAS throughout CP4. (b) HS1 will review the MEP asset data monitoring plan for opportunities to improve it by Year 1 of CP4. HS1 will report on this in the HS1 AMAS.	(a) Each AMAS in CP4. (b) Year 1 AMAS.
2. ORR recommended that the governance of stations renewals is reviewed and aligned to the governance of route renewals. This should include sharing best practice from route renewals, for example, better use of leading indicators and better packaging of works, to reduce the number of small change controls.	HS1 will review the governance of stations renewals. This will focus on aligning governance of stations renewals to the governance of route renewals, for example, better use of leading indicators and better packaging of works.	Year 1 AMAS

ORR Comment	HS1 Commitment text	Commitment date
3. ORR requested that we include a commitment to demonstrate improvements around managing recovery of the train services following an incident by the end of CP4 Year 1. Otherwise, ORR suggested we propose an alternative means to achieve a similar benefit.	HS1 will report on changes that have been made and benefits that are being realised by NR(HS) around managing recovery of the train services following an incident by the end of CP4 Year 1.	Year 1 AMAS
4. ORR would like to see increased focus on safety by design throughout CP4. ORR asked us to include a commitment in the HS1 Final 5YAMS to report on any new initiatives or examples of safety by design, in the HS1 Asset Management Annual Statements throughout CP4.	HS1 will report on any new initiatives or examples of safety by design in the AMAS on an ongoing basis.	Each AMAS in CP4
5. Following examination of HS1 corporate environmental strategy, ORR recommended a commitment for HS1 Ltd to lead a working group in Year 1 of CP4, with involvement from DfT, suppliers and other relevant stakeholders, to seek a way forward on the issues of zero emissions vehicles, renewable energy, circular economy and biodiversity.	(a) HS1 will hold a working group with NR(HS) and DfT to discuss possible solutions for introducing charging infrastructure at Singlewell Depot. HS1 will report on progress in the Year 1 AMAS.	(a) Year 1 AMA
	(b) HS1 will lead on progressing the delivery of the solar panel initiative. We will report back on progress in the Year 1 AMAS.	(b) Year 1 AMAS

ORR Comment	HS1 Commitment text	Commitment date
	(c) HS1 and NRHS will explore options to integrate circular design principles and sustainable procurement into future projects, and expand our existing circular economy plan to reflect this. As the asset owner, HS1 will involve DfT in this workstream if required. HS1 will report progress in our annual ESG reports under the 'Resource Use and Waste Impacts' section, with key updates provided after year 2 of CP4 (2026-27 ESG report).	(c) Progress updates in annual EAS report. Key update in Year 3 ESG report.
	(d) HS1 will undertake a biodiversity re-baseline survey and develop a management plan to achieve net gain by the end of Year 1 that allows HS1 and NRHS to make a business decision on implementation. The management plan will have regard to priorities set in Local Nature Recovery Strategies and the Government's Environmental Improvement Plan.	(d) Year 1 AMAS

ORR Comment	HS1 Commitment text	Commitment date
6. ORR identified inconsistencies between the contractual arrangements for the St Pancras International station and the Thameslink Box (managed by NRIL and use by the operator GTR) and in the charges between operators at the station that run directly competitive services. The ORR recommends that these contractual inconsistencies are reviewed by the affected stakeholders (HS1 Ltd, DfT, NRIL and operators) to propose alternative contractual arrangements in Year 1 of CP4.	HS1 will hold a working group with DfT, NRIL and, where relevant, operators to review the contractual arrangements between the Thameslink Box and St Pancras International in Year 1 of CP4. This will consider if alternative contractual arrangements are possible to address inconsistencies in charges between operators that run directly competitive services. HS1 will report back on the outcome of this working group in the Year 1 AMAS.	Year 1 AMAS.
Other proposals to which HS1 will commit		
7. ORR recommended that we further develop our plans to address significant high-consequence, low-probability risks. The limited size of the HS1 network should allow for clear, concise, agile management of an unpredictable risk such as climate change. ORR believes that this opportunity is currently being missed by the omission of a specific climate change adaptation or weather resilience SAS.	HS1 will include a weather resilience strategy in each discipline SAS by the end of CP4.	End of CP4.

ORR Comment	HS1 Commitment text	Commitment date
8. In line with SBTi's updated target validation criteria, HS1 Ltd will commit to developing 'supplier engagement' targets, one of four target-setting methods for companies to formulate scope 3 targets ('Setting science-based, as opposed to other types of greenhouse gas reduction targets, ensures that the targets are meaningful and that their ambition is in line with climate science"). Alongside continued data refinement, HS1 Ltd will liaise with key suppliers and develop supplier engagement targets by April 2025. Examples might include: "Ensure X% of our suppliers by emissions / spend covering purchased goods and services and capital goods have science-based targets by X date".	HS1 will develop "supplier engagement" targets in line with SBTi's updated target validation criteria by Year 1 of CP4 and liaise with key suppliers to monitor their progress on delivering these targets across CP4.	Targets by end of Year 1. Supplier liaison ongoing over CP4.
9. ORR encourages us to progress as quickly as possible with developing a more up to date scope 3 emissions baseline based on supplier bill of quantities data, assessing tools such as the 'Rail Carbon Tool', and incorporating initiatives being undertaken by NR(HS)'s parent company (NRIL). ORR is also encouraging us to develop our approach to showing how reductions in scope 3 emissions could deliver financial efficiencies; or could be delivered alongside its strategy for 'circular depot' initiatives and 'circular station' initiatives during CP4.	We will Incorporate supplier-specific data into our annual Carbon Footprint Analysis by the end of Year 2 of CP4 to develop an updated scope 3 emissions baseline. We will report on the progress for this commitment in our annual ESG reports.	Data by end of Year 2

ORR Comment	HS1 Commitment text	Commitment date
Additional commitments from HS1		
10. ORR conclude that there is an opportunity to improve cost policy calculations at future periodic review. ORR recommended that the cost policy methodology is improved before the next periodic review to include probabilistic risk.	During CP4 we will further develop Cost Policies for route and stations, evolving them into integrated cost models, linking volumes and HS1 outturn renewal costs, considering risk application/methodology improvements. We will report on the development of the Cost Policies in the HS1 AMAS.	During CP4. Ongoing progress reporting over CP4.
11. ORR concluded that there are opportunities to review deliverability challenges for CP4 ballast renewal.	We commit to develop, socialise and implement a stakeholder engagement plan for the ballast campaign in Year 1 of CP4, continue the development works and update system stakeholders of progress towards delivery in accordance with the plan.	Year 1 of CP4

A3 Renewals cost efficiencies

Appendix A3 Renewals cost efficiencies.xlsx provides a response by asset type and time horizon to the ORR DD challenges around:

- Improving efficiency in 40-year renewals plans, through asset data maturity (9% reduction in renewals costs for specific asset types from CP5)
- Improving efficiency through better 'base cost' data at future periodic reviews (4% reduction in renewals costs from CP5)
- Improving the 'cost policy' calculations at future periodic reviews (0.5% reduction in stations renewals costs from CP5)

A4 Escrow sensitivity analysis

The ORR's DD conclusions made several adjustments to the renewals costs and annuity modelling and assumptions. We were conscious that these adjustments, taken together with the adjustments that HS1 made to the annuity costs in our May 2024 5YAMS, might increase the risk of underfunding the escrow.

To demonstrate the combined impact on the per annum annuity for route and stations from HS1's and ORR's adjustments, we have shown this in waterfall graphs in Figure 1 and Figure **2**. These set out:

- For route, HS1's adjustments on renewals costs and modelling reduce the annuity cost by £19.6 million per annum. Combined with the ORR's adjustments, the overall reduction in the annuity of £23.2 million per annum.
- For stations, HS1's adjustment for the Cost Policy reduced the annuity by £0.9 million per annum. Combined with the ORR's adjustments, the annuity is reduced by £3.0 million per annum.

Figure 1: Route renewals annuity cumulative adjustments (£m, February 2023 prices)

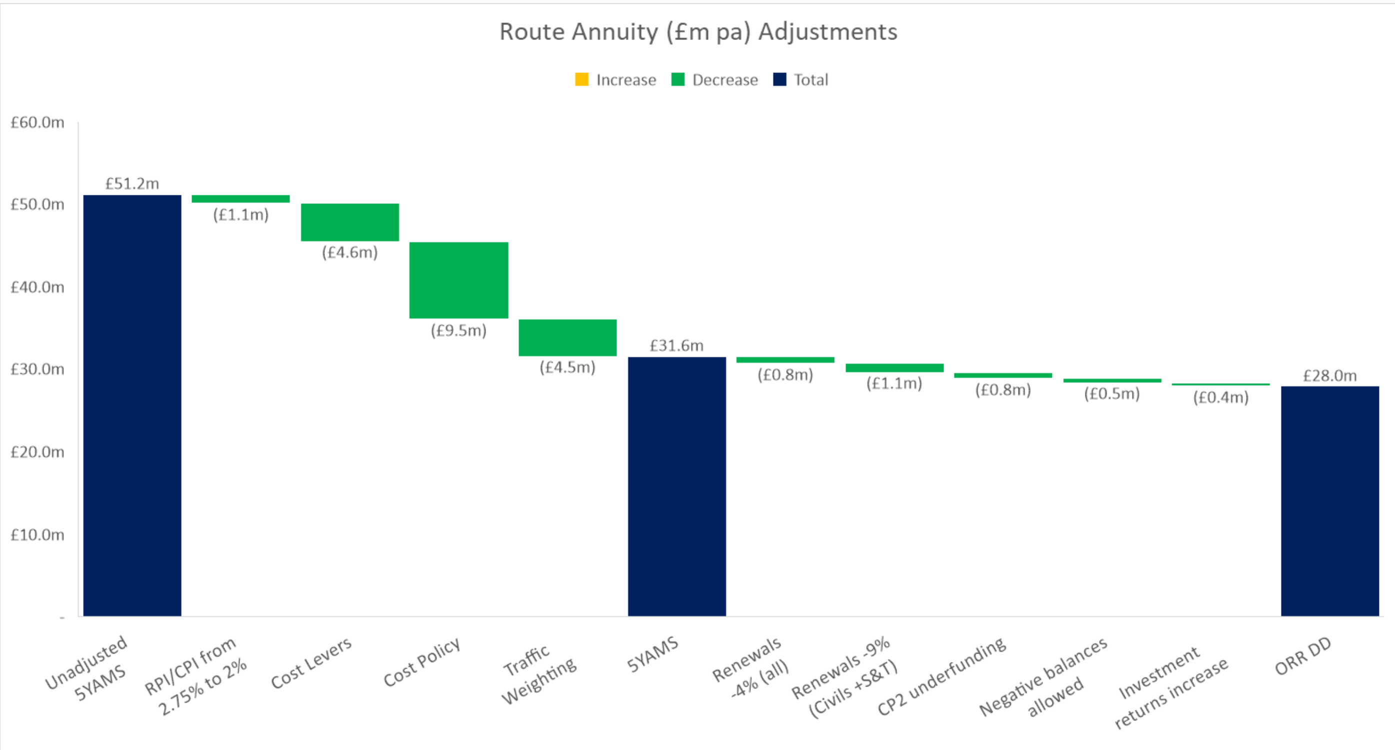
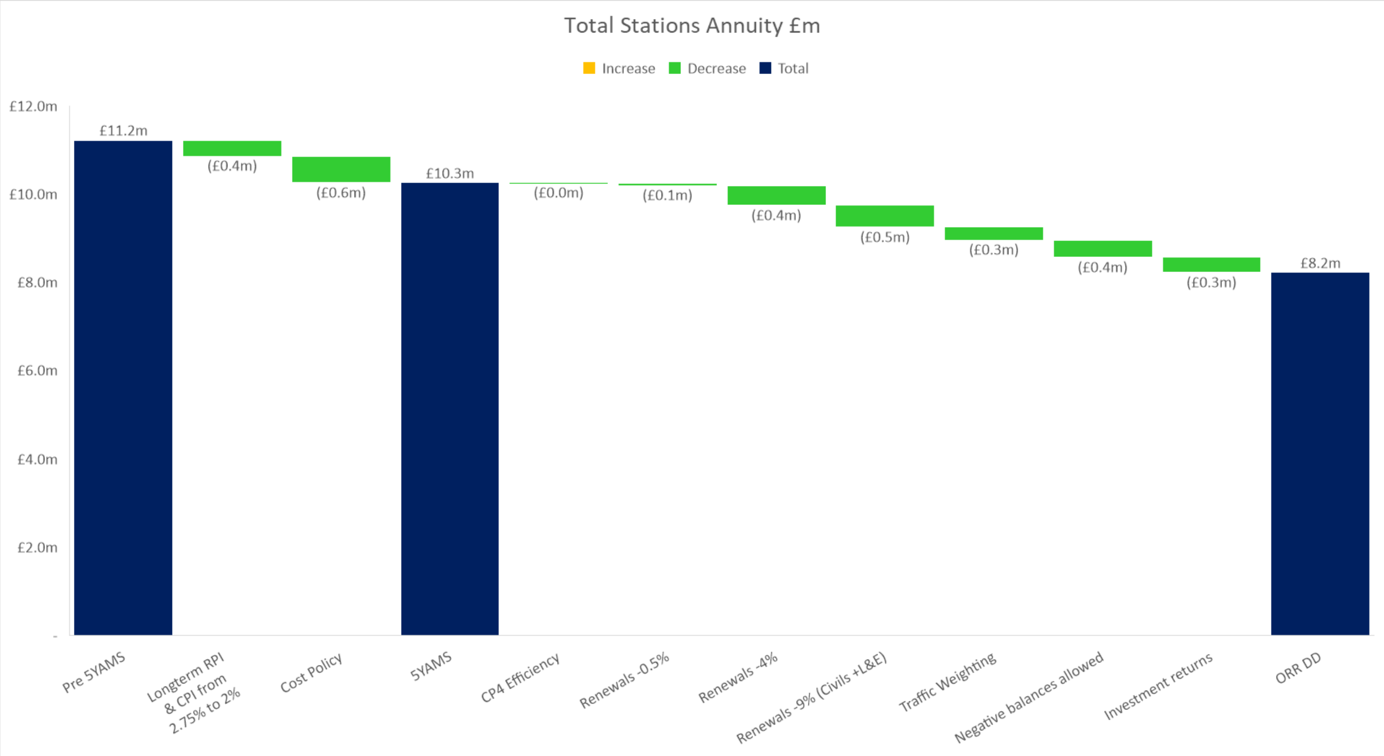


Figure 2: Stations renewals annuity cumulative adjustments (£m, February 2023 prices)



We therefore undertook a sensitivity analysis of the route and four station escrow balances to understand if the ORR's renewals costs and modelling adjustments increase the risk of underfunding the escrow balance. We did this in two parts:

A. The risk to funding of renewals in the immediate control period (CP4) as well as the early years of the following control period (CP5). The concern being that risk of reaching a negative balance in these years could result in costly last-minute financing of renewals and higher charges for the operators. In this part we also considered the impact of a delay in the ballast renewals, as part of the review requested by the ORR – see Section 1.2.4.

B. The risk of underfunding in later control periods resulting in higher future charges for operators. The concern being that making assumptions that are overly optimistic will support operator affordability in the short term but lead to large adverse swings in operators' charges in the following periodic review that could affect their ability to run services (particularly for new operators) which would impact on growth, competition and ultimately outcomes for passengers.

We have summarised the findings below. We will provide the detailed working of this analysis to the ORR.

PART A. Underfunding risk for immediate control periods

For this analysis, we modelled a baseline scenario for PR24 (CP4 to CP10) based on the ORR's DD outcomes i.e. renewals cost efficiencies and modelling assumptions. For route, this baseline scenario uses HS1's proposed ballast delivery profile so we can test the impact of a delay.

We then considered whether the following scenarios put the escrow balance and funding of CP4 and CP5 renewals at risk (as shown in Figure 4 to Figure 7 below):

1. The ORR's adjustments combined, particularly the allowance of small negative balances (i.e. the baseline scenario – the pink line):
   - For all five escrow accounts, the balances remain positive beyond CP6.

