Subject: ***HS1: Track Access Charges Framework in PR19***

Date: ***July 2019***

1. Purpose

As part of the PR19 process, HS1 Ltd (**HS1**) issued the attached consultation document[1] on 23 May 2019 that set out proposed changes to our charging framework to comply with recent changes to regulations. This paper summarises the comments we received on the consultation and provides our response to the comments along with proposed next steps.

2. Consultation responses

We received responses from two passenger operators, Eurostar (EIL) and London South Eastern Railway (LSER), and from two freight operators, DB Cargo and GB Railfreight. We also received a response from the Rail Freight Group that supported the responses from the two freight operators. A summary of views on the key consultation issues is as follows:

Issue	Comment
1). Impact of new apportionment for period from 2 August 2019 to 31 March 2020	Support for a wash-up following the end of the current control period (**CP2**)
2). Calculation of direct unit costs and basis for charging passenger operators	Support for continuing to base charges for passenger operators on the current per minute basis
3). Level of charges increase proposed for CP3	Although outside the remit of the consultation document, there was concern regarding the affordability and the proposed increase in charges for CP3
4). Renewals costs over a 40-year period being used for calculating access charges	Although outside the remit of the consultation document, there was commentary that advance funding of renewals is not appropriate, particularly for freight operators with short access contracts, and that pre-funding renewals over 40 years is a contributing factor to the increased charges
5). Reallocation of costs to comply with the new regulations	Support for the proposed re-categorisation from direct to common costs
6). Using the 2nd charging exception based on the long-term operational phase of the project rather than the 1st exception that	Operators disagree with using the 2nd exception. The concern is that without a test on what the market can bear, the proposed increases in charges in CP3 are not

[1] Revised for 3 minor typos compared to the version issued on 23 May 2019.

is based on mark-ups that the market can bear	affordable. There are also some concerns about how long-term costs in the 2nd charging exception are defined

3. HS1's response to the comments on the consultation

3.1 Impact on CP2, charging per minute and re-categorisation of direct costs

We received support for several aspects of our approach to charging described in the consultation. Considering this, we propose the following:

- Deal with the impact of the new apportionment during the period of 2 August 2019 to 31 March 2020 through a wash-up following the end of CP2. Our proposed approach is discussed in more detail in Section 4 of this paper.
- For CP3 we will continue to charge passenger operators on the current £ per minute basis and continue to charge freight operators on the current £ per train-km basis.
- For CP3 we will calculate charges using the re-categorisation of direct costs as set out in our consultation document.

3.2 Level of CP3 charges and pre-funding renewals over 40 years

We have listened to the feedback on the increase in charges in CP3, including the approach to pre-funding renewals over 40 years, and understand the significant concern that operators have on affordability. We have considered potential alternative ways to mitigate the CP3 increase in charges, which we assessed against the following criteria:

- Sustainability: manage the risk of under-funding of renewals, and deliver sustainability of the asset;
- User pays: users pay for wear and tear over time;
- Affordability: consider the ability of end users to fund renewals;
- Stability: avoid sharp fluctuations in annuity payments; and
- Efficiency: incentivise efficient delivery of renewals.

Operator feedback to the access charges consultation and our 5YAMS consultation was clear and unambiguous – the costs associated with pre-funding a 40-year renewals programme are not affordable. Considering the strong operator concerns, we have developed two alternative options for calculating the renewals annuity in addition to the base case. In order to implement an alternative approach, we would need to have further discussions with DfT and ORR to ensure the approach remained consistent with our obligations under the Concession Agreement. HS1 welcomes DFT's endorsement of annuity option 2 in relation to stations and hopes this will also be the case for the route periodic review. In order to apply this approach, we expect that we will require clear regulatory statements from ORR and DfT that we are complying with our asset stewardship obligations. The two annuity options are presented below.

Annuity Option 1

Stakeholders commented that there is some ambiguity in the Concession Agreement about pre-funding. Although we need to take a long-term (40-year) view as the asset steward, it is not clear that we need to pre-fund renewals over the same period. It may therefore be an option to pre-fund renewals for the next 20 years (or another timeframe) and roll that approach forward in subsequent control periods. For Option 1 we have therefore modelled an annuity which pre-funds renewals for a 20-year period.

Annuity Option 2

Operators also raised concerns around our treatment of the expected non-direct costs of delivering the CP4 to CP10 renewals portfolio, which include the management fee, contingency costs and delivery integrator costs. An alternative approach would be for us to base the annuity on direct costs only (based on the strong engineering analysis that underpins the workbank) and include non-direct costs over 10 years (CP4 and CP5) in order to build a buffer that would be used to fund non-direct costs. The approach could then be rolled forward in subsequent control periods.

The following table presents HS1's proposed CP3 charges for the base case and for each of the two annuity options.

CP3 Operation, Maintenance and Renewal charges (18/19 prices)

Option	International £ per minute	Domestic £ per minute	Freight £ per train-km
Base case	77.18	50.88	13.10
Annuity option 1	71.93	48.48	11.78
Annuity option 2	67.63	46.83	10.55

3.3 Further possibilities to address affordability concerns

Whilst the annuity options shown in Section 3.2 reduce the level of charges increase during CP3, we appreciate that they still represent an increase compared to current charges. We continue to explore options to improve affordability but, unlike NRIL, we have no public funding so all our costs are recovered from operators. Further possibilities that we have considered to reduce charges include the following:

- ERTMS. There is a possibility that the cost of ERTMS will be treated as a Specified Upgrade by ORR rather than as signalling renewals, and if this is the case its cost would be excluded from operation, maintenance and renewal

(**OMR**) charges. However, this only impacts on affordability in the short term as HS1 will still need to recover these costs unless a decision is taken to fund the activity through the DfT.

