Graham Richards

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11 December 2019

Dear stakeholder

Office of Rail and Road periodic review of HS1 Ltd 2019 (PR19)

In accordance with the process for periodic reviews set out in the Concession Agreement between the Secretary of State and HS1 Ltd, we initiated PR19 in September 2017, and published our draft determination (PR19 page of ORR website) for consultation on 30 September 2019.

Thank you for responding to that consultation which closed on 11 November. We received HS1 Ltd's revised final Five Year Asset Management Statement (5YAMS) on 29 November 2019 which can be found on HS1 Ltd's website.

We have scrutinised this document and propose to accept the majority of it. However, there remain a few aspects that we do not accept and, further to the provisions set out in paragraph 8.10.3 of Schedule 10 of the Concession Agreement, we propose to determine some elements of the operating, maintenance and renewals charge, and some other elements which we consider to be inconsistent with HS1 Ltd's General Duty.

Prior to the implementation of an access review, we are required to consult parties of the access contracts, and any other interested persons, on any proposed determination in accordance with paragraph 8.10.3 of Schedule 10 to the Concession Agreement.

I enclose details of the matters which we propose to determine. Please inform us of any views on these, by noon on 20 December 2019, by mail or to PR19@orr.gov.uk.

This marks the conclusion of consultation on the Consideration Stage of the periodic review. We will consider any responses and then publish our final determination on 7 January 2020, after which we move into the Implementation Stage.

Yours sincerely,

Graham Richards



We proposed less conservative asset life modelling in our draft determination which resulted in a volume reduction of around 10% over 40 years

Asset Management

We are minded to determine a less conservative approach to asset life in modelling over 40 years. This reduces the renewals annuity by £1.5m compared to the revised final 5YAMS (no change compared to our draft determination).

Background

- It is difficult to accurately predict asset life 40 years in the future
- HS1 Ltd has also acknowledged the uncertainty of long-term planning but it does not think it appropriate to change its approach
- Stakeholders welcomed the analysis and recommendation in our draft determination
- HS1 Ltd consider its approach to asset life is robust, based on the asset information currently available supplemented with engineering knowledge and, where necessary, judgement

- Given the uncertainty around asset deterioration and the resulting 40-year renewal plan, we consider our recommendation of a 10% reduction in renewals to be more representative of best practice, based on adopting an optimisation approach to maintenance and renewals activities.
- Our proposed volume reduction represents a target, driving efficient and innovative behaviours over the control periods.



HS1 Ltd proposed project management costs of 15% in its May 5YAMS, our draft determination set out recommended costs of 10%

Asset Management

We are minded to determine an allowance of 10% for project management costs in CP3. This reduces the renewals annuity by £0.1m compared with the revised final 5YAMS.

Background

- As set out in our draft determination, benchmarking against other UK rail projects indicated that project management costs should be around between 8-12% of the agreed renewals value of CP3
- · No adverse comments from stakeholders
- In its revised final 5YAMS, HS1 Ltd submitted a bottom-up estimate resulting in a team of 19 staff to deliver 48 renewals (total value £57m) at £7.6m - 13.5% of the agreed renewals value.

- In our draft determination we set out that benchmarking indicated that PMO costs should be in the region of 10%.
- We do not consider that the proposed fixed costs of £7.6m is justified by either the complexity and/or volume of renewals planned for CP3.
- We still consider that by HS1 Ltd adopting a programme management approach, including packing of smaller projects and by some rephasing, renewals would be delivered more efficiently.
- We consider 10% (c.£5.6m) to be the most appropriate level of project management costs.



Our draft determination required HS1 Ltd to maintain adequate research and development in CP3

Asset Management

We are minded to determine that HS1 should be funded for £2m of R&D in CP3. This includes an additional £0.4m in the renewals annuity for CP3 compared with both the revised final 5YAMS and our draft determination.

Background

- Our draft determination required commitment from HS1 Ltd to maintain adequate levels of R&D investment in CP3.
- HS1 Ltd has committed to setting up a R&D panel on which operators would be represented.
- HS1 Ltd also put forward a proposal for an increase in OMRC of £2m to fund R&D in CP3.
- Funders would benefit from any additional efficiencies realised as a result of R&D, noting typical business case ratios would be greater than 2
- All innovation proposals will require authority on a case by case basis via a panel including operators representatives.

- We consider £2m could be reasonable to fund R&D in CP3 (being comparable to the percentage funded for NRIL) but there must be a clear link to potential benefits for existing and future operators.
- This has been calculated using an average number for CP3 rather than over 40 years due to uncertainty over the level of expenditure and benefits.
- Our view is that the expenditure should be treated as a renewal and funded from the escrow account to provide greater transparency and governance. This approach aligns with our decision on PR18 for NRIL.
- R&D would be expected to have a Business Case Ratio greater than 2 at a portfolio level.