2. Interest rates on escrow investments are 1% lower than assumed by the ORR, i.e. realised in line with HS1's assumptions (the blue line):
   - All five accounts remain positive in CP4 and CP5. The impact has a larger effect towards the end of the 40-year period which can be corrected for in future Periodic Reviews through higher charges.
   - This also indicated that there is significant headroom in CP4 and CP5 to manage any adverse outcomes on renewals costs (at least £75m, £50m and £8-10m per year in the route, St Pancras, and other station escrows respectively).
   - ➢ *Therefore, this analysis indicates that there is no significant risk to underfunding in the immediate control periods with the ORR's adjustments.*

3. A 'delay in ballast' renewals in line with ORR DD proposed ballast profile (the yellow line) and the combined impact of a delay in ballast and 1% lower interest rates (the green line):
   - The route escrow remains positive through CP5. The impact is to shift back renewals expenditure resulting in a higher-than-expected CP4 escrow closing balance that is used to fund the delayed renewals in CP5.
   - ➢ *This indicates there is little risk to funding CP4 and CP5 renewals from HS1's ballast renewals profile.*

Figure 3: Route escrow balance scenarios (£m, nominal prices)

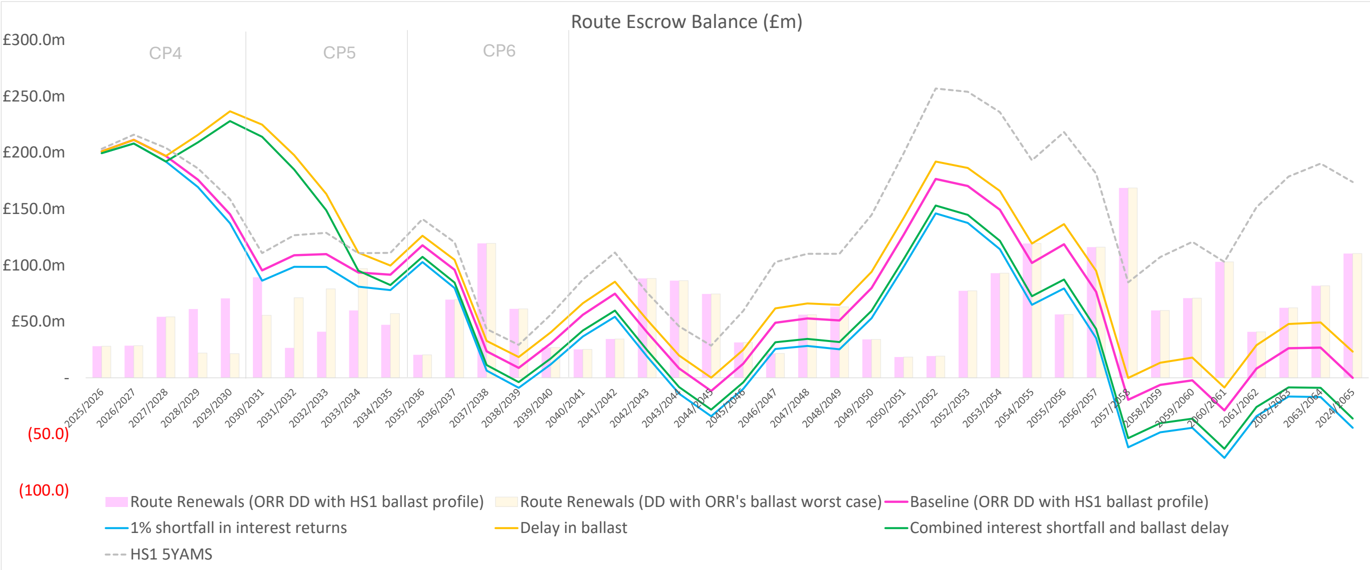


Figure 4: St Pancras station escrow balance scenarios (£m, nominal prices)

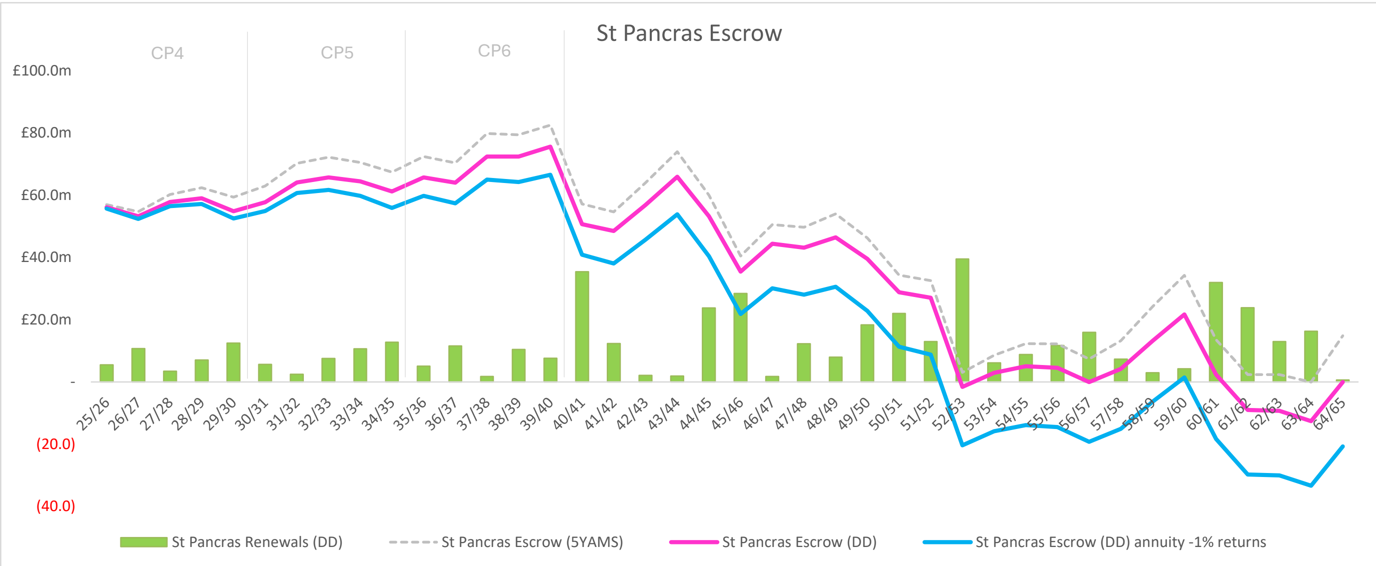


Figure 5: Ebbsfleet station escrow balance scenarios (£m, nominal prices)

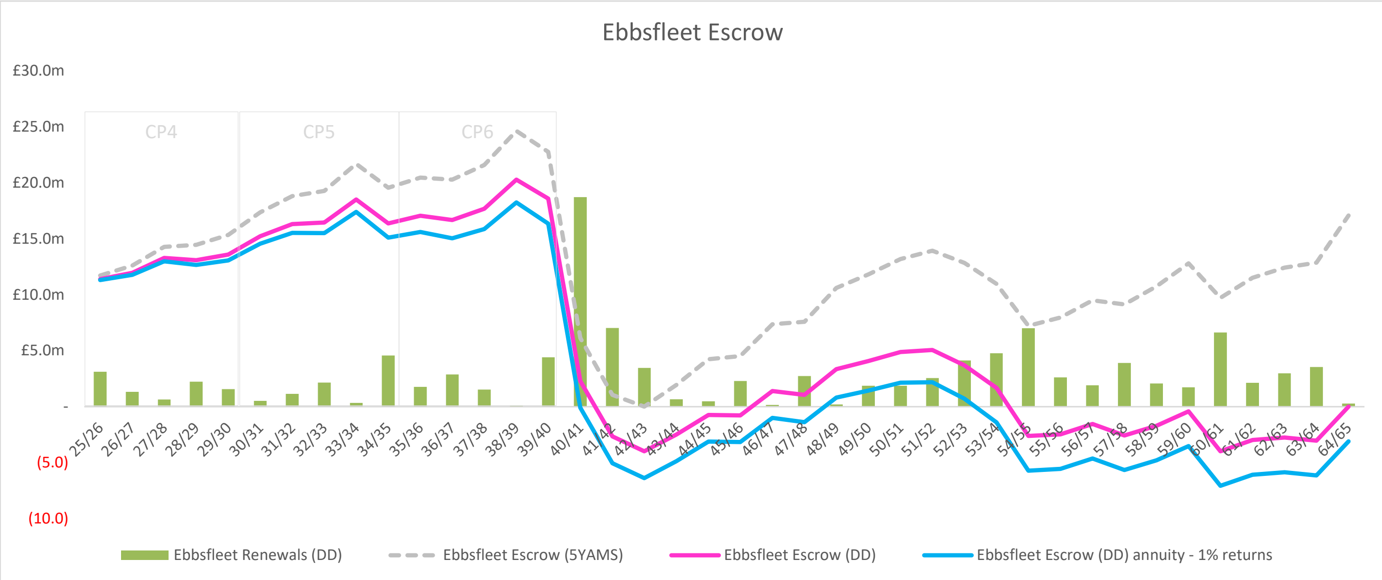


Figure 6: Stratford station escrow balance scenarios (£m, nominal prices)

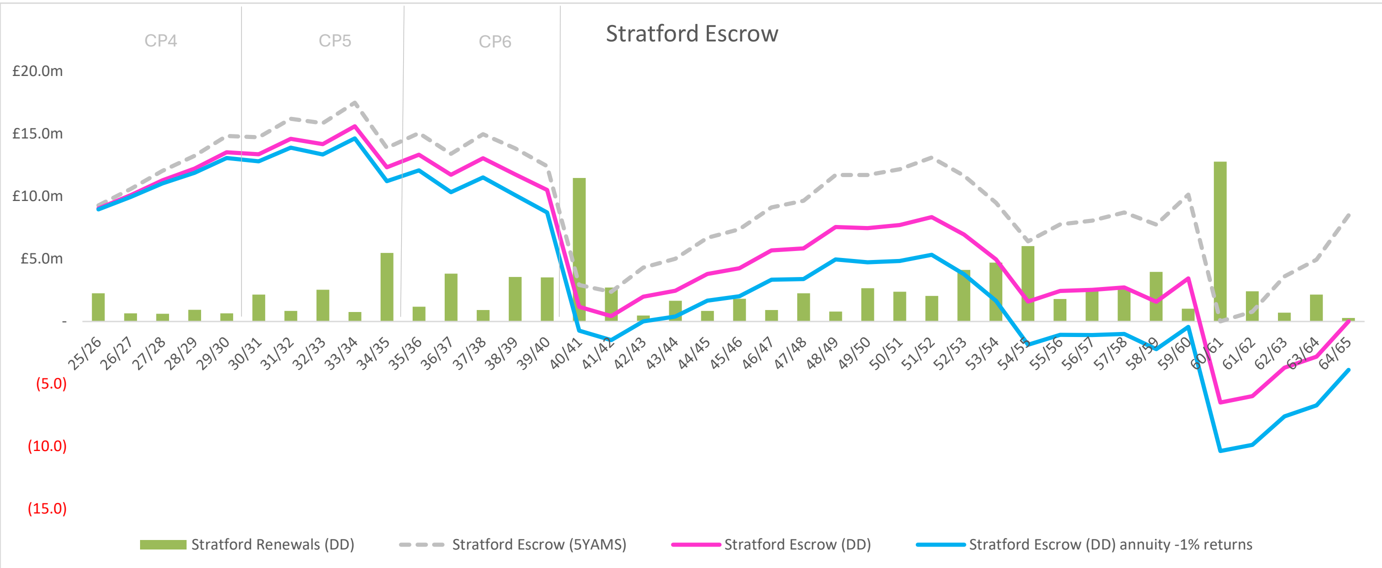
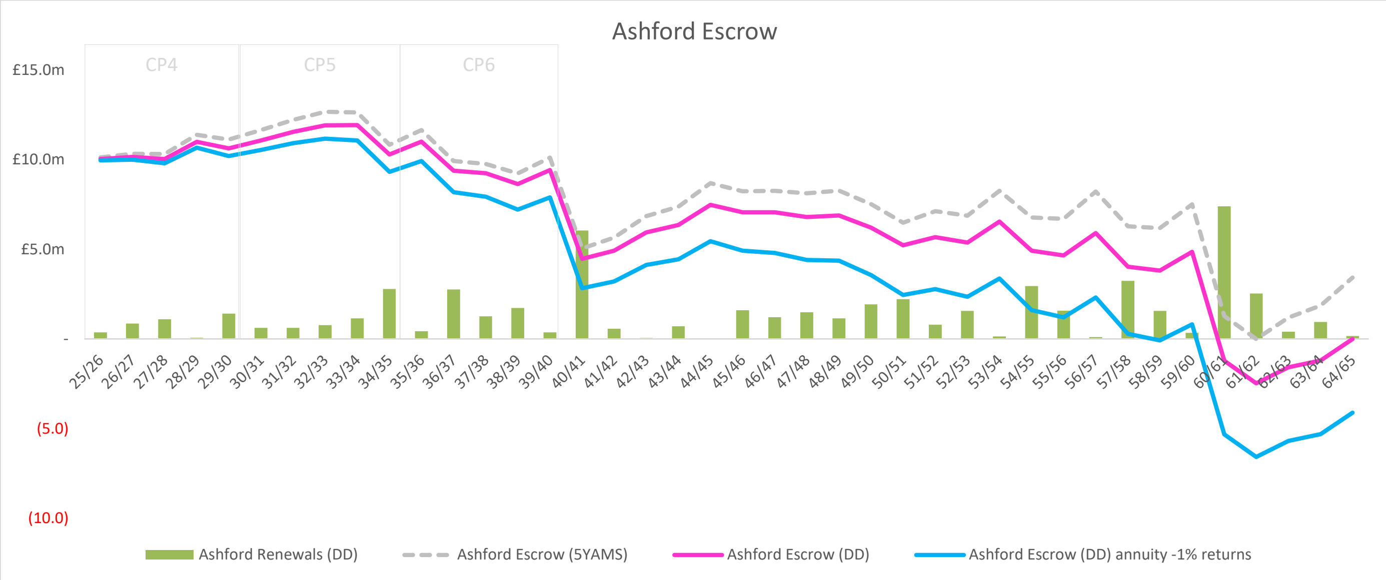


Figure 7: Ashford station escrow balance scenarios (£m, nominal prices)



PART B. Underfunding risk for future control periods

For this analysis, we considered the sensitivity of indicative CP5 costs to alternative adverse scenarios so that we can compare these to CP4 proposed costs as a proxy for what the change in operators costs could be between control periods.

We modelled indicative PR29 (CP5 to CP11) renewals expenditure for the five escrow accounts (route and four stations) to calculate an indicative per annum annuity for CP5 under certain scenarios. This is then compared to the CP4 annuity costs to understand the potential increase between CP4 and CP5.

Assumptions for the indicative PR29 (CP5 to CP12) escrow profile:

- The 40-year renewals profile is the same as PR24 (using HS1's ballast delivery profile). The new 5-year period (CP12) is based on the average renewals cost for each year (e.g. Year 1 is the average of Year 1 capex) of the previous control periods CP4-CP11.
- The indicative PR29 annuity is calculated using: (i) the CP4 closing balance given by the ORR's renewals cost and modelling assumptions and HS1's ballast renewals profile (i.e. CP4 materialises as per the ORR's assumptions) and (ii) assumes the same modelling assumptions for CP5 to CP11.

We compared the route and stations LTC per annum annuities for CP4 to what these could be in CP5 under several scenarios that assume adverse outcomes to what the ORR has assumed. These scenarios include:

0. ORR baseline – what the CP5 costs would be if ORR's DD assumptions are retained.
1. Reverse the ORR's adjustments to renewals costs (c7% overall increase in costs) to return to HS1's 5YAMS cost assumptions.
2. Interest rates 1% lower than ORR DD assumption.
3. Combined impact of (i) return to HS1's 5YAMs renewals costs and (ii) 1% lower interest rate.

4. Combined impact of (i) HS1's renewals costs plus 20% higher costs and (ii) 1% lower interest rates – a worst-case scenario such as the Cost Policy being optimistic.

Table 8 and Table 9 below summarise the outcomes.

Table 8: CP5 route cost sensitivity analysis (£m per annum, February 2023 prices)

Scenarios	Route Renewals Annuity			
	£m pa	£m change vs PR24	% change vs PR24	% change vs PR24 (nominal*)
PR24 DD - CP4 costs	28.0	n/a	n/a	18%
0. Baseline - ORR assumptions remain	28.2	0.3	1%	19%
1. HS1's PR24 5YAMS renewal cost forecast	30.4	2.5	9%	28%
2. -1% interest rate	28.5	0.6	2%	20%
3. Combined - HS1's 5YAMS renewals costs, -1% interest	30.7	2.7	10%	29%
4. Combined - HS1's 5YAMS renewals costs plus 20%, -1% interest	37.4	9.4	34%	57%

* Based on HS1 5YAMS inflation forecast

Table 9: CP5 stations LTC sensitivity analysis

Scenarios	All Stations LTC Annuity			
	£m pa	£m change vs PR24 (real terms)	% change vs PR24 (real terms)	% change vs PR24 (nominal*)
PR24 DD - CP4 costs	8.2	n/a	n/a	18%
0. Baseline - ORR assumptions remain	8.3	0.0	0%	18%
1. HS1's PR24 5YAMS renewal cost forecast	9.3	1.1	13%	33%
2. -1% interest rate	8.5	0.3	4%	22%
3. Combined - HS1's 5YAMS renewals costs, -1% interest	9.5	1.3	16%	37%
4. Combined - HS1's 5YAMS renewals costs plus 20%, -1% interest	11.8	3.6	44%	69%

* Based on HS1 5YAMS inflation forecast

It shows that:

- If we need to reverse the ORR's assumptions in PR29 (scenario 3), the per annum annuity costs for operators could increase:
    - For the route, by 10% (or £2.7m per annum, £13.6m over a control period) in real terms. This could be a 29% increase in nominal terms.
    - For stations, by 16% (or £1.3m per annum) in real terms. This could be a 37% increase in nominal terms.

- In a worst-case scenario (scenario 4), if we need to reverse the ORR's assumptions and the Cost Policy, the annuity costs for operators could increase:
    - For route, by 34% (or £9.4m per annum, £47m over a control period) in real terms. This could be a 57% increase in nominal terms.
    - For stations, by 44% (or £3.6m per annum) in real terms. This could be a 69% increase in nominal terms.

We consider that applying all of the ORR's adjustments to the annuity costs materially increases the risk of future escrow underfunding and higher charges. The risk of higher charges is particularly concerning given the developments that will be occurring at that time. This includes:

(i) Operators facing higher costs for anticipated international station capacity enhancement and ERTMS implementation, which will compound the cost impact and could affect their growth plans and service quality for passengers.

(ii) Potential new operators that could be entering around this time, which operations will be sensitive in the initial years and so adverse changes could have a disproportionate impact on their ability to compete.

HS1 response to ORR PR24 Draft Determination

Hi, Thank you very much for the opportunity to comment on the ORR's draft determination dated 30 September 2024, relating to its Periodic review of HS1 Ltd.

Access charges for freight traffic
I very much support the reduction in freight access charges to £7.74 per km, as shown in the ORR's draft determination for CP4. This would of course be a significant reduction as compared with CP3.

The ORR's draft determination indicates that there are now only about 200 freight trains per annum using HS1. There is thus much work to be done to take advantage of the proposed lower access charges, to correct the legacy of the past, which has resulted in such low usage of HS1 by freight traffic. This work is badly needed, in the interests of countering climate change.

Climate change – need for modal shift
There is a strong need for modal shift of freight from road to rail in the UK, as part of measures to counter climate change,. This particularly applies to trunk hauls of freight.

HS1 potentially has a key role to play in this. Trains carrying lorry trailers are seen in Continental Europe, but not so far in the UK.

More freight train paths and lower access charges are needed on HS1 to facilitate the through running of trains carrying lorry trailers from Continental Europe to Barking for the London market – and vice-versa – via the Channel Tunnel and HS1.

This would, of course, be much more climate friendly than lorries travelling through the Channel Tunnel on the Shuttle, and those lorries then using the UK road network to reach the London area.

Important – and achievable
Emissions from rail transport are much lower than those from operating HGV's on the road network. Thus, putting lorry trailers on trains in this way could be expected to significantly reduce emissions – clearly a very important and necessary objective.

And we have the infrastructure to achieve it. HS1 has been built to European gauge, and therefore trains carrying lorry trailers from Continental Europe could use HS1.

A company called CargoBeamer https://www.cargobeamer.com/ is developing routes for trains carrying lorry trailers in Continental Europe, and currently has a route from Perpignan, in the South of France, to Calais – running four round trips per week on this route.

Taking this route as an example, there might be the possibility of extending this route – with appropriate negotiations, traffic analysis, and marketing etc – from Calais to Barking.

At the moment, CargoBeamer has an arrangement with the operator of the Channel Tunnel for lorry trailers to be forwarded from Calais to Ashford where desired. Clearly, in terms of the journey in the UK, this is limited.

A copy of CargoBeamer's product sheet for the Calais to Perpignan route is attached for information.

Need for a driving force

So we have the necessary basic infrastructure to run trains carrying lorry trailers from Continental Europe to Barking via HS1.

But where is the driving force that will make this happen?

The fact that the operation of HS1 has been granted to a private concession until 2040 seems unhelpful.

Great British Railways (GBR), which exists in shadow form, may have a team focussed on development of rail-freight. But, of course, HS1 does not come within GBR's remit.

It seems that the only levers that we can pull in order to influence HS1 are those resulting from the regulatory oversight exercised by the ORR.

UK Government shortcomings

The technology exists to create dedicated freight depots, with equipment to quickly and efficiently transfer lorry trailers between road and rail wagons, and vice versa. If such a depot were to be created at Barking, there would clearly be a significant cost.

Would the UK Government contribute to this cost, in the interests of tackling climate change? It seems not, since Freight Facilities Grants have apparently been phased out in England (although, ironically, they are still available in Scotland).

Looking at rail freight in Great Britain generally, the Mode Shift Revenue Support grant scheme (MSRS) aims to support the transfer of rail freight from road to rail. The scheme recognises the financial disincentives inherent in transfer of traffic to rail, such as the fact that rail track access charges have increased over the years, whereas road fuel duty has been frozen or reduced. In addition, electricity charges for rail traffic have increased significantly.

So could the MSRS help with the introduction of trains carrying lorry trailers on HS1? Unfortunately, this seems unlikely –

1. There is a limited overall budget for MSRS;
2. The MSRS scheme for intermodal traffic excludes trains coming through the Channel Tunnel;
3. It seems questionable whether the MSRS scheme for bulk rail traffic could apply to trains carrying lorry trailers coming from/to Continental Europe.

Could it be, therefore, that the UK Government is not willing to offer any financial support towards reducing the number of HGV's which come through the Channel Tunnel on the Shuttle, and thence directly onto British roads?

Could the Government help?

The answer should be, and must be, 'Yes'. The Government should surely help and offer incentives for such a project, to progress the Government's environmental objectives.

Again looking more generally at rail-freight in Great Britain, Network Rail has recently introduced a scheme for temporary, initial reduction of rail track access charges, for new rail freight traffic flows. This is clearly intended to encourage companies to take the first step in transferring traffic to rail – and hopefully the companies will find that rail works well for them, and continue to use rail.

Of course, this scheme would not apply to HS1, since HS1 is operated as a private concession, not within Network Rail.

It seems that this disjointed structure, with HS1 being separate from Great British Railways (GBR), is likely to result in HS1 continuing to be overlooked by GBR / the Government when considering the perceived rail-freight network in Great Britain.

The Government needs to be reminded of the potential of HS1 as a carrier of rail-freight from/to Continental Europe.

With the reduction in HS1 track access charges proposed under the ORR's draft determination, now is the time when the Government should be showing support (through financial incentives) for the concept of trains carrying lorry trailers to operate between Continental Europe and Barking.

The Government's incentives should include a freight facilities grant for the depot needed at Barking, together with modal shift grants. The latter may need to include help with the cost of electricity for rail transport, in addition to help with track access charges.

Developing the concept

We need a person with vision, to see the possibilities, and progress this concept.

Discussions would clearly be needed with a number of different parties – including

- HS1 Ltd;
- A company such as CargoBeamer which operates trains carrying lorry trailers;
- UK freight operating companies;
- Freight forwarders, logistics companies etc;
- The ORR;
- The UK Government;
- The company operating the Channel Tunnel;
- Land-holders at Barking / Ripple Lane, where the freight depot would be built.

Other considerations

Class 92 electric locomotives are the only locomotives authorised to work freight trains through the Channel Tunnel and along HS1.

Due to the limited freight traffic through the Channel Tunnel in recent years, only a limited number of these locomotives are in suitable condition to operate the proposed trains carrying lorry trailers.

A refurbishment programme might therefore be necessary to provide a sufficient pool of locomotives able to operate the trains.

As noted above, some Government help might be needed with the cost of electricity for rail transport.

Looking at Great Britain more generally, we have the ridiculous situation that electricity charges are so high that many electric locomotives have been sidelined by UK freight operators, with diesel locomotives then taking the place of the electric ones in hauling freight services.

This situation is clearly contrary to the Government's objectives in tackling climate change. So how can a responsible Government preside over this situation? – action is obviously needed, possibly by means of a subsidy, to ensure that the electricity charges do not remain unaffordable.

<u>The start of something bigger?</u>

The operation of trains carrying lorry trailers between Continental Europe and Barking could be Stage one in a bigger project – a project which would be even more beneficial in countering climate change.

We would again need a person (Government?) with the vision to see and implement this possibility.

Ultimately, trains carrying lorry trailers could operate between Continental Europe and the Midlands and North of England – and between Barking and the Midlands and North – potentially leading to a very significant reduction in HGV journeys on the main road network, and thus a large reduction in emissions.

There would be a direct reduction in emissions arising from the fall in HGV journeys, and also potentially an indirect reduction due to the lower usage of the road network, and thus less congestion.

These freight train journeys would be achieved by using both HS1 and HS2. Use of HS2 would probably be limited to night times, when there would be lower demand for passenger use. However, as with the situation generally in Great Britain, the priority given to freight traffic, in gaining access to the rail network, needs to be enhanced – in order to gain the environmental benefits from rail-freight.

To cater for this traffic, there would clearly need to be possibly two new freight depots, one in the Midlands and one in the North, with access from HS2 – and with good links to the road network, for onward transit of the lorry trailers.

When HS2 was first announced, there was to be a link between HS1 and HS2. This link was subsequently dropped, a very short-sighted and limiting decision in my view.

The link between HS1 and HS2 needs to be reinstated. In judging the project to provide this link, environmental benefits, as set out in these notes, should be a major consideration – rather than the historical approach of largely considering time savings (a method which can be traced back to social cost-benefit studies undertaken as long ago as the 1960's, and which is no longer appropriate in many cases in the modern era). Having said that, there might indeed be some time savings for road users, as a result of lower congestion – and there might potentially be savings in road maintenance costs, due to lower HGV usage.

Like HS1, HS2 has been built to European Gauge. This gives the possibility of running trains carrying lorry trailers between Continental Europe and the Midlands in this Country.

In addition, at least two proposals have been put forward to extend HS2 from its present truncated limit at Handsacre, to Crewe and Manchester. Contrary to the proposed specifications for these additional lines, any extension of HS2 must be built to European Gauge, to allow for the future use of these lines by trains carrying lorry trailers from Continental Europe.

An incidental benefit of reinstating the link between HS1 and HS2 is, of course, that through passenger services could operate between Manchester or Birmingham and Continental Europe – offering more competition with air travel and a more climate friendly alternative.

<u>A completely possible benefit for the environment</u>
The proposed reduction in HS1 access charges, as shown in the ORR's draft determination for CP4, is very welcome, and I very much support it.

However, I also hope that this reduction in charges could be the spring-board for a transformational change in freight traffic through the Channel Tunnel, as set out in my notes above – with great benefits for the fight against climate change.

It surely makes sense to have trains carrying lorry trailers running between Continental Europe and Barking, the Midlands and North, in order to reduce HGV journeys on the roads, and thus reduce emissions.

We have the building blocks to do this. It just needs some Government help and incentives, and someone with the vision to push through and organise the project.

There are such clear environmental benefits – so why should we not do this?

Thank you again for the opportunity to comment.

Regards
[redacted]

[redacted]
Delivery Manager
Office of Rail and Road
[redacted]

Network Rail (High Speed) Ltd.
[redacted]

11th November 2024

[redacted]

Dear [redacted]

Network Rail (High Speed) Ltd Response to the ORR PR24 Draft Determination (<u>Public Version</u>)

1. <u>Introduction</u>

1.1. Network Rail (High Speed) Ltd (NR (HS)) has reviewed the PR24 Draft Determination published by the Office of Rail and Road (ORR) on 30th September 2024 (ORR DD); this letter sets out NR (HS)'s response.

1.2. NR (HS) confirms that this letter can be published and made publicly available by the ORR. Some parts of our letter contain confidential and commercially sensitive information; this has been redacted, as shown by [.] in this public version. A separate confidential version of our letter will be submitted to the ORR. We are content for both versions of our letter response to be made directly available to the HS1 system stakeholders (HS1 Ltd, ORR, DfT, TOCs and FOCs).

1.3. Whilst the response below sets out detailed evidence and information in relation to specific points NR (HS) wishes to make regarding the ORR's PR24 Determination, there are a number of overarching points to consider first.

1.4. We are concerned that there appears to have been a departure in the regulation of PR24 to previous HS1 Ltd periodic reviews undertaken by the ORR where several factors have focussed specifically on what NR (HS) can do to deliver savings instead of a focus on HS1 Ltd. as the regulated entity. NR (HS) does not have the ability or jurisdiction to garner system action in response to challenges ORR has set out in its draft determination; specifically in relation to contractual efficiency intrinsically linked to system risk, reward and incentivisation surrounding the HS1 Performance Regime and associated regulatory agreements.

1.5. It also appears as if ORR have departed from the regulatory approach they set out for themselves [Periodic Review of HS1 Ltd 2024 (PR24) - Approach and process, 31 January 2023] published on ORR's website. In this document ORR make reference to their approach in managing risk and uncertainty and how this would be approached in section 2, which alludes to use of top-down benchmarking and sampling a proportionate amount of bottom-up cost; ORR also make further references to determining the regulatory treatment of a number of key issues affecting HS1 Ltd.'s financial framework which include the allocation and management of risk. ORR continues to refer to:

'working with all HS1 stakeholders to better understand the uncertainties they face and the package of mechanisms which already exist to deal with uncertainty, in their business-as-usual activities and contractual arrangements. Where ORR has mechanisms within our control in the PR24 process, we will deal with risk in a transparent manner that recognises the financial strain on the system but ensures that our decisions appropriately balance our duties, and the effects on current and future operators. Where there is still uncertainty outside of our control, we will clearly identify this and then work with HS1 Ltd and other stakeholders to ensure it is understood and is monitored. In addition, we will ensure that stakeholders are clear on the mechanisms available to deal with this uncertainty, if outcomes are more adverse than predicted.'

1.6. ORR also refer to indexation and state: 'In relation to operations and maintenance, we understand that HS1 Ltd is tied to indexing by the retail price index (RPI) by its contractual arrangements with suppliers. So, our approach to PR24 will only consider the appropriate '*index for renewals cost inflation.'*

1.7. It is not clear how ORR has either followed the approach it initially set out, has evidence to support its approach or why it has had cause to deviate from it so significantly as stated within its Draft Determination.

1.8. The ORR's Draft Determination has identified efficiencies for operations and maintenance costs in CP4. Whilst the ORR have suggested these efficiencies can be delivered through either acceleration of asset management maturity or changes to the contractual arrangements under our Operator Agreement with HS1 Ltd, it is the latter where the ORR has quantified the total efficiency of [.] over CP4. The Operator Agreement contract was entered into by HS1 Ltd and NR (HS) as part of a commercial negotiation and reflects the balance of risk and reward agreed at the time, plus any subsequent negotiations. Changes to contractual arrangements are out of scope of ORR's remit. ORR's draft determination in this regard therefore sets a worrying precedent, that it should take decisions that have the effect of directing changes to the nature of commercially agreed contracts. In the HS1 2009 Regulatory Statement, clause 32 refers to ORR having regard for the existing contractual terms of HS1 Ltd.'s supply chain with the onus on HS1 Ltd. to secure efficiency improvement. We find ORR's approach in proposing changes to the Operator Agreement highly irregular and note that none of HS1 Ltd.'s other suppliers or features of their agreements have been expressly referenced within the ORR's Draft Determination.

1.9. We are also concerned that in developing its proposals, it is unclear how ORR has considered the asymmetric contractual risk profile and interdependencies with other mechanisms such as the HS1 Performance Regime. Following both NR (HS)'s and HS1 Ltd.'s suggestion in October 2022 that further efficiency could be derived if system risk was reviewed and engagement sought amongst all stakeholders; we note that ORR also sought to review risk, rewards and incentives a year later in 2023 as part of PR24 but did not arrive at any agreed outcome for the system.

1.10. NR (HS) remains committed to its contract with HS1 Ltd in ensuring that it delivers OMR commitments effectively and efficiently. NR (HS) has taken a methodical, structured, evidenced and open approach when responding to HS1 Ltd.'s Strategic Asset Management Plan (SAMP) to build its CP4 strategies, seeking engagement from all system stakeholders from the outset and consistently engaging throughout leading up to regulatory submission. NR (HS)'s 5YAMS underwent a rigorous challenge by HS1 Ltd as a part of its progressive assurance framework over the last 2 years, on which the ORR and TOCs were consulted parties and where key outcomes and decisions were formally documented. This approach resulted in HS1 Ltd endorsing NR (HS)'s asset management strategy and demonstrating its support for the proposed level of enabling funding required to achieve the [.] gross level of efficiency proposed in the NR (HS) 5YAMS.

1.11. ORR's efficiency assumptions are materially higher than those proposed by NR (HS) ([.] higher). We are very concerned that these assumptions appear to be driven by qualitative judgements, rather than being grounded in any robust analytical evidence which we would have expected to be the case. Additionally, and notwithstanding our other points, ORR has not explicitly built-in any phasing-in of efficiency, which is common practice amongst regulators, to allow for a realistic and deliverable efficiency trajectory. This lack of phasing-in means that actual efficiency (exit-to-exit) is much higher, at [.], than ORR's headline figure [.] which compounds the issue of deliverability unless HS1 Ltd can smooth the financial flows across the five-years. It is critical that ORR's final determination reflects challenging but achievable and realistic efficiency assumptions, underpinned by credible assumptions and evidence.

1.12. ORR has referenced its obligations under the Access & Management Regulations (A&MRs) to set access charges at efficient levels. Para 5.29 of the draft determination says that whilst ORR has no power over the Operator Agreement it 'must ensure that costs passed on to train operators are efficient'. 'Efficiency' in the AM&Rs is not defined but it is recognised that efficiency improvement must be realistic and achievable. The AM&Rs reference sets out a requirement on ORR to ensure that HS1 Ltd is provided with incentives to reduce the cost of allowing access to its infrastructure and the level of access charges. Whilst we strongly agree with reducing costs for operators, we should do this in a way that balances the ambition to deliver material efficiency and the financial viability of the companies involved and sustainable whole life cost asset management. Again, we refer to Clause 32 of the HS1 2009 Regulatory Statement in relation to ORR having regard for existing terms of HS1 Ltd.'s supply chain.

1.13. NR (HS)'s Operator Agreement with HS1 Ltd and CP4 5YAMS balances the appropriate level of output to meet commitments and obligations with risk and reward. NR (HS) has real concerns that if ORR carries forward its proposed level of efficiency over and above which NR (HS) has already evidenced is achievable and has committed to, without wider changes made to the HS1 system, NR (HS) would be faced with a material risk [.] by the end of CP4, which risks breaching the terms of ORR's consent with NRIL. There is an additional risk that ORR's proposed changes could lead to charges that undercut and/or distort competition in the high-speed market, which could leave NR (HS) (and NRIL) in breach of subsidy control rules.

1.14. Whilst we recognise that there may be further efficiency opportunity to be driven out of the HS1 cost base, NR (HS) has been clear with ORR previously that this would require change to wider industry arrangements (e.g. a more symmetrical performance regime, and the ability to benefit from investments with payback periods longer than five years), which would need consensus and agreement from all parties. We do not have that consensus and it is not within NR (HS)'s control to single handedly establish these arrangements.

1.15. We remain open to system discussions on the content of the draft determination to realise efficiency opportunities relating to system risk, reward and incentivisation and are supportive of working collaboratively with HS1 system stakeholders during CP4.

1.16. In summary, the ORR appears to be pushing savings onto the O&M elements of HS1 Ltd.'s plans to force wider changes, which NR (HS) cannot make, which in turn results in unreasonable financial risk. Given these concerns, alongside ORR directing contractual changes which are beyond the scope of its remit, NR (HS) is considering the basis for reviewing these points judicially should the position remain unchanged in ORR's final determination.