In its November 5YAMS, HS1 Ltd has included a number of costs which have been included without sufficient supporting evidence

Asset Management

We are minded to determine that HS1's internal costs should remain as set out in our draft determination, except for the adjustment in UKPNS costs. This is a £4.0m reduction from the revised final 5YAMS and a £1.1m reduction from our draft determination

Background

- HS1 has proposed a £2.9m net increase in operations and maintenance costs due to developments between May and November as set out below.
- A £0.5m increase in ORR costs due to new staff, and a £1.5m increase in HS1 Internal costs due to increased regulation, traffic forecasting modelling, office running and additional IT costs
- HS1 also proposed that the £2m for R&D should be treated as an Operations & Maintenance cost.
- These increases were offset by a reduction in UKPNS costs of £1.1m.
- In our draft determination, we did not include an
 efficiency challenge on internal costs because we
 thought that further efficiencies would pay for the
 cost increases necessary to improve HS1 Ltd's
 capability, that is, do "more with the same".

- HS1 Ltd not provide sufficient justification for the increases in internal or ORR costs. Therefore, we do not approve the cost increases.
- We have approved the £1.1m reduction in UKPNS costs as we were aware in our draft determination that the costs were likely to change and this looks reasonable.
- £2m for R&D should be treated as a renewal (see slide 3)



Based on the CP3 risk assessment for our draft determination and improved information, we propose risk funding at 13% for CP4-10.

Financial Framework

We are minded to determine a 13% allowance for risk and contingency for CP4-10 renewals costs. This increases the renewals annuity by £0.1m compared with the revised final 5YAMS (no change from draft determination).

Background

- HS1 Ltd and NR(HS) originally assumed 30% risk and contingency for 40-year renewals costs in its final 5YAMS.
- Our draft determination concluded that 13% was an appropriate assumption.
- EIL supported the reduction from 26% to 13% made in the draft determination.
- In its revised final 5YAMS, HS1 Ltd has submitted an assumption of 12.6% for CP4-CP10 based on a P50 approach instead of the P80 approach in the final 5YAMS and the correction [of some double-counting of risks].

- Following our draft determination, HS1 Ltd produced a P50 (half projects underspend and half overspend) estimate of 12.6% in its revised final 5YAMS.
- However, HS1 Ltd has not taken into account input price inflation for CP4-CP10 (it has in its CP3 assumptions). So, overall we have retained our view that 13% is appropriate.



Financial Framework

We are minded to determine that an average interest rate assumption of 2.5% should be used for authorised investments for CP4-CP10, with 80% of the escrow balance invested and 20% in a current account. This reduces the annuity by £0.3m compared to the revised final 5YAMS but has no impact compared to our draft determination.

Background

- In our draft determination, we said that HS1 Ltd's approach to investing the escrow balance was too conservative.
- Authorised investments include government bonds,
 AAA-rated corporate bonds and deposit accounts, these tend to have higher interest rates than current accounts.
- We proposed an average interest rate of 2.5% on authorised investments for CP4 to CP10.
- HS1 Ltd disagreed with our assumption of 2.5% and submitted a revised average interest rate assumption on authorised investments of 1.92% for CP4-CP10.
- It also revised its allocation between authorised investments and the current account, from 80%/20% to 90%/10%.

- HS1 Ltd revised its CP4-CP10 interest rate estimate for authorised investments but did not provide sufficient evidence to support the revised estimate. In particular, it did not explain why it considered its revised interest rates based on one particular day's yield curve were more appropriate, when considering a 40 year period,, given financial market uncertainty.
- In view of this, we have retained our assumption of 2.5%, which
 is within reasonable expectations of what is achievable when
 returns on government and corporate bonds are considered.
 Especially, in the situation where market interest rates are
 historically low at the moment and below the level of inflation
 and we are looking forward 40 years.
- Our assumption on the allocation between authorised investments and the current account remains as an 80%/20% split as HS1 Ltd has not provided sufficient evidence to support this change.



In our draft determination, for CP3 we assumed an average interest rate of 2.5% for authorised investments because we thought HS1 Ltd's interest rate assumptions over 40 years were too low.

Financial Framework

We are minded to determine that an average interest rate assumption of 1.22% should be used for authorised investments for CP3 and have retained a 80% authorised investments 20% current account split. This has no impact compared with the revised final 5YAMS and increases the annuity by around £0.1m compared to the draft determination.

Background

- HS1 Ltd had proposed in its May 5YAMS an interest rate for authorised investments of 1.22%.
- In our draft determination, we said that HS1 Ltd had adopted a too conservative approach to investing the escrow balance. We proposed an average interest rate of 2.5% on authorised investments for CP3 as part of an average assumption for CP3-CP10.
- In its revised final 5YAMS. HS1 Ltd disagreed with our assumption but did not submit revised interest rates for CP3.
- HS1 Ltd did revise its allocation between authorised investments and the current account, from 80%/20% to 90%/10%.

- For CP3, we have changed our interest rate assumption on authorised investments to 1.22%, as HS1 Ltd said it has agreed an approach with operators to not invest in government or corporate bonds in CP3, which would have provided higher interest rates.
- We are not minded to approve the change in allocation between deposits and bonds and the current account as we have not received sufficient justification from HS1 Ltd to support this change.