1.17. The remainder of this letter provides more detailed responses to specific areas of ORR's PR24 draft determination.

2. Route Operations & Maintenance Efficiencies

Context

2.1. NR (HS) approached PR24 on the backdrop of the Covid-19 pandemic, which brought about uncertainty for system stakeholders both in the short and long term. It was important to recognise this challenge from the outset and take a collaborative approach for the PR24 process to support stabilisation and promote growth of the HS1 network. For the first time in the lead up to a new Control Period for the HS1 network, NR (HS) and HS1 Ltd initiated the 'Sprint' process in May 2022 and held bilaterals with each system stakeholder to understand their requirements and expectations for CP4. in June 2022, HS1 Ltd published its SAMP setting out four scenarios (Growth, Re-build, Re-structure, Re-think) to focus the system on the outcomes and efficiency opportunity that could be achieved in CP4. On 21st July 2022, NR (HS) and HS1 Ltd held a stakeholder workshop to officially 'launch' PR24, setting out the initial opportunity areas being explored that required system-wide engagement and support (such as 10YAMS, Renewals to Maintenance, and performance optimisation). HS1 Ltd wrote to both the ORR and DfT following the workshop, reconfirming the desire to review the structural issues that were present in the system, but noted that "HS1 alone cannot solve the structural issues the highspeed system faces".

2.2. NR (HS) and HS1 Ltd held further bilaterals with system stakeholders in September 2022 to explore the structural issues in more detail. This led to the 13th October 2022 stakeholder workshop where we provided a target cost envelope upfront in the 'Sprint' process to provide cost certainty to stakeholders. This included sharing our O&M gross efficiency target of [.]

along with a number of initiatives that could be adopted by the HS1 system to aid recovery from the Covid-19 pandemic by thinking outside our contractual constraints. Some of these identified the potential for more significant efficiencies, for example changes in the performance regime if supported by system stakeholders. NR (HS) is not able to progress these opportunities on its own and given that these top-down proposals were not supported by the system, we developed our PR24 submission with a focus on the re-build scenario. This was the only scenario supported by the system, which would deliver on stakeholder requirements such as cost efficiency and maintaining a highly performing 7-day railway, whilst enabling NR (HS) to continue to meet its asset stewardship obligations and deliver the asset management objectives. Following the stakeholder workshop, HS1 Ltd wrote to the ORR on 14th October highlighting the opportunity to explore greater cost reductions, noting this would require collaboration from all HS1 Ltd system stakeholders.

2.3. The ORR recognised that the risk and incentivisation profile of the system was suboptimal and wanted to explore the appetite to change mechanisms in the HS1 system. On 3rd August 2023 the ORR shared its PR24 Uncertainty Working Paper to engage system stakeholders on a number of risks and incentives it had identified and the mechanisms that exist between the parties. In NR (HS)'s response letter on 28th September 2023, we confirmed our support of ORR's approach to improve risk and uncertainty to drive efficient and productive outcomes for the system. NR (HS) discussed this in further detail at the PR24 Uncertainty Working Paper Stakeholder Workshop held on 3rd October 2023. Topics included the performance regime and outperformance, which [.] NR (HS) [.] were willing to explore, including alternative incentivisation mechanisms, but reiterated that this required system stakeholders to actively engage in the process. Unfortunately, there was little appetite from other stakeholders to progress this further; as such we were not able to commit to the additional 'Sprint' initiatives put forward in October 2022. We assume ORR were unable to progress this either, but we have not been party to the conclusion of ORR's PR24 Uncertainty Working Paper and it is not referenced within its Draft Determination.

2.4. NR (HS) was able to go beyond its initial top-down O&M gross efficiency target of [.] set out in October 2022, increasing this to [.] in its 5YAMS for CP4 following the development of its strategies and bottom-up planning. This equates to a [.] reduction in the O&M Annual Fixed Price from the start of CP1 to the exit of CP4. Our CP4 efficiency plans were benchmarked and are comparable to other UK regulated infrastructure organisations. Additionally, European benchmarking was undertaken and our 5YAMS set out our response to the Rebel benchmarking study. Some of the efficiency opportunities identified by Rebel are similar to those that have been put forward by the ORR in its Draft Determination such as optimising signalling maintenance, which we have already included in our [.] net efficiency plans for CP4. However, as we've noted in our 5YAMS, direct comparisons are difficult due to each Infrastructure Manager having differences across their operating environments and their own contractual arrangements. Overall, these benchmarking activities demonstrates that our plans are realistic, deliverable and in line with industry best practice. Whilst the ORR may have elected to use the Rebel benchmarking study in its assessment of cost efficiency, it also has access to benchmarking outputs from other regulated entities to substantiate its proposed additional efficiency on O&M; we have not seen any other benchmarking in the ORR's Draft Determination to the contrary.

ORR's Proposed Additional O&M Efficiency

2.5. The ORR has proposed the efficient O&M cost is circa [.] per year lower than the NR (HS) Annual Fixed Price submitted in the 5YAMS, totalling [.] over CP4. It has been suggested that opportunities exist through accelerating asset management maturity and/or contractual arrangements.

2.6. From the outset, NR (HS) want to reiterate the circumstances during Covid-19 that led to underspends in years 1 and 2 of CP3 [ORR DD: 5.39], which, concerningly, is one of the reasons the ORR has used for justifying its additional cost efficiency proposal to commence from year 1 of CP4. The Covid-19 pandemic introduced unprecedented challenges for the rail industry. NR (HS) was not exempt from these challenges, with issues affecting operational, maintenance and investment decisions within the CP3 period. [.]. While there were undoubtedly fewer trains on the high-speed line during the pandemic, NR (HS)'s maintenance operations saw limited flexibility in terms of cost reductions because the trains that were still in service maintained the standard speed levels. In fact, costs associated with maintenance delivery increased due to complying with Public Health England and government guidelines for social distancing and needing to introduce additional vehicles for sole travel, PPE, signage, etc. NR (HS) did impose a headcount freeze during 2020-2022 due to system instability and inability/impracticality of furloughing staff. During this time NR (HS) remained exposed to the downside risk of incidents that could disrupt the services still in operation, such as trespassing and infrastructure failures.

2.7. Additional financial challenges emerged as a result of the pandemic and continued to persist. For instance, NR (HS) was forced to halt certain investments and renewal projects during the pandemic, due to either operational issues or financial constraints. As a result, its investment profile had changed (with investments now ramping up in the latter years of CP3) and some renewals will need to be completed in the next control period that were scheduled for CP3. We have estimated that the direct cost of Covid-19 to our business stands at [.] over the period 2020–23, which has not been passed onto system stakeholders.

2.8. As summarised in section 2.2, NR (HS) and HS1 Ltd had noted opportunities to go further with efficiencies if system agreement could be sought on changes to the performance regime. NR (HS) and HS1 Ltd were unable to garner engagement; and as set out within section 2.3, it is assumed ORR were unable to achieve this either. As such the current system risk profile surrounding the HS1 Performance Regime and associated 3rd party risks remains the same as ORR determined in previous control periods. In order to achieve some of the contractual efficiency, ORR [ORR DD: 5.56] refers to the system needing to agree to a revised performance regime model. It is not possible for NR (HS) to undertake this single handedly as it has no ability to negotiate and amend the HS1 Performance Regime, HS1 Regulatory Agreements or Concession Agreement.

2.9. NR (HS) has sought independent economic advice from Oxera to evidence its response to the opportunities ORR identified are available through contractual arrangements. This advice provides a more granular understanding of the HS1 system risk profile and proposes what an appropriate level of management fee, contract risk and indexation should be for NR (HS) whilst the risk profile from inception of the Operator Agreement in 2010 remains. The report also proposes further action to be taken to arrive at a correct position for CP4 which NR (HS) are keen to discuss with ORR. This section should be read in conjunction with Appendix 1 "Oxera - Review of the ORR's PR24 Draft Determination – 11112024", commissioned from Oxera.

2.10. The fundamental issue with the ORR's proposed additional efficiencies (also referenced in section 2.2 and section 2.3 above) is that they limit how individual elements of risk are managed and compensated in the contract without any shift in the ownership of the risk under the HS1 Performance Regime and the asymmetrical risk it causes.

2.11. [.]

2.12. [.]

2.13. It is important to note that NR (HS) has a limited number of options if it receives insufficient funding for delivering services to HS1 Ltd and train operators; [.]. In discussions since the Draft Determination was published, ORR have mistakenly alluded to NR (HS) being able to reopen the Annual Fixed Price if the determination is incorrect. This is inaccurate.

2.14. NR (HS) needs to earn sufficient margin to continue to provide services under the Operator Agreement, ensuring train performance on HS1 is at a high standard, and to provide additional services (such as renewals) on behalf of HS1 Ltd and operators. The proposals in the ORR's Draft Determination, unless reversed at the Final Determination, will require NR (HS) to alter its approach to CP4. We will need to reconsider our strategy and decide how to balance and optimise delivery, likely refocussing efforts on ensuring that safety and asset management are maintained to a sufficient level, without some of the preventative maintenance that it currently undertakes. We would need to consider a change in how we deliver our contractual outputs to align performance more closely with the minimum contractual requirements, rather than the current elevated performance levels.

2.15. NR (HS) could reduce investment to some areas not directly related to safety or critical services but our CP4 5YAMS balances investment in assets including our people, which is intrinsically linked to achieving our efficiency statement; if we follow the ORR Draft Determination this would result in cost reduction in the short term but not cost efficiency in the long term. In the short term this may result in more delays and costs, as well as a reputational risk to operators, HS1 Ltd and NR (HS) which has significant consequences at a time when operator growth and stability is critically important to the HS1 system and its stakeholders.

2.16. This does not promote a sustainable whole life cost model in the long term as the asset ages, and replacement volumes and network utilisation increase creating a bow wave of cost increases and access constraints for a later point.

2.17. It should not go unrecognised that experience of underfunding in other sector/industry settlements takes a long period to recover from, also noting that many other regulated entities are managing classic, aged or assets in managed decline situations. HS1 as a high speed asset seeking to recover, stabilise, and welcome network growth, requires appropriate levels of funding over and above contractual minimum operating standards. This is essential for the system, particularly at such a critical point over the concession period.

2.18. As outlined earlier in this letter, NR (HS) and HS1 Ltd went to great lengths at the commencement of PR24 to acknowledge all stakeholders' requirements and implement a robust asset management framework which balanced high levels of performance, long term sustainable asset stewardship and whole life cost with sustainable efficiency, not cost reduction. We clearly heard the demand from stakeholders for efficiency, but it was not to be at the detriment of operational performance.

2.19. [.]

2.20. There is an overarching need for a robust and systematic approach to risk analysis. In the first instance, this requires a clear quantification of the risk in the system; second, a thorough calculation of the associated costs associated with holding and mitigating those risks; and third a detailed assessment on who bears the specific responsibility for holding each category of risk. The ORR's approach to risk and uncertainty has fallen short in addressing these three issues in its provisions for managing risk.

2.21. We have significant concerns that if ORR's Final Determination confirms a reduction of NR (HS)'s revenue accrued from its O&M services below the level which no market efficient operator could sustain, the O&M contract could no longer be a going-concern for NR (HS). This would require NR (HS) to pursue options open to it at the time, including analysis of its position under the HS1 2009 Regulatory Statement, the Subsidy Control Act 2022, and the ORR's intent expressed in the 2010 Consent to avoid cross-subsidisation of NR (HS) by NRIL, with the support of our shareholder, NRIL, also impacted by this determination. As set out in section 1 above, on the basis of these concerns and if the ORR's proposals are confirmed in the Final Determination, NR (HS) may need to consider a judicial review.

2.22. The remainder of this section sets out our response to the opportunities identified by the ORR through the contractual arrangements.

2.23. <u>Contract Risk: [.] reduction over CP4 by changing the P-value to P60-P80.</u>

2.23.1. [.]

2.23.2. [.]

2.23.3. Following the publication of the Draft Determination, NR (HS) has sought to clarify the basis of ORR's analysis (as quoted in the ORR DD: 5.47) for justifying a reduction to the risk probability to between P60-P80. ORR directed NR (HS) to its Draft Determination Annex document. However, this provides inadequate detail to explain the rationale or quantification of the revised P-value the ORR has used to propose the reduction [.] over CP4. We are concerned by the lack of robust analysis to support ORR's proposal and ORR's approach appears to conflict with its approach to the relative level of risk funding required by NRIL, even though NRIL has greater ability to pool risk and there are ultimately reopener provisions for NRIL's determination.

2.23.4. Regarding historical spend of contract risk, the ORR Draft Determination Annex document states under point B.54 that "*the full value of risk has not always been spent in recent control periods, we do not believe this is the most efficient way of funding the impact of this risk*." To clarify, NR (HS) has historically [.]. The value of the CP4 contract risk is in line with the average actual spend over the past two control periods. Through its QCRA process, NR (HS) carried out a thorough review both internally and with HS1 Ltd to ensure each cost risk event was clearly defined and assessed based on likelihood and impact of the risk occurring in the future. Analysis has previously been shared with the ORR on a number of occasions, including on 5th March and 19th June 2024 where bilaterals were held to walk the ORR through the contract risk methodology, QCRA models and historical spend. It is unclear how ORR in its proposals, has taken account of the extensive information NR (HS) has provided during the process.

2.23.5. It should also be noted that in the ORR Draft Determination document, there are two quoted values for the contract risk reduction. Paragraph 5.47 states [.] over CP4, whereas paragraph 5.56 states [.] over CP4. Given paragraph 5.56 outlines all contractual elements (including contract risk) that the ORR have quantified to reach its [.] of additional efficiencies in CP4, NR (HS) has assumed that [.] is the correct value.

2.23.6. The ORR has reviewed the CP4 Contract Risk value in isolation when determining the total efficiency stretch it is imposing on NR (HS). In contrast, the P80 value is based on a holistic view of NR (HS)'s risk profile to deliver the outputs. As noted in section 2.3 above, NR (HS) has been open to exploring alternative incentivisation mechanisms but reiterated that this required system stakeholders to actively engage in the process, which has not been done.

2.23.7. NR (HS) does not accept ORR's proposal to reduce the Contract Risk value [.] over CP4 and is concerned by the lack of credible and robust analysis to support this position. If the ORR's Final Determination confirms that the P-value should be reduced from P80 to ORR's proposal of P70, then NR (HS) propose that the system should hold the risk. Should any risk materialise in CP4, then NR (HS) will not be liable in the Control Period.

2.24. <u>Outperformance mechanism/management fee: [.] over CP4 by [.] and reducing the management fee [.].</u>

2.24.1. As explained in our 5YAMS, the contract mark-up (or management fee as it has been referred to) has been benchmarked by Oxera, which determined an appropriate range should be between [.]. Oxera's report was shared with ORR as part of HS1 Ltd.'s 5YAMS submission. ORR's Draft Determination proposes [point 5.49] changing [.], which it believes would allow NR (HS) to reduce the management fee as it is not providing the right incentives for NR (HS). ORR states [ORR DD: 5.48] that there is concern among operators that this incentivises NR (HS) to [.] more stretching targets over the whole period. We are concerned that ORR goes on to misquote NR (HS) and HS1 Ltd by stating "the [.] has little impact on their decisions" and therefore it is "not an effective incentive". As we have stated previously to the ORR is that while it does not provide as much of an incentive as other areas of the regulatory regime, it still has an impact or creates some incentive for NR (HS), with main incentives being driven by the asymmetry of the HS1 Performance Regime.

2.24.2. The ORR goes on to acknowledge that NR (HS) bears [.] overspend if it spends more than its annual budget. [.In other words, if the [.] is removed and replaced then, from ORR's perspective, there is no justification to maintain the management fee at [.]The ORR proposes a reduction of the management fee to [.], resulting in a reduction in charges to operators of [.] over the control period. The [.] reflects the mid-point range (including 2020) from Oxera's benchmarking analysis of profit margins of relevant comparators.

2.24.3. The ORR's rationale in arriving at this conclusion is inaccurate in several ways as detailed below and concluded within Oxera's report. The following paragraphs explain at a high level the nature of the asymmetric risk present within the performance regime and outperformance share mechanisms.

2.24.4. In PR19, NR (HS) reduced its management fee from [.] [.] NR (HS) bears all of the downside risk, but only part of the upside risk. The ORR's outcome in its Draft Determination is seeking to undo previous commercial negotiations.[.]

2.24.5. The HS1 Performance Regime is based on the number of minutes that NR (HS) exceeds or falls short of the delay threshold on the network. There is a notable difference in both the level of the penalty and bonus rates and the threshold at which penalties or rewards are triggered. The poor performance threshold is set at [] seconds delay per train on average, while the good performance threshold is set at [] seconds delay per train on average. As a result, it is easier to meet the poor performance threshold than the good performance threshold. In addition, the penalty rate is roughly [] higher than the bonus rate [.] As a result, NR (HS) faces a significant downside risk, with a limited chance for substantial upside within the performance regime. Adding further to this skewed risk is the relative cap on bonuses and penalties. The bonus cap is set at approximately [.], although achieving this cap is not theoretically possible due to the thresholds for bonuses as illustrated within Oxera's most recent report [Appendix 1: Oxera - Review of the ORR's PR24 Draft Determination - 11112024]. Based on realistic assumptions of traffic volumes and the probability of meeting the good performance threshold, the highest bonus achievable is roughly [.]. Meanwhile, the maximum liability for NR (HS) is [.] in 2024 prices. A single incident causing network delays can lead to hundreds of penalty minutes and eradicate NR (HS)'s entire management fee, with limited to no upside opportunity from good performance. Please refer to Oxera Report, Section 4.1.

2.24.6. It should be noted, the HS1 Performance Regime differs significantly from the symmetrical regime which exists on the NRIL network. NR (HS) is concerned that from recent discussions with ORR, this fundamental detail of the HS1 Performance Regime on which the Operator Agreement is based has not been understood nor factored into ORR's review of the NR (HS) management fee.

2.24.7. It should also be noted that, contrary to what ORR has assumed, NR (HS) does not have a re-opener mechanism in the event that more O&M is required than forecast ex ante during the periodic review. The re-opener mechanism provides NR (HS) with the ability to recover O&M costs when ex ante assumptions do not account for circumstances that materialise (but only when these circumstances are outside NR (HS)'s control).

2.24.8. The management fee represents, and has always represented, the profit margin for NR (HS). As explained in our 2023 benchmarking analysis by Oxera:

2.24.9. The management fee is designed to capture the risk that NR (HS) faces, and over which it has some degree of control when providing services to HS1 Ltd. For example, NR (HS) may set out a particular operating and maintenance strategy, but the actual strategy implemented may differ. These risks are 'two-sided'—that is, they have both potential upsides and downsides. This means that NR (HS) could incur either cost overruns or lower costs than expected. In this respect, the management fee is comparable to profit margins observed in the private sector, which can be lower or higher than expected.

2.24.10. It is important to note that the management fee at the current [.] level is approximately [.] per annum. NR (HS)'s liability cap under the HS1 Performance Regime is [.] indexed per annum [.]. The HS1 Performance Regime is heavily asymmetrical, with low opportunity for bonus payments and low bonus payment rates than the higher and more frequent penalty rates. This presents a real risk of a single performance event (either within or outside of NR (HS)'s control) [.]. This is just one of the many risks that NR (HS) must absorb within its management fee as all performance and safety risk also sit with NR (HS). [.]. If there is an assessment of system risk and changes to the HS1 Performance Regime, then NR (HS)'s management fee should be assessed in the round and expressed in respect to NR (HS)'s full risk exposure. However, to reiterate, this requires all system stakeholders to be engaged in the process to take this forward.

2.24.11. In 2023, Oxera was commissioned to independently review the appropriate management fee for CP4. The analysis suggested that the management fee [.] should be refined to a range of [.], with a mid-point of [.]. ORR has incorrectly concluded that Oxera's analysis implied that 'without the asymmetry in the pain/gain share, a lower range with a midpoint of [.] would be appropriate' [ORR DD: 5.49]. [.].

2.24.12. There is lack of credible and robust analysis provided in the ORR's Draft Determination or its supporting annexes as to the rationale of why the lower bound of this lower range was selected as an appropriate management fee. [.].

2.24.13. If the ORR opted for the lower bound of the range, it should have used the lower bound of the range [.].However, it is critical that the system risk, HS1 Performance Regime asymmetry and downside risk of the [.] are also properly considered. The reduced funding proposed by the ORR in the Draft Determination would leave NR (HS)'s O&M activities [.] by the end of the next control period, and in a position where it does not have the flexibility to handle risks both within and outside its control, exacerbated by NR (HS)'s overall asymmetric risk profile. There is a risk that by reducing NR (HS)'s revenue accrued from its O&M services below the amount at which a competitive operator is able to provide such services might distort competition in the high-speed market by charging below market clearing costs to market participants.

2.24.14. NR (HS)'s position remains that there are efficiency opportunities to be explored through properly understanding the HS1 system risk, reward and incentivisation framework as it proposed in October 2022 and ORR later proposed in its PR24 Uncertainty Working Paper in 2023 (see section 2.3 above). However, NR (HS) has no jurisdiction or ability to enable this. It neither owns the HS1 Performance Regime nor regulatory framework which drives the level of risk within the system. There is an overarching need for a robust and systematic approach to risk analysis. In the first instance, this requires a clear understanding and quantification of the risk in the system; second, a thorough calculation of the associated costs associated with holding and mitigating those risks; and third a detailed assessment on who bears the specific responsibility for holding each category of risk. The ORR's approach to risk and uncertainty has fallen short in addressing these three issues in its provisions for managing risk. NR (HS) remains, as outlined in section 2.2 and 2.3 above, open to exploring this with all system stakeholders to reach a mutually agreeable, efficient outcome for the system centred around the common goal of excellent and efficient train service performance.

2.24.15. Overall, we are concerned by the lack of robust and credible assumptions to inform ORR's proposals on the management fee. NR (HS)'s strong view, based on evidence and advice from Oxera in its economic benchmarking analysis, and the fact that the risk profile remains unaltered since inception of the Operator Agreement, is for NR (HS) to retain its management fee at [.].

2.25. <u>Inflation: [.] over CP4 [.].</u>

2.25.1. The ORR has suggested a further reduction in funding for NR (HS) relating to inflation risk [ORR DD: 5.51 and 5.52]. The current inflation regime is to apply an inflation rate of [.] to the O&M Annual Fixed Price, as the use of [.] was in place for the majority of our contracts at the time that the HS1 contracts were first established in the early 2000s and was historically used by NRIL for the majority of its contracts. Despite stating in its PR24 Approach and Process that that it would only consider it would only consider the appropriate index for renewals cost inflation, the ORR has argued that a shift to CPI-based indexation would better reflect current inflation and market conditions. The ORR estimates that [.] is equivalent to a 1% uplift on CPI and therefore it considers an [.] mechanism as an excessively generous inflation adjustment. The ORR also references other infrastructure managers, particularly NRIL, where it is common practice to use the CPI along with adjustments for input price effects within the regulatory regime. The ORR has suggested that such a move to a CPI+1% mechanism would result in lower charges to operators amounting to [.].

However, even putting aside the need for ORR to have regard to the existing Operator Agreement, following economic advice, within the appended Oxera report, there are several reasons why [.] inflation adjustment would still be appropriate given the input price pressures faced. We have summarised these points below.

2.25.2. The ORR's proposed approach of CPI+1 % may underestimate the level of input price risk that NR (HS) faces across its cost lines. ORR's claim that CPI+1 % is equal to [.] is not accurate as during periods of high inflationary pressure, CPI and [.] can diverge. Examples from Oxera demonstrate CPI+1 % would have undercompensated NR (HS) in recent years and in some years could even cause over-compensation – see Figure 5.1 of the Oxera Report.

2.25.3. Wage-setting across the transport sector, particularly for unionised occupations which make up 70 % of our workforce, remains linked to [.] and has been long before the inception of the Operator Agreement contract. NR (HS)'s, much like NRIL's, bargaining power is limited by the strength of unions and further by the specialised nature of the NR (HS) work force which hold unique skillsets and competencies driven by the bespoke nature of maintaining and operating the UK's only High Speed railway and its standalone Rule Book, which the Oxera report provides more detail. Due to the 'lagged effect' of wage setting in union organisations, inflation data available at the time of pay negotiations often can differ to extremes from actual inflation at the time and is a particular risk in periods of high inflation volatility. Wage demands over the next few years may outpace general inflation. Setting inflationary adjustments based on CPI+1 % would risk undercompensating NR (HS). In Section 5.1 of the Oxera's report, Figure 5.1 demonstrates the forecast for the BCIS construction labour index against CPI; BCIS also reflects a highly unionised sector similar to NR (HS) and is likely to be more appropriate than CPI.

2.25.4. [.].

2.25.5. Circa 75 % of what CPI captures in terms of 'consumer goods' is not relevant to the provision of rail O&M services as explained further in Oxera's report (see section 5.2). Some materials used, such as steel, are procured from the same suppliers used by NRIL. ORR sets RPE allowances for NRIL based on input price indices that pertain specifically to its cost categories (labour, materials, plant, equipment, contractors). For NRIL's most recent periodic review (PR23), the ORR commissioned Europe Economics to undertake an analysis of historical data from several indices to assess the degree to which input price pressures in NRIL's various cost categories differed from general inflation. Its analysis found that 'CPI does not capture changes in materials' costs and that composite indices such as the BCIS resource cost index FOCOS, demonstrate that there is a 'positive wedge' between CPI and FOCOS. NRIL's previous analysis from Oxera (shared with ORR as part of the supporting information and evidence for NRIL's PR23 draft determination response) also noted that 'a composite index like FOCOS is less volatile than indices for individual materials and better captures the wide range of materials used in railway activities.

2.25.6. In summary, the ORR has proposed that the regulation of the high-speed network moves away from the [.] framework previously used to counter inflation risk and move towards a CPI+1 % mechanism. The ORR has suggested this could lead to [] in savings for operators as well as create a mechanism that is more cost-reflective of NR (HS)'s cost base. We strongly disagree that this would be cost-reflective of NR (HS)'s cost base, for the reasons summarised above and evidenced within the Oxera Report.

2.25.7. The Operator Agreement applies [] to the O&M Annual Fixed Price, so a change in indexation rates going forward would attract both reductions in funding, and also changes to NR (HS)'s risk profile. We believe the ORR has not appropriately considered the latter. Moreover, CPI+1 % will generate more cost pressure and risk for NR (HS) because it faces specific inflation-related risks due to union labour costs still set by [.], the lagging effect experienced with collective bargaining, and the use of specialised materials, equipment and services from other markets which it cannot diversify from, neither of which the proposed CPI+1 % mechanism appropriately applies to.

2.25.8. Overall, Oxera's analysis concludes that a CPI+1 % indexation rate will not appropriately capture the inflation-related risks faced by NR (HS). NR (HS) would like the opportunity to review this with ORR and HS1 Ltd, prior to the ORR's Final Determination, to explore what an appropriate indexation if not [.] could be, to ensure NR (HS) is appropriately compensated for the very specific risks it faces in relation to managing the high speed infrastructure.

2.26. <u>Enabler Costs: [.] reduction over CP4 [.]</u>

2.26.1. NR (HS) has explained throughout its 5YAMS the need for upfront investment to continue to unlock and deliver financial efficiency. The [.] net efficiency committed by NR (HS) by the end of CP4 is dependent on these enablers, which will benefit HS1 system stakeholders not just NR (HS).

2.26.2. [.]

2.26.3. In summary, NR (HS)'s enablers have been through a rigorous and challenging review as part of HS's progressive assurance; HS1 Ltd have confirmed their support for our enablers as these are critical to NR (HS)'s asset management maturity and cost efficiency plans. NR (HS) does not accept ORR's proposal to reduce the Enablers [.] over CP4. NR (HS) would like the opportunity, prior to the Final Determination, to further clarify the ORR's rationale for the proposed reduction. If the ORR are still of the view that these investment costs should not be included in the Annual Fixed Price, then NR (HS) will either need to reassess and reprioritise its remaining enablers to ensure it is able to still meet its contractual obligations for asset stewardship or apply for funding for costs considered to be 'incremental' in achieving asset stewardship obligations. For example, the consequence of this could impact less critical investments such as operational resilience for the benefit of all system stakeholders. NR (HS) already meets its contractual performance requirements under the OA, [.], further investment in improving already high levels of performance will no longer be feasible. If NR (HS) elects to self-invest in any improvements from its profit for system benefit, then these will become the IPR of NR (HS) [.].

3. Asset Management Maturity

3.1. ORR's Draft Determination makes reference to NR (HS)'s approach following best practice and in some asset disciplines, representing best practice but calls for acceleration in capability in some instances, such as asset data modelling. However, NR (HS) believes it is already proposing the same level of acceleration ORR are proposing and that the ambition is duplicated.

3.2. Our SASs include plans to improve collection of data across the assets. [.]

3.3. In response to ORR's recommendation [ORR DD: 4.15] to accelerate gathering and use of data for stations lifts, escalators and travelators (LETs), it is worth noting that RCM has already been installed on [.]assets during CP3 as part of the renewals programme. [.]. Increasing the installation rate of LETs monitoring outside of the renewals programme would come at an additional cost and would not result in an earlier shift to risk-based maintenance during the control period so NR (HS) propose this is not pursued.

3.4. We are also planning to gather data using more machine-based and automated systems throughout CP4. This includes a range of potential solutions across the different assets[.].

3.5. NR(HS)'s asset management digital road map demonstrates how we will use this data more effectively by the end of CP4, [.].

3.6. Over CP3 we developed the track deterioration model as it was identified as the asset group offering the most significant benefit from asset management maturity improvements. Due to the urgent need to develop this capability for the track renewals programme over CP3, it was agreed to fund this work from the renewals escrow account. For clarity, this static model has allowed us to use data to move away from the manufacturer's guidance. This has benefited the 40-year renewals volume forecasts and not maintenance as alluded to in the ORR's draft determination [ORR DD: 5.38].

3.7. The ORR's Annex document [ORR DD: A.32] states that it "proposed an R&D fund to facilitate a step change in track deterioration modelling" which is incorrect. For the R&D fund allocated to HS1 Ltd during PR19, the only guidance given was that it should deliver long-term cost savings for train operators. There was no explicit requirement for the R&D fund to facilitate step changes in deterioration modelling. The track deterioration model (described in section 3.13 above) developed in CP3 was not funded though the R&D fund; it was part of our renewals capability development programme (see Section 9.4 of our May 2024 NR (HS) 5YAMS) and was therefore funded from escrow. It would be helpful to understand if this clarification of the actual funding mechanism for track deterioration modelling would have an impact on the ORR's Draft Determination conclusion on reprioritisation of R&D funding.

3.8. In CP4 we have committed to developing condition index metrics which will be used to monitor asset condition and then can be modelled for future maintenance and renewals scenarios. [.]

3.9. Once condition index metrics are established, these can be used to monitor the deterioration of asset components. This will naturally lead to the move away from the risk based modelling approach used for PR24 towards more refined asset models in PR29. For Civils assets we do not believe a 'step change' (interpreted as a high cost, comprehensive data driven model) is proportionate for the asset modelling. We do however agree with the ORR's recommendation [ORR DD Annex: A.11 and A.20] to manage the Civil assets in smaller groups of similar asset types of earthworks, retaining walls, drainage, etc. These would benefit from some high level whole life cost models developed through CP4 to support simple excel deterioration models. We intend to create these models utilising the additional asset data functionality [.]. We are however unclear how the models can introduce O&M cost savings within CP4.

3.10. In CP4 we currently do not plan to implement a step change in our asset models. We will, however, continue to evolve the models we have. The improved asset data we will be gathering will improve our asset modelling capabilities as committed to in the SASs. We believe this is reasonable and proportionate to achieving the performance levels and maturing the efficiency of the system over the next control period.

3.11. [.] We are unable to identify the scope or extent for a 'step change' in the S&T asset as ORR has proposed in its Draft Determination. If the ORR feels that this step change is essential then additional funding, such as that provided for to produce the track model, will be needed.

3.12. The SASs also contain our approach to understanding the effects climate change may have on the assets and increasing the resilience to severe weather events. Whilst it is acknowledged that the HS1 network was designed and constructed to more modern standards than the rest of the railway in the UK, climate change still represents a risk to the performance of the railway.

3.13. To better understand the risks associated with climate change and severe weather, HS1 Ltd led the production of a climate risk assessment in CP3, which informed the SASs and the PR24 submission. Over CP4 this will be reviewed in more detail by the Heads of Engineering and updated in the SASs to inform future maintenance. Renewals specifications will also incorporate weather resilience requirements as appropriate. [].

3.14. To support this, NR (HS) has included an additional CP4 commitment in our 5YAMS: "*Inclusion of a weather resilience strategy in each discipline SAS by the end of CP4*".

3.15. The ORR has specifically called out maturity acceleration for Civils and Environment. We already have commitments in this SAS which will see our data maturity for this discipline improve over the control period. This focusses on both data collection and subsequent processing and analysis, [.]

- [.].

3.16. The ORR has also specifically called out maturity acceleration for Signalling and Control Systems. The Draft Determination suggests that there should be greater focus on finding solutions to obsolescence risks, further analysis of the ERTMS programme, and improved use of track maintenance data for the prevention of points equipment failures. We believe this is already covered in the S&CS SAS.[.]

- [.].

3.17. HS1 Ltd and NR (HS) undertook a structured and progressive assurance process which is detailed in the respective 5YAMS. The activities included HS1 Ltd.'s reviews of SASs, reviews of the risk-based modelling approach and the resulting renewal workbank. To supplement HS1 Ltd.'s review, NR (HS) also engaged both the NRIL Southern Region and Technical Authority teams to review our asset management plans, so any shared learning and best practice could be considered.

3.18. Despite this early engagement, the ORR's proposed asset management maturity acceleration has not been shared in sufficient time, and the supporting evidence is not sufficiently clear that the ORR are not proposing outcomes to which we have already committed to and costed in our 5YAMS.

3.19. In summary, from the information in the ORR's Draft Determination and Supporting Annexes, it is not clear what additional actions ORR believe will improve maturity across the asset areas, how this is funded and delivered, and/or how it generates or accelerates efficiency specifically for O&M, over and above what NR (HS) has already committed to for CP4.

3.20. HS1 Ltd and NR (HS) are willing to work with ORR prior to the Final Determination to provide further evidence showing where we believe the proposals in the SASs and 5YAMS already meet the accelerated maturity levels set out in the Draft Determination. This will also offer the opportunity to understand in greater detail how the ORR believe efficiency savings could be realised within CP4.

4. CP4 Route Renewals – Mid-Life Ballast Campaign

4.1. The ORR has recognised the logical process in which route renewals has been planned, with evidence available to support the timing, scope and volume of the schemes put forward [ORR DD: 4.31 and 4.37]. Specifically in relation to the ballast cleaning campaign, the ORR concluded that the volume and type of renewal is appropriate, and that they were satisfied that the cost estimate reflected the likely cost to deliver this work efficiently [ORR DD: 4.34].

4.2. In response to ORR's concerns regarding the proportional significance of the ballast campaign and the associated risk of slippage [ORR DD: 4.42 and 4.87], NR (HS) have shared detail on progress to date and the future development timeline; this is appended to our consultation response [Appendix 2: NR (HS) Management of Ballast Programme Delivery Risk - 11112024] and summarised below.

4.3. The phasing of the ballast campaign has changed over time. Originally planned for CP3, the low volume [.] meant that market interest and engagement was a challenge and as such, the decision was taken to defer the work to CP4. This allowed a greater window for development work to take place and an opportunity to combine control period volumes to improve market attractiveness and enable efficiency. This created a revised profile of [.] starting in year 3 of CP4. Following the NR (HS) 5YAMS submission to HS1 Ltd in September 2023 and prior to HS1 Ltd.'s draft 5YAMS submission to the ORR in February 2024, NR (HS) and HS1 Ltd conducted a further validation of the workbank to assess challenges, risks, cost, and asset need, which resulted in an additional year of development to adequately de-risk delivery – the profile was maintained at [.], with a revised start date in year 4 of CP4.

4.4. A significant amount of development work has already taken place over CP3 to lay the foundations in the lead up to commencement in CP4. [.].Regular engagement and workshops between NR (HS) and SME support from the NRIL High-Output team is also forming the basis to identify any risks, opportunities, mitigations and actions to ensure a successful start in year 4 of CP4.

4.5. NR (HS) has assessed the impact of slippage, from both an elongation of the existing campaign or a delayed start of the campaign. A number of risk and mitigations have been identified for both scenarios, which are detailed in the appended document.[.].

4.6. While there are still challenges to be resolved as is anticipated in the preceding years of any large delivery programme, we are utilising CP3 lessons to pre-empt blockers and leveraging SME input to de-risk delivery plans. We have also outlined the ways in which system stakeholders will be updated on development progress, in both existing forums and through ballast specific engagement. [.].To support this, NR (HS) has included an additional CP4 commitment in our 5YAMS: "*Develop, socialise and implement a stakeholder engagement plan for the Ballast Campaign in year 1 of CP4, continue the development works and update system stakeholders of progress towards delivery in accordance with the plan*".

5. CP4 Station Renewals – Project Scope

5.1. For the first time in CP4, in conjunction with the Route 5YAMS submission, we have produced a Stations 5YAMS and SASs (led by HS1 Ltd in previous control periods) which sets out our approach to renewing the HS1 station infrastructure at an economical and efficient price for CP4. This approach reflects the increased alignment and integration in our Asset Management approach for station and route assets, which has been positively recognised by the ORR in the Draft Determination.

5.2. The ORR has reviewed each CP4 station renewal put forward by NR (HS) and HS1 Ltd on a case-by-case basis and proposed an efficiency opportunity within the scope of three specific projects at St Pancras (Uninterruptable Power Supplies (UPS), heat pumps, and toilets) where there are interactions with third parties within the station, such as retailers and NRIL [ORR DD: 4.47 and 4.48]. NR (HS) has set out its response below to each station renewal project identified by the ORR in its Draft Determination, explaining why there is no further efficiency opportunity between NR (HS)/HS1 Ltd and third parties at the station as ORR suggests. As such, NR (HS) disagrees with ORR's proposed efficiencies for these projects, and that these should be removed.

5.3. When scoping future station renewals projects we will support HS1 Ltd.'s plans to provide clear evidence that interactions with third parties have been considered within the project scope. This will be added as a regular part of the governance for all station projects.

Uninterruptible Power Supply

5.4. The interfaces between HS1 station systems and adjacent operations, facilities, and buildings (including the Chambers and Hotel, TfL and Thameslink Box) are designed to provide security of condition and understanding of current operational position. However, there is no direct full system control, support or reliance between each neighbour and their systems. Each property owner/operator is directly in control of their own assets and systems.

5.5. The interfaces between station systems and external systems exists purely for exchange of data/telemetry information. There is no physical supporting of third-party systems directly from any HS1 station UPS unit, other than to protect the station system and the station safety environment. For example, a computer room UPS that supports the HS1 station data equipment might connect to the Thameslink Box shadow fire panel that is situated within the HS1 station control room, but this supply does not mean that Thameslink Box can reduce the renewal of their own system. This is because the HS1 supply exists to support the shadow fire panel and protect the HS1 asset, not the Thameslink Box fire system asset. Thameslink Box continue to renew their systems when planned and the HS1 supply to the shadow fire panel has no impact on that renewal.

Heat Pumps

5.6. The connections from the HS1 station heating and cooling system to third party systems are for take-off purposes only, meaning that the delivery of the station heat pump project will not save any third-party from delaying or deferring any of their own HVAC systems or assets. However, the change to the station heating and cooling could potentially increase the cost to third-party users as they will be required to increase their own system operating specification to adapt to the change in lower temperatures, slower heat transfer and greater pumping pressures needed to deliver the agreed operating temperatures.

Toilets and Toilet Vacuum Pumps

5.7. The renewal of any food & beverage retail unit that has toilet facilities is wholly funded by the retailer at fitout or refurbishment. As noted, in some cases, the retailer has also funded an individual vacuum system for their own food & beverage unit to ensure that they maintain an optimised system for service. Both systems are then connected to the sewer via a common station gravity connection. All other retail units that have a toilet facility as well as public and back of house toilet facilities have a connection to either a station vacuum system or a gravity sewer. Changes to the vacuum system are not impacted by the number of toilet facilities as the original specifications and sizing of the systems have not been impacted by changes to the station operation, and where this has happened the retailers have paid directly for an independent system. The station is required to provide a sanitary connection, and it is the design and layout of the station that necessitates the requirement for the evac vacuum system as a solution to the reduced amount of direct sewer connections and is covered in the service charge of the unit.

6. CP4 Station Renewals – Governance

6.1. NR (HS) has worked together with HS1 Ltd during CP3 to improve the governance of managing and delivering the renewals workbank on route, which has been recognised in the ORR's Draft Determination [paragraph 4.32]. We believe that stations governance has benefitted from this, and best practice has been adopted. NR (HS) will support HS1 Ltd to align the stations governance with the route governance where there is opportunity to do so, as suggested by the ORR [paragraph 4.56]. This is crucial to ensure that NR (HS) can deliver the stations renewals workbank as packages of work within a portfolio approach, as outlined in the NR (HS) Stations 5YAMS.

7. Research & Development

7.1. NR (HS) and HS1 Ltd submitted a joint CP4 R&D strategy, building on the successful application of early trials in CP3 [.] [ORR DD: 4.13 & 4.86]. It is positive that ORR have stated within their Draft Determination that they are supportive of the proposed level of funding and governance approach for the CP4 R&D fund, recognising that the increase [.] represents the benefits gained during CP3 [ORR DD: 4.85].

7.2. ORR suggested in their Draft Determination that R&D funding could be re-prioritised to accelerate Asset Management maturity, which continues the approach NR (HS) have been trialling within CP3 [ORR DD: 4.90]. NR (HS) want to note that, whilst positive steps have been achieved to identify technological solutions to asset management interventions for high speed assets during CP3 [.], success beyond initial trials into working implemented solutions and embedment phases such as changes to standards, remains a work in progress. NR (HS) would like to clarify that the statement in the ORR's Annex document [ORR DD: A.69] is incorrect. No R&D funded projects in CP3 have yet led to full implementation; this is built into the PR24 plans for delivery in CP4. The named projects, [.], were not agile process projects and have not yet been implemented. In addition, it should be noted that what has worked in CP3 would not necessarily have the same transformative impact in other asset areas.

7.3. The general purpose of R&D schemes is to undertake trials and achieve resolution to the pre-defined problem/opportunity statement, noting that the specific nature of R&D precludes tangible benefits being derived from all trials. It is common that initial trials fail until a successful solution is achieved. Our CP4 R&D strategy enables us to take an agile and balanced approach to managing the portfolio, which includes continuing CP3 trials to implement and embed, sighted and/or new innovation opportunities to trial on UK high speed rail, PhD research and seeking beneficial resolution to problem statements. Taking a blended approach allows us to scan the horizon and make use of R&D in an agile and flexible way, making both investments for immediate benefit within CP4 and longer term system benefit.

7.4. Success in R&D is intrinsically reliant on readiness of technology levels within the UK market that the rail industry, specifically high speed, are able to capitalise upon. In CP3 we have explored new ideas, technology and concepts that will both address problem statements and achieve one or more of our key drivers. We have found in CP3 that the quality of technology may be 'ready' for the typical rail industry but the higher quality and/or tolerances essential for a high speed railway are not currently available or attainable, which is the current blocker to success of R&D on the HS1 network being more readily realised. Reflecting on this, we have matured the definition of CP4 R&D for high speed from that of typical R&D to fit the bespoke nature of HS1 in the UK market. We have proposed to define R&D for CP4 as "*Trialling, developing and embedding technology, process, or ways of working that have not been previously applied in the High Speed 1 System*".

7.5. Enabling use of R&D funding to support success in implementation phases is an essential improvement being made to the definition of R&D on high speed for CP4, to enable benefits of R&D trials to be fully realised on HS1 infrastructure. The ORR make a statement in their DD that R&D could aid acceleration of asset management maturity on HS1 [ORR DD: 4.90]. ORR specifically relate this to automated data collection schemes, which are two specific schemes NR (HS)/HS1 Ltd have factored into its asset management plans to support a risk based maintenance approach and are therefore already considered within the NR (HS) 5YAMS and proposed NR (HS) O&M efficiency.

7.6. Success of the R&D portfolio and a prioritised and targeted approach requires resource to support the R&D programme, the production and conclusion of business cases, reprioritisation of schemes targeting asset management maturity and implementation and embedment following successful trials. [.]

7.7. NR (HS) will directly manage the R&D fund in CP4 and will utilise the funding in an agile way as set out within the R&D Strategy, prioritising schemes regularly to provide system benefit. Changes to governance arrangements are required to ensure that R&D trials are undertaken at a fast pace and also successfully implemented and embedded. NR (HS) will outline the forward delivery framework for R&D to target areas of opportunity and continue to hold a technical R&D forum, where SME's can engage on ideas, benefits and challenge statements to utilise R&D funding effectively [ORR DD: 4.89]. NR (HS) will report on progress of delivery against the R&D portfolio to HS1 Ltd. on a quarterly basis and within its Asset Management Annual Statement (AMAS). The framework will set out the improvement opportunity, expected benefits and proposed level of funding to be spent by year of the Control Period. NR (HS) will have overall governance authority over spending arrangements for the R&D portfolio in order to achieve the outcomes for the system. To support this, NR (HS) has included an additional CP4 commitment in our 5YAMS: "*NR (HS) and HS1 will review and agree the revised R&D definition and governance arrangements with ORR prior to the commencement of CP4*".

8. Operations

8.1. It is positive that the ORR is supportive of our Operations Strategy [ORR DD: 4.93 and 4.94]. NR (HS) developed its plans with a focus in CP4 on maintaining high levels of train performance and improving incident response and recovery. Key to these plans is the introduction of the Service Delivery Manager (SDM) role within our operations team at Ashford.

8.2. ORR's Draft Determination notes the challenge to recruit, train and retain these additional staff, based on its experience of the wider national network [ORR DD: 4.97]. NR (HS) has made significant progress since its 5YAMS submission in May 2024, with the successful appointment of all [.] SDMs. [.]It should be noted that the 2024 Olympics and Paralympics provided an opportunity to test the Service Delivery Concept ahead of the SDMs starting in-post; this was successful resulting in NR (HS) achieving high levels of performance[.].

8.3. The ORR [ORR DD: 5.55] has proposed to reduce the investment enablers put forward by NR (HS), whilst also proposing additional efficiencies to be delivered from year 1 of CP4 [ORR DD: 5.56]. As outlined in section 2.26.3, we do not accept this proposal. If this reduction in investment remains in the ORR's Final Determination, then NR (HS) will need to reassess and reprioritise its remaining enablers. The consequence of this could impact less critical investments such as operational resilience for the benefit of all system stakeholders. Additionally, as a consequence of the ORR's proposal to reduce the enablers, NR (HS) may need to revise the following existing commitment: "*Fully integrated incident response and service recovery (reference Service Delivery Manager Capability)*". Therefore at this stage, NR (HS) is not able to accept the ORR's proposal for an additional commitment to demonstrate that the operational changes have been made and benefits are being realised by the end of CP4 year 1.

8.4. There are some additional clarification points that NR (HS) would like to make in regard to the Operations & Train Performance section of the ORR Draft Determination:

8.4.1. ORR has noted [ORR DD: 4.96] that NR (HS) intends to use best practice tools to improve processes and increase resource, giving the example of the Integrated Train Service Recovery (ITSR) programme used on NRIL. NR (HS) would like to clarify that using the ITSR tool on the HS1 network would require additional roles to be introduced [.]. Instead, NR (HS) intends to adapt the ITSR into a version that can be used on the HS1 network utilising the new SDM role to deliver the principles of ITSR.

8.4.2. ORR has noted [ORR DD: 4.98] that NR (HS) will make savings in station security staff through more efficient allocation of tasks. NR (HS) would like to clarify that any savings in stations will be in relation to its customer service roles, not station security, and any changes in headcount will be achieved through natural attrition to avoid additional costs where possible. The savings generated will be passed onto operators through the Stations Best Estimate process.

9. Safety

9.1. It is positive that the ORR is supportive of our Safety Strategy [ORR DD: 4.104 to 4.108] and recognises the engagement and alignment across our other strategies that underpin our plans for CP4. The ORR has highlighted the need to put particular focus on safety by design in CP4 [ORR DD: 4.110], as more first-time renewals are delivered on the HS1 network. NR

(HS) acknowledges this, with safety by design forming one of our four pillars of the Safety Strategy, which will be delivered both at the planning and design stage of the renewals process.

9.2. To support this safety pillar, NR (HS) has an existing commitment in its 5YAMS for the "*Improvement of Safety by Design through use of technology and innovation to reduce the need for physical on-site intervention and working at height*". NR (HS) accepts the ORR's proposal [ORR DD: 4.112] to report in the AMAS on any new initiatives or examples of safety by design throughout CP4.

10. <u>Environmental Sustainability</u>

10.1. Whilst our Sustainability Strategy for CP4 seeks to support HS1 Ltd.'s corporate Sustainability Strategy, the ORR has recognised the need for system stakeholders to work together to ensure HS1 Ltd.'s ambitious objectives can be delivered [ORR DD: 4.120]. The ORR has identified three specific areas, where it has proposed a commitment for HS1 Ltd to lead a working group in year 1 of CP4 with stakeholders to seek a way forward on these matters. We have set out our response to each item below.

10.2. <u>Zero Emissions Vehicles</u> – NR (HS) has an existing commitment in its 5YAMS to "*Progress against our target of transitioning all our road vehicle fleet to electric by 2035*". The ORR has acknowledged the challenge we are facing regarding the lack of charging infrastructure at our Singlewell Infrastructure Maintenance Depot (SIMD). We will support HS1 Ltd to engage in any working group they may seek to establish, to discuss possible solutions for introducing charging infrastructure at SIMD.

10.3. <u>Renewable Energy Initiatives</u> – we understand from HS1 Ltd that progress has been made with the DfT in establishing a possible mechanism for third party funding for solar panels at stations, so a working group is not required. HS1 Ltd intend to focus on the solar panels' initiative first, before commencing with wind and hydro initiatives.

10.4. <u>Circular Economy</u> – we will support HS1 Ltd in its commitment to actively explore options to integrate circular design principles and sustainable procurement into future projects and their intention to expand their existing circular economy plan to reflect this.

10.5. <u>Biodiversity</u> – NR (HS) supported HS1 Ltd in outlining the work planned in CP4 in response to ORR's queries in July 2024. We will support HS1 Ltd in its commitment to conducting a biodiversity re-baseline survey and its intention to producing a management plan to achieve net gain.

11. <u>[.]</u>

<u>[.]</u>

12. Conclusion

12.1. NR (HS) rejects the ORR's proposed [.] of additional O&M efficiencies over CP4, which are not underpinned by credible assumptions nor evidence. Despite the ORR stating that it "cannot instruct changes to the former contract in PR24" [ORR DD: 5.56], it has proceeded to outline proposed changes to the contractual arrangements under our Operator Agreement with HS1 Ltd. This is out of scope of ORR's remit in accordance with the HS1 2009 Regulatory Statement, Clause 32; in addition we are concerned by the precedent this sets, that ORR should take decisions that have the effect of directing changes to the nature of commercially agreed contracts.

12.2. Together with HS1 Ltd, from the start of the PR24 process in 2022 we are clear that further efficiency could be derived if system risk was reviewed, and engagement sought amongst all stakeholders. Despite this, and ORR's attempt to review risk, rewards and incentives as part of PR24 which did not arrive at any agreed outcome for the system, the ORR has proceeded to apply efficiencies on NR (HS). It is not within NR (HS)'s control to single handedly establish these arrangements without support and engagement from the HS1 system. ORR appears to be pushing savings, that are neither realistic nor credible, onto the O&M elements of HS1 Ltd.'s plans to force wider changes, which NR (HS) cannot make. In turn this results in unreasonable financial risk. If these proposals are confirmed in ORR's final determination, it may necessitate NR (HS) seeking to review these points judicially, given the concerns set out in this letter.

12.3. We have engaged the ORR in our plans from the outset of PR24, and together with HS1 Ltd undertaken progressive assurance with the ORR throughout the process. The proposed asset management acceleration has not been raised by the ORR in any of the bilaterals, stakeholder workshops, or site visits held over the past two years and ORR's Draft Determination, in addition to deviating from its own approach to PR24, provides limited evidence on how it expects this can be achieved.

12.4. NR (HS)'s Operator Agreement with HS1 Ltd and the CP4 5YAMS balances the appropriate level of output to meet commitments and obligations with risk and reward. NR (HS) must reiterate that it has significant concerns that if ORR carries forward its proposed level of efficiency over and above which NR (HS) has already evidenced is achievable and has committed to, without wider changes made to the HS1 system, NR (HS) would be faced with a material risk of becoming [.]by the end of CP4, which risks breaching the terms of ORR's consent with NRIL. There is an additional risk that ORR's proposed changes could lead to charges that undercut and/or distort competition in the high-speed market, which could leave NR (HS) (and NRIL) in breach of subsidy control rules.

12.5. To support the ORR as it prepares its Final Determination, we would like to further engage with the ORR on our responses outlined in this letter. In particular:

12.5.1. Despite this being a contractual feature of our Operator Agreement, we are open to exploring with the ORR what an appropriate [.] to ensure NR (HS) is appropriately compensated for the very specific risks it faces in relation to managing the high speed infrastructure.

12.5.2. We would like the opportunity, to further clarify the [.] put forward in the NR (HS) 5YAMS to demonstrate their benefit and link to asset management maturity and efficiency.

12.5.3. We also see the benefit in further discussing ORR's proposal for asset management maturity acceleration, to show where we believe this will be already achieved through the proposals in the SASs and 5YAMS and to confirm what opportunity ORR believe there is 'to go further'.

12.5.4. We believe it is essential for ORR to call a system workshop to review the position on system risk; we remain committed to support the system to understand opportunities and benefits for system risk, reward and incentivisation.

12.6. We look forward to engaging with the ORR over the coming weeks to clarify the points we have made in this response, ahead of the Final Determination.

Yours sincerely,

[redacted]

[redacted]
Managing Director
Network Rail (High Speed) Ltd

Copied to:
[redacted] – Network Rail (High Speed) Ltd

[Redacted] Chief Financial Officer, Network Rail
[Redacted]

[Redacted] Director, Planning & Performance
[Redacted]

11 November 2024

Dear [Redacted]

Network Rail Infrastructure Limited's (NRIL's) response to ORR's Periodic review 2024 (PR24) draft determination for HS1 Limited

This letter sets out Network Rail Infrastructure Limited's response to ORR's draft determination for the 2024 Periodic Review of High Speed 1 Limited (HS1 Ltd). We welcome the opportunity to comment on ORR's proposals. This response is distinct from Network Rail High Speed's (NRHS's) response but it may be read in conjunction with that.

We recognise that many of the issues in your draft determination are detailed and specific to HS1 Ltd. Therefore, we have only responded to the questions that may have implications for NRIL and the delivery of its current and future commitments and funds available. We have focused particularly on ORR's draft decisions relating to the operations and maintenance elements of the NRHS plan. NRHS's response provides more detail and covers a broader range of topics.

<u>HS1 Ltd is the regulated entity</u>

There appears to have been a departure in PR24 from previous HS1 Ltd periodic reviews in that ORR has focused specifically on NRHS and what it can do to deliver savings rather than focusing on the regulated entity HS1 Ltd. Unlike HS1 Ltd, NRHS does not have access to all the levers that would be required to respond to overall challenges ORR has set out in its draft determination. For example, NRHS can't, on its own, change the system risk, reward, incentives framework.

<u>Importance of recognising existing contractual arrangements and clarity on ORR's remit</u>

A significant proportion of the savings that ORR identify for operations and maintenance costs in CP4 are proposed changes to the contractual arrangements between HS1 Ltd and NRHS. This contract was entered into by HS1 Ltd and NRHS in 2010 as part of a commercial negotiation and reflects the balance of risk and reward agreed at the time, plus any subsequent negotiations. In developing its proposals, it is not clear how ORR has considered the asymmetric contractual risk profile and interdependencies with other mechanisms. We note that ORR sought to review risk, rewards and incentives in 2023 as part of PR24 but did not arrive at agreed outcome for the system.

Change to contractual arrangements are out of scope of ORR's remit and we think this sets a worrying precedent that ORR should take decisions that have the effect of directing third parties to change the nature of commercially agreed contracts. This is likely to increase perceived regulatory risk for third parties exploring whether to invest funds into the GB railway, if they think that the regulator could force through changes to those agreements mid-contract.

<u>Lack of evidence and appropriate level and phasing of efficiency assumptions</u>

ORR's efficiency assumptions are materially higher than those proposed by NRHS. ORR has nearly doubled NRHS's efficiency proposal of 6.9% improvement to 12.5% (which means £14.7m additional savings over the control period). ORR's proposals are not grounded in any robust analytical evidence, rather they rely on judgement. Please can you explain where, specifically, these efficiencies can be made given that we cannot unilaterally change the terms of the contract with HS1 Ltd.

Additionally, and notwithstanding our other points, ORR has not allowed for any phasing-in of efficiency – which is common practice amongst regulators – to allow for a realistic and deliverable efficiency trajectory. This lack of phasing-in means that actual efficiency (exit-to-exit) is much higher, at 16.5%, than ORR's headline figure (12.5%) which compounds the issue of deliverability unless HS1 Ltd can smooth the financial flows across the five-years. Whilst NRHS is content to continue discussions with ORR to explore opportunities for further efficiency, it is critical that ORR's final determination reflects challenging but achieveable efficiency assumptions.

<u>Setting efficient charges</u>

ORR has referenced its obligations under the Access & Management Regulations (A&MRs) to set access charges at efficient levels. Para 5.29 of the draft determination says that whilst ORR has no power over the Operator Agreement it 'must ensure that costs passed on to train operators are efficient.' The AM&Rs reference set out a requirement on ORR to ensure that HS1 Ltd is provided with incentives to reduce the cost of allowing access to its infrastructure and level of access charges. Whilst we strongly agree with reducing costs for operators, we should do this in a way that balances the ambition to delivery material efficiency with financial viability of the companies involved. We note that ORR has made other decisions where it has not set the maximum level of efficiency (or lowest cost), such as efficiency decisions in previous NRIL periodic reviews and the prolonged capping of freight charges in CP6 and CP7 below the efficient level.

<u>Overall impact on financial sustainability of NRHS</u>

The assumed net revenue from NRHS's contract with HS1 Ltd is baked into the overall CP7 funding settlement for NRIL set out in ORR's PR23 final determination. We would not enter into a contract with HS1 Ltd if there was not an appropriate balance of risk and reward. It could fundamentally undermine our interest in providing services to a third-party customer lover the longer term.

We have real concerns that if NRHS were to carry out the changes ORR propose to our contractual arrangements, without wider changes to the wider HS1 system , NRIL would have a material risk of either receiving significantly less revenue from its subsidiary or even making a loss on this contract, which risks breaching the terms of ORR's consent for NRHS to stand or fall on its own merits and not be cross-subsidised by NRIL. There is an additional risk that ORR's proposed changes could lead to charges that undercut / distort the market, which could leave NRHS (and potentially NRIL) in breach of subsidy control rules.

Whilst we accept that there are further efficiencies to be driven out of the HS1 cost base, NRHS has been clear with ORR previously that these require change to wider industry arrangements (e.g. a more symmetrical performance regime, and the ability to benefit from investments with payback periods longer than five years), which would need consensus and agreement from all parties – we don't have that consensus and it is not within NRHS's control to single handedly establish these arrangements. ORR appears to be pushing savings onto the O&M elements of HS1 Ltd's plans to force wider changes, which NRHS cannot make. In turn this results in unreasonable financial risk for NRIL in an already challenging financial context, where we are already seeking to manage down the overlay of which ORR is very aware.

We recognise that ORR will continue to hold discussions with NRHS colleagues on the content of the draft determination.

Given the significance of your proposals and the risk to our long term commercial model I would request a follow-up meeting to explore the rational for the material increase in efficiencies in your draft determination.

I am copying this letter to *[Redacted]*.

Yours sincerely,

[Redacted]

Rail Partners' response to ORR's periodic review of HS1 Ltd 2024 (PR24) draft determination

About Rail Partners

Rail Partners represents private passenger train operating company owning groups and freight operating companies – providing policy and advocacy functions on their behalf. We also provide technical services to train operating companies in both the public and private sectors. This response is on behalf of our owning group and freight operating company members.

Introduction

The periodic review process is fundamental to the operation of a high performing railway that delivers against the expectations of both funders and railway users. We recognise that this periodic review is taking place during a time of significant uncertainty, both in relation to High Speed 1 Ltd (HS1 Ltd) and amidst wider structural changes to the railway.

The impact of Covid-19 across the GB rail network has been profound, affecting traffic volumes and the railway's finances. On HS1, we note that while passenger services continue to recover steadily, in 2023/24 the total number of timetabled passenger services remained 18% below pre-Covid levels. Similarly, the number of timetabled rail freight services has declined significantly over the past decade, with 67% fewer freight services running in 2023/24 compared to 2014/15. This decline in rail freight reflects the ongoing challenge in making the economics of international rail freight work, despite strong recognition of the wider economic and environmental importance of increasing rail freight services, as demonstrated by the introduction of a rail freight growth target by the previous government, and regulated rail freight growth targets for Network Rail in its current control period (CP7).

Against this backdrop, we support the emphasis in the draft determination on resilience, specifically improving HS1 Ltd's ability to manage uncertainty regarding future traffic levels. HS1's size relative to Network Rail Infrastructure Ltd (NRIL) means that it is more vulnerable to changes in traffic volumes as it does not have the same economies of scale. However, as noted in the draft determination, the small size of HS1 also enables it to be more agile with a stronger understanding of its asset base. These factors should support HS1 in responding to continued uncertainty through its management of the network. Rail Partners also recognises that legislative changes resulting from Government's proposals for rail reform are likely to take effect during this HS1 control period (CP4). These changes may affect the regulatory regime on HS1 Ltd, creating further uncertainty.

Rail Partners notes that there is potential for international rail freight growth on HS1 Ltd infrastructure under the right conditions, and that there are a number of parties interested in operating new international open access passenger services which would introduce competition to this market. It is important that the regulatory framework supports the introduction of new services to support the financial sustainability of HS1 Ltd and provide additional options for passengers and freight customers.

Rail Partners is broadly supportive of the PR24 draft determination, and the rest of our response covers some specific elements of the consultation document.

Rail Partners' response

Charges

Rail Partners supports ORR's proposed amendments to the charges paid by train operators for the use of HS1 Ltd infrastructure. In line with existing legal requirements, we acknowledge that charges must be set to cover the costs of maintaining and renewing rail infrastructure and understand that typically the costs of managing high speed infrastructure will be higher relative to the classic network. Critically, charges should also be set to ensure that the infrastructure manager is incentivised to maintain the network efficiently and that charges are borne fairly by all operators. As such, we support the £14.7m adjustment to HS1's route operation and maintenance fund to introduce a stronger efficiency challenge, which will help to improve the affordability of operating services on HS1 Ltd infrastructure.

The proposed 54.7% reduction in freight charges from HS1 Ltd's Five Year Asset Management Statement is also supported by Rail Partners. We note that this is driven by a reallocation of freight specific costs to common infrastructure costs and the introduction of HS1 Ltd's new cost policy. One of the key reasons that the number of international rail freight services using HS1 infrastructure has declined over the past decade has been rising HS1 infrastructure charges which have become unaffordable for freight customers. The freight and logistics sector is highly price-sensitive with customers operating on low margins and rising charges have driven modal shift from freight customers towards more carbon intensive modes – particularly road haulage. Although charges remain at a level that is prohibitive for many freight customers, the proposed reduction in freight charges in this draft determination is a welcome first step that will help to improve the competitiveness of rail freight.

Further, as noted in the draft determination, the contractual arrangements regarding Ripple Lane Sidings are complex. While we support the adjustments to freight specific costs proposed by the ORR in the draft determination, it will result in a 24% increase in the access charges applied to domestic freight services using Ripple Lane Exchange Sidings. The complexities regarding the contractual arrangements at Ripple Lane with HS1 Ltd are well understood, but they continue to present a barrier to rail freight growth both domestically and internationally. The transfer in ownership of Ripple Lane from HS1 Ltd to NRIL would help to drive rail freight growth by lowering charges for all freight services using these sidings.

As a wider point, the access and charging framework, currently underpinned by the Railways (Access, Management and Licensing of Railway Undertakings) Regulations 2016 will be reviewed as part of the Railways Bill proposed by the Government to support the creation of Great British Railways (GBR). As these amendments are likely to apply to all infrastructure managers, including HS1 Ltd, it is important that any future framework is suitable for the entire GB rail network. We note that most of the current HS1 access beneficiaries (Eurostar and freight operating companies) will continue to operate outside the commercial framework of GBR and as such the regulatory protections relating to access and charging will continue to be important to provide certainty and enable private investment. Rail Partners supports amendments to the charging framework that would enable a more creative approach to charging including incentivising low-carbon traction, productivity improvements, and the introduction of new traffic. On HS1, this approach could help to drive rail freight growth through the Channel Tunnel and support the introduction of new open access passenger services.

Renewals

As a smaller and more modern network, the requirement for renewals on the HS1 Ltd network continues to be limited. Rail Partners is pleased that ORR considers that HS1 Ltd governance and management of renewals has improved by taking on board feedback in the periodic review 2019, noting that HS1 Ltd is planning its largest renewal to date in CP4 – the mid-life ballast replacement. We note that ORR has reservations about the deliverability of this project under the timelines proposed. It is important that HS1 Ltd and Network Rail High Speed (NRHS) reflect on this feedback and consider whether an alternative timeframe should be implemented. Once approved by ORR, it is important that the regulator monitors the delivery of this renewal to ensure that it is delivered cost effectively and on time to minimise disruption to passengers and freight customers – recognising the disruptive impact that any further reprofiling would have on access to the network.

Regarding HS1 Ltd's cost policy for CP4, we note that ORR considers this policy is a significant improvement on previous control periods. The draft determination highlights that improved base cost data would give HS1 Ltd more accurate estimates of future renewal work, but recognises that this is challenging as most infrastructure on the network is yet to be renewed and therefore making cost assumptions is challenging. As the volume of renewals will increase in future control periods, we support ORR's recommendation that HS1 Ltd seeks to improve its understanding of base costs during CP4 and agree with the proposed efficiency challenge for renewals in CP5 and beyond while these improvements take place.

We also support the efficiency challenge introduced for the delivery of stations renewals during CP4 and support greater collaboration and improved governance between HS1 Ltd and NRIL at St Pancras International station.

Performance

Noting that there has been some high profile performance incidents during CP3, the focus on the recovery of services after infrastructure failures as part of PR24 is welcomed. We support the proposed changes to NRHS operational processes in order to improve the management of incidents to restore services more efficiently, minimising disruption to passengers and freight customers.

The proposed improvements to NRHS asset management maturity are also supported by Rail Partners. The proposals will not only help to reduce operation and maintenance costs, but will also help NRHS to reduce asset faults and the delays associated with them. Further, in line with Rail Partners comments during the most recent periodic review of Network Rail, we support a greater focus on preventing and responding to network incidents caused by extreme weather events as these are now occurring more frequently.

We understand the rationale for deferring the recalibration of the HS1 performance regime to commence in 2025 due to a lack of availability of representative data as a result of Covid-19, Brexit and industrial action. Rail Partners notes that changes are required to the Passenger and Freight Access Terms to enable a mid-control period performance recalibration, although we have no specific comments on the proposed wording. We expect that HS1 Ltd will share further details on its proposed methodological approach to the recalibration in due course, given the importance of a robust and accurate performance incentive regime for any commercial train operator.

Managing uncertainty

Rail Partners supports the improved definition of the Volume Reopener (VRO). This balances the need for HS1 Ltd to cover its costs in relation to a material change in volumes or wider changes to the regulatory regime, with the importance of maintaining a stable regime for train operators while reducing administrative costs for all parties. In recognition of the continued uncertainty of HS1 traffic, Rail Partners support the annual wash up of fixed charges, which will ensure operators' fixed charges are proportionate to the number of services they operated rather than forecast traffic levels. We note that ORR agrees that this is useful, and expect that HS1 Ltd, and passenger and freight operators will work together to agree how a wash up should be implemented to reduce additional administrative burden.

Periodic Review of HS1 Ltd 2024

Response from Rail Freight Group (RFG)

November 2024

Introduction

1. Rail Freight Group is pleased to respond to the ORR's consultation on the periodic review of HS1 Ltd. This response is not confidential.

2. RFG is the representative body for rail freight in the UK, and we campaign for a greater use of rail freight, to deliver environmental and economic benefits for the UK. We have over 130 member companies including train operators, end customers, ports and terminal operators, suppliers including locomotive and wagon companies and support services.

HS1 and Rail Freight

3. International rail freight through the Channel Tunnel remains an under developed market for UK rail freight, but one which continues to have significant potential. There are a number of challenges in this market however, including the lack of 'gauge clearance' on the key routes through Kent, which means that containers cannot be conveyed on them. This is a significant limit for the market.

4. HS1 therefore offers some significant benefits for freight services, particularly the ability to convey containers. HS1 also allows European wagons to be conveyed, which reduces complexity, and provides a direct link to the Barking area which is a significant freight and logistics cluster. However, there are also many limitations on operations, and the costs of using HS1 for freight have been prohibitive.

5. Whilst we recognise that HS1 is by design a high speed passenger railway, the significant opportunity for rail freight must remain a key part of the planning and operation of the railway. We are therefore pleased to see the consideration given to freight users in this consultation, and the proposals to significantly reduce freight charges, which we strongly support.

Specific Comments

6. *Asset Management Activity:* We support the work undertaken to develop mature asset management plans across HS1's portfolio. We note the expected increased demand for engineering access, and note that this will need to be planned with freight

services in mind, given that they will operate at night, and noting the absence of an alternative gauge cleared route.

7. The signalling replacement to ERTMS is a complex project for freight, with the need to align timescales with the Channel Tunnel and with the main UK network. The Class 92 locomotives which are currently the only ones able to be used are also likely to need replacement at some stage, and a coherent strategy will be needed across all parties, not just HS1.

8. *Cost Assessment* We support the assessment.

9. *Charges* We strongly support the reallocation of common costs and the consequent reduction in rail freight charges. This is a significant step in helping to restimulate this important market and in turn increase the traffic using the route. We note that there has been a long standing ambition to remove the yard at Ripple Lane from the HS1 concession area and transfer to Network Rail, which would be expected to reduce overall costs. We would support the development of this proposal during the control period.

10. *Network Incentives* We have no specific comments on the conclusions. We note that the performance regime represents a significant risk for rail freight, and care must be taken not to increase that risk through changes in the regime. We note the comments on ‘zero freight scenarios’, but hope that the charges reductions in this draft determination will reduce the risk of that occurring.

southeastern

[redacted]
Track Access & HS1 Contracts Manager
SE Trains Limited (**SETL**)

Office of Rail & Road
[redacted]

11th November 2024

ORR Draft Determination on HS1 PR24 – Southeastern Response

Dear Sir/Madam,

Southeastern welcome this opportunity to respond to the ORR's consultation on its Draft Determination. The level of engagement with the ORR and other stakeholders to date has been appreciated. However, whilst it is clear that feedback has been considered and acted upon in many areas, there are further improvements that could be made prior to the Final Determination to ensure the resilience of the system and value for its users.

We welcome the effort to control costs in CP4 (largely through the application of the Cost Policy). However, we raised a number of points/questions in our response to the Draft 5YAMS document for which we have not received responses (refer to Appendix 1), and we reiterate our disappointment for not seeing more of the specific savings in areas outlined in the Rebel Report.

Asset Management

1. Ballast

Southeastern note that the ORR are satisfied that the cost estimates reflect the likely cost to delivery this work effectively. Yet paragraph A.43 of the Supporting Annexes states the following '*At the time of the review there were multiple options available and limited ability to be certain of costs and timing*'. This is a contradiction.

Unit rates have risen from £575k per km during PR19 to £1.4m in PR24. This rise is attributed to changes in productivity, material price and labour costs. To date, this rise is unsubstantiated.

Draft Determination supporting annexes state that it is not reasonable for the ORR to review each individual unit rate and that a selection was chosen based on value and significance. Can the ORR confirm that ballast unit rates formed part of their review and provide details of what assurances have been done to validate the proposed £1.4m unit rate/£90m total cost that has been allocated to this programme as this number is excessive and comes with no certainty that these works will actually be delivered in CP4.

As part of HS1's Final 5YAMs, HS1 provided the ORR with a separate document 'Summary of Ballast Unit Rate Development'. Why has this not been shared with operators?

Southeastern's response to the Draft 5YAMs sought further information as to what industry comparisons had been carried out and whether recycling options had been contemplated. This information has not been provided to date, so we are unclear as to whether our points have been considered.

The HS1 Final 5YAMS documents states that work is ongoing to validate current cost estimates and delivery strategy. Can the ORR confirm if these works have been concluded?

2. Renewals

(Route/Stations)

Southeastern support the acceleration of improvements for asset renewals and concur that it would not be appropriate to wait for efficiencies to be realised. The proposed 9% reduction is welcome, however, Southeastern question if this could have been a more challenging target given the ease at which NRHS delivered its efficiency target set in CP3.

Southeastern are supportive of the proposed 5% efficiency on specific station projects, however, question if the interaction with works funded by third parties could have a greater impact. Are the ORR able to substantiate and enforce their conclusion that 5% is the appropriate level of efficiency? A higher efficiency target could encourage NRHS to act sooner to improve asset knowledge and data maturity.

Southeastern concur that station renewals have more direct impact on operators and so welcome increased involvement in project planning and governance.

3. Engineering Access

Southeastern acknowledge the need for a significant step change in the level of access required to deliver renewals in CP4. Our concerns re the ability to rollover the Extended Possessions Allowance remain as a build-up of possession in any one year could have a significant impact on our ability to deliver our committed timetable. Limiting the amount of the allowance that can be rolled over would help to mitigate some of this concern.

Southeastern support a more realistic delivery profile for renewals, especially for ballast works. The need for a greater level of communication and the avoidance of short notice changes is integral to ensure demand is manageable.

4. Research & Development

Southeastern support the exclusion of the R & D budget from the Outperformance Regime meaning any underspend remains within the R & D budget. Inclusion of operators in the scope and governance of projects remains a priority along with full detail of specific benefits to be realised. Southeastern now have two colleagues on the regular R & D Panel so hope that this will allow for greater input into future workstreams. A commitment is needed from HS1 to provide operators with sufficient detail of the return on investment (both assumed and actual) where applicable as our past experience has proved this is not always forthcoming even when requested. The recent N-1 scheme has been a good example of this.

5. Environmental Sustainability

Southeastern support the required commitment for HS1 to lead a working group in Year 1 of CP4 but would like to see a tangible output included within this commitment along with reporting obligations on the outputs such as return on investment.

Southeastern would welcome a receipt of an annual statement of the carbon impacts of the HS1 system that are attributed to our operations. This would reflect how HS1 are achieving reduced emissions (towards net zero) and their Science Based Targets.

In light of RSSB upcoming guidance on how to compile a weather resilience and climate change adaptation (WRACCA) plan, we would like to understand how HS1 are approaching this area, and to have visibility of such plans.

6. Safety Strategy

Southeastern note that the ORR support HS1's Safety Strategy however would be keen to understand if there is any requirement on HS1 to align their Safety Strategy with the RSSB's Health & Safety Strategy, which was launched earlier this year as this would align HS1 more closely with the industry.

Cost Assessment

7. Cost Policy

Southeastern support the introduction of the Cost Policy for both Route and Stations and are reassured by the proposed (approx.) 4% adjustment in subsequent Control Periods that takes into account the potential double counting of some factors that occurs in the absence of 'clean' base data.

Charges

8. Escrow

Southeastern are supportive of the allowance of small negative balances towards the end of the 40-year annuity model and agree that it is unnecessary to increase the annuity today for this uncertain event.

Southeastern note that the ORR have increased investment return assumptions from 3.3% to 4.3% on the basis that DfT and HS1 will find a solution to enable higher returns. Recent interactions between those parties have led to confusion as to whether everyone is seeking the same outcome. Southeastern require a commitment from all parties to find a solution that allows investment in a wider portfolio which should deliver the returns at an acceptable level of risk for all. Southeastern's position remains that we are supportive in an expansion of the scope of Authorised Investments as we believe that an agreement can be made that would deliver the modest return ORR have reflected and are keen to work with the system to deliver changes to the Authorised Investments criteria.

9. WACC

Southeastern have no further comment on this element.

10. Capacity Reservation Charge

Southeastern have no further comment.

11. Removal of Underfunding Factor

Southeastern are supportive of this proposal.

12. Freight Fixed Costs Reallocation

Southeastern understand the position however the ORR and operators need to be sure that HS1 have and continue to pursue and attract freight onto the network.

13. Stations LTC

Southeastern welcome the proposed reduction in Stations LTC. However, note our disappointment that the review of Station Contracts carried out by the ORR does not consider that there is an option to seek contributions for use of Common Station Amenities and Services from third parties, especially when a similar provision exists for Qualifying Expenditure. (Condition 102 of the Station Access Conditions).

14. Traffic Forecasts

Southeastern consider that the forecasts used are conservative.

There is a likelihood that Southeastern will procure new rolling stock for the HS route in the medium to long term, however this is uncertain at present so may be something we can provide a more tangible update on in future control periods.

The level of and timing of additional capacity which would be needed is dependent upon forecast demand which is difficult to predict over the medium/long term as well as the interventions available to Southeastern at that the time. For example, the ability to strengthen existing services, the level of congestion at terminals (especially London St Pancras), the ability of Southeastern to yield manage fares/demand, other costs associated with operating additional HS1 services (as it is not just the ORR regulated charges that would be incurred and need factoring into any business case. e.g. IRC, EC4T, Staff costs etc) as well as the prevailing Government's policies. Having said that, the likelihood is, demand will warrant domestic paths to increase to be in excess of the DUP. We will provide a further path forecast to ORR which is likely to show only modest growth. However, we do not believe the increase would warrant a material increase in O&M or renewals costs.

Operations & Maintenance

The significant level of inefficiency identified in this area is concerning especially as these agreements are between NRHS & HS1 and so the ORR have no power to direct changes to them. Whilst Southeastern support the proposed £3m per annum adjustment, we continue to question if the reductions in response to the various commissioned reports are as robust as they could be.

We note the ORR have estimated that NRHS could deliver its O & M between £2-3m more efficiently. Southeastern question if this proposed efficiency target is robust enough given that NRHS achieved its end of control period efficiency targets in Year 1 of CP3. Efficiency targets should be more challenging in this area.

15. Management Fee

Southeastern maintain the view that a management fee of 8% is excessive and support the adoption of the Oxera recommendations as detailed by the ORR at paragraph 5.49 of the Draft Determination.

16. RPI+1

Southeastern agree that RPI +1.1% is excessive and support the alignment to CPI plus a factor for input prices.

17. Enabler Costs

Southeastern support the ORR's point on NRHS Enabler Costs, that it is not reasonable to pass on costs for training and developing people up to the standard already achieved by comparators.

Overall, HS1 need to acknowledge and urgently address the issues in its contractual arrangements as per the list at Section 5 of the Draft Determination. In their current form, they fail to incentivise efficient behaviours and are therefore not delivering the best for the system.

18. HS1 Own Costs

Southeastern are disappointed not to see any proposed efficiencies in this area. We reiterate that the headcount forecast is 1.8 heads above the CP3 budget. The decrease in levels of spot bids and process automation/familiarisation should mean that no additional resource is needed compared to pre covid levels.

The efficiencies identified within the Rebel study (page 36) do not appear to have been considered. As with many organisations, train operators are having to deliver efficiencies in their support costs and HS1 are no different. Savings should be achievable for HS1 given the advent of new technology and if they address some of the shortcomings in HS1 support processes we have experienced in recent times.

19. Contract Risk

Southeastern's response to the Draft 5YAM's listed several questions regarding the information used to quantify and support the proposed pot for risk for CP4. To date, no information has been provided to support this cost nor allow for assessment as to whether the risk premium is acceptable or excessive (refer to Appendix 1). Based on our review of performance payments paid out in previous control periods, the costs built in for CP4 seem disproportionate and not justifiable.

20. Outperformance

Southeastern welcome ORR's view that the regime is not incentivising efficient behaviours and are pleased to see that they recognise that is not supported by stakeholders.

Our previous comments on the Outperformance Regime still apply – the regime is inextricably linked with OMRC arrangements therefore it clearly sits within the scope of PR24 and should be subject to a thorough review. The regime is a clear factor in driving the behaviour of NRHS and both CP2 and CP3 have shown that NRHS have a track record of underspending in Years 1 and 2 of a Control Period. The purpose of the regime is to support HS1 in being economically efficient and NRHS should not be expecting outperformance in any year if forecasts are accurate so we still fail to understand why sharing any savings that materialise should be limited to Years 3, 4 and 5.

In the event of the removal of the Outperformance Regime, Southeastern would like to see alternatives to the current regime, as well as have a view on where any underspend is reinvested to ensure that it benefits operators and their customers and require assurances that a robust regime will be added in its place to track underspend/reinvestment as removal alone is not an option.

Network Incentives/Changes to PATs

21. VRO

Southeastern recognise the benefits of tidying up the VRO provisions and agree that proposed changes are reasonable. Consideration does need to be given to how the proposed wash up will interact with a VRO or if a wash up negates the need.

Southeastern understand the challenges faced by freight operators and the need for HS1 to ensure that a zero-freight scenario is considered.

In relation to the proposed change whereby operators should approve the forecasts HS1 use to execute the VRO if above FWT, Southeastern would like to understand the process if operator approval is not received and if operators approval will be for both their own and other operators forecasts.

22. OMRCA1 Wash Up

Southeastern are supportive of EIL's proposed wash up mechanism for operator cancelled services as this ensures that operators are not overcharged in the event that a spot bid replaces a cancelled train.

23. Pass Through Costs

Southeastern agree that only charges beyond HS's control should fall into this category. Consultation should be offered to operators in the event of any large or extraordinary items to allow for a view on both price and activity involved.

24. Annual Fixed Cost Wash Up

Southeastern have welcomed the open dialogue on this proposal throughout the PR24 process.

Southeastern remain of the mind that an annual wash up is fairer for all parties as it allows costs to align to actual usage of asset. A wash up would allow for a simpler allocation of rates across the control period as there should be no further changes to determined rates in subsequent years. It is our belief that the work required to complete a wash up need not be excessive following set up; especially as similar wash ups are already undertaken for other cost elements.

There should be no trigger for the proposed wash up as this will allow a regular process to be installed in business as usual and not as one that needs dusting off as and when required – this would make it laborious, something that all are keen to avoid. If initial forecasts are reasonable then we should not expect to see large wash up amounts, thus HS1 cash flows should be manageable.

A quarterly statement of accounts is sensible and will provide operators with an evolving picture upon which operators can plan. A wash up carried out more frequently would have to be by extreme exception and so it seems unnecessary to come up with a criteria other than mutual consent of parties involved.

25. OMRC Indexation Floor

Southeastern are supportive of the removal of floor to indexing OMRC.

26. Performance Regime

Southeastern are supportive of the ORR's position to recalibrate in September 2025 and welcome the opportunity to contribute to any future consultation on the method of recalibration.

Southeastern support the ORR's position that any amendments to OMRCA2 and OMRCB be limited to the recalibration in 2025.

However, we do not support the proposed sole ability for HS1 to not proceed with the implementation of a recalibration as it is our strong belief that this should be a system decision.

Southeastern do not support the inclusion of provision that gives HS1 the ability to invoice operators for external costs of recalibrations.

27. Possessions Regime

In our response to the Draft 5YAMS we noted that increased route renewals will result in a change to the Possessions Allowance within the Passenger Access Terms. We stated that longer more frequent possessions will import costs into our business and affect our ability to collect revenue. Southeastern requested that the mechanism to recoup these costs be revisited as part of this proposed change. It is disappointing that this has not been considered. (refer to Appendix 1)

There also needs to be controls applied to the ability to rollover possessions from one year to the next. A build up in allowance could make a timetable inoperable. Southeastern are supportive with the proposed inclusion of possessions allowances within the EAS process.

28. St Pancras International - Contractual Inconsistencies

Southeastern welcome the review of this area as have raised concerns over many years. Whilst we welcome findings that there are inconsistencies, it is disappointing that the ORR do not see the resolution as integral to PR24. Southeastern do support the recommendation of a working group in Year 1 of CP4 however require commitment to tangible outputs. We look forward to having a seat at the table for these conversations and welcome a full review of the Station Access Agreements/Conditions (to include QX & LTC charging to third parties as per Condition 102 of the SACs) in the coming months as this is long overdue.

Stations

29. Remote Condition Monitoring (RCM)

Southeastern previously noted the introduction of RCM in CP3 with further to be installed in CP4. A request for HS1 to demonstrate the effectiveness of this technology does not appear to have been addressed. The current perception is that it is either not working or it is extremely basic. Southeastern reiterate our request that HS1 demonstrate how effective RCM technology is and how it is providing value for money?

To support this, we would like to see a commitment from HS1 to supply operators with a periodic report for Stations. This report should include management of failures, first fault fix remedies, renewals, environmental /waste reports, operational incidents, staff/passenger accidents and training (both internal & external). This would allow for full sight of where money is being spent for stations and the benefits we should expect to see as a result.

Conclusion

In conclusion, Southeastern thank the ORR for their engagement in this process and welcome the outputs that support the affordability of the use of the HS network.

Southeastern look forward to your response and to receiving the Final Determination in due course.

Yours sincerely,

[redacted]

Track Access & HS1 Contracts Manager

Let's talk

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Appendix 1

Paragraph Number	Subject	Type of Request	Detail
1	Renewals	Information	Information to understand the criticality of timelines for large renewals
1	Ballast	Information	Information to explain rise in costs for CP3 and how HS1 ballast is driving increases
1	Renewals	Information	Detail as to levels of assurance applied to remaining 15% of work bank
4	Authorised Investments	Information	Confirmation of intended levels of operator involvement
5	Sectional Appendix	Request	Amendments to km's in 5YAMS to reflect the Sectional Appendix
6	Cost Comparisons	Request	Consist approach to cost comparisons in Final 5YAMS
8	R & D	Information	details of value for money of R & D appointments
9	REACT	Request	New schemes are present in business case format
10	Infrastructure Evolution	Request	Programme accelerated to deliver in CP4
11	NRHS Management Fee	Request	Rebel Report recommendations are utilised
12	HS1 Staff Costs	Requests	Headcounts are maintained at pre covid levels and operators are involved in governance
13	Relationship	Information	details of steps to source all information required and collaborate for the system
15	Concession Performance Floors	Request	change to performance floors to reflect reality
16	Outperformance	Information	Details of reason for discounting Rebel recommendations
16	Outperformance	Request	Years applicable to Outperformance are amended to include entire control period
17	Pass through Costs	Request	Costs are controlled and incentive introduced
18	Indirect Cost Percentages	Request	Changes to % as per Rebel Report
18	Indirect Cost Percentages	Information	Confirmation of what 23% profit element consists of
19	Possessions Regime	Request	Introduction of a claims mechanism for cost incurred within Possessions Allowance
20	Safety Strategy	Request	NRHS to reach out to Ian Hall to review document
21	Contractual Risk	Information	Confirmation as to the trigger for use of this fund
		Information	Trespass & Vandalism - further info on drivers of charge
		Request	Supplier Capacity - removal of this charge
		Information/Request	Dewirement - further info on historic occurrences. Removal of this charge
		Information	Bridge strikes/Vehicle Incursion - further info of historic occurrences
		Information	Insurance Claims - further info re how costs were determined and excesses
		Request	Supplier Risk - removal of this charge
		Information	Third party/External - further info as to how costs were determined
		Request/Information	Pandemic - removal of this charge and explanation of industry risk knowledge
		Information	Interface Risk - further info as to risks considered
		Information	Performance Risk - further info on historic incidents
		Information	Fatalities - further info on historic incidents
22	New International Operator	Information	Confirmation re funding
23	Cost Policy	Information	Assurances re stretch levels applied
27	Mark Up	Information	Information re the make up of charge/assurances re duplication
31	Asset Management	Request	Monthly PGI's to be carried out with SETL
		Information	Information re how bespoke assets affect cost
		Request	Participation in HS1/NRHS Period Review Board
		Request	Fast Facts process and outputs shared with SETL
32	RCM	Information	Information re the effectiveness/value for money of RCM technology