- Track and Overhead Line Equipment (OLE) renewals cost breakdown. We have reviewed the breakdown of the renewals forecast and consider there is scope to expand the track and OLE work categories into those activities that are subject to wear and tear from traffic and those that are not. For PR19 we have more detail on future renewal activities, and reviewing the disaggregated forecast for track renewal shows that there are opportunities to reconsider the cost causation associated with wear and tear. The more detailed cost breakdown allows us to separate sleeper renewal from other track renewal activity. Sleeper renewals are driven by design life and other external factors rather than the direct operation of trains and so we can strip this out from directly incurred costs (OMRCA1) and move to common costs (OMRCA2). Similarly, the disaggregated forecast for OLE shows that we can separate out contact wire renewal from overall OLE renewal costs. Contact wire renewal is driven by wear and tear from the pantograph but the rest of OLE renewal is driven by environmental factors or design life. We would therefore allocate contact wire renewal to directly incurred costs (OMRCA1) and the rest of OLE renewal to common costs (OMRCA2).
- Management fee and project delivery partner costs. Our 5YAMS and the access charges shown in Section 3.2 treated both the management fee and the project delivery partner costs as elements added to the overall renewal portfolio and hence meant that some was allocated to directly incurred costs. We believe it is more appropriate to treat these as fixed common costs (OMRCB).
- Weighted Average Cost of Capital (WACC) values for negative escrow balances. Our approach to the annuity includes an allowance for financing negative escrow balances. However, a negative balance is extremely unlikely because the annuity is reset every five years and would expect this to adjust for potential underfunding. We have therefore set the WACC value to zero.

The table below shows the impact that these changes would have on charges.

CP3 Further options to reduce OMR charges (18/19 prices)

Option	International £ per minute	Domestic £ per minute	Freight £ per train-km
Base case plus removal of ERTMS, re-assess track and OLE renewal breakdown and re-allocate management fee and project delivery costs and set WACC to zero	70.38	51.24	9.52
As above and annuity option 1	63.02	46.90	8.19
As above and annuity option 2	61.80	46.18	7.97

3.4 The charging exception

Operators have challenged HS1's entitlement to reclassify avoidable "directly incurred costs" as avoidable "long-term costs" in accordance with the second exception to the Charging Principle (i.e., long-term project costs). Operators have asserted that the elements of this charge may only be levied as a mark-up under the first exception to the Charging Principle (i.e., a mark-up that the market can bear), subject to satisfying the relevant tests associated with that exception. We disagree for the reasons set out below.

Infrastructure managers must set access charges "at the cost that is directly incurred as a result of operating the train service", a rule referred to as the "Charging Principle" and set out in paragraph 1(4) to Schedule 3 of the *Railways (Access, Management and Licensing of Railway Undertakings) Regulations 2016* (the **Regulations**)[2].

The 'cost directly incurred' equates to the short run marginal cost of operating a train service and, on its own, would not enable an infrastructure manager to recover the full costs it incurs in operating, maintaining and renewing the railway, still less make a profit. However, there are two exceptions to the Charging Principle set out in the Regulations.

The first exception allows HS1 to levy mark-ups which do not "exclude the use of infrastructure by market segments which can pay at least the cost that is directly incurred as a result of operating the railway service plus a rate of return which the market can bear" (paragraph 2 to Schedule 3 of the Regulations).

The second exception allows HS1 to levy higher charges "set on the basis of the long-term costs of the project" (paragraph 3 to Schedule 3 of the Regulations). In these circumstances, the "project" is High Speed 1.

HS1 applies the long-term project costs exception when levying the Investment Recovery Charge (the IRC) on passenger services. HS1 has also applied the long-term costs exception – with the ORR's endorsement – in order to levy OMRCB (common costs) and OMRCC (pass-through costs). It is therefore incorrect, as Operators have implied, that the long-term costs exception applies only to the financing or capital costs associated with the construction of High Speed 1.

The Charging Framework set out in Schedule 4 of the HS1 Concession Agreement[3] also expressly provides that HS1 may levy charges in respect of both:

- Long-Term Construction Costs, being the "costs relating to the initial construction of HS1…"; and
- OMR Costs, being "the costs relating to the operation, maintenance and renewal of HS1, including stations, over the life of the HS1 Concession, which costs include long-term costs of the operational phase of the project incurred in

[2] Railways Regulations 2016: http://www.legislation.gov.uk/uksi/2016/645/made

[3] Concession Agreement: https://highspeed1.co.uk/regulatory/key-regulatory-documents/concession-agreement

order to meet the performance standards, asset condition and handback condition of HS1 required by this Agreement" (see paragraph 1.1 of Schedule 4 of the HS1 Concession Agreement).

The HS1 Concession Agreement also acknowledges that charges relating to OMR Costs are levied "on the basis of the long-term project costs pursuant to paragraph 3 of Schedule 3 of the Railway Regulations…" (see paragraph 3.1.3 of Schedule 4 of the HS1 Concession Agreement). Thus there is a logical link through that makes it clear that the ongoing maintenance and renewal costs of HS1 are part of OMR costs, and these OMR costs are included in access charges on the basis of the 2nd charging exception.

4. Next steps

As described earlier in this paper, we propose to deal with the impact of the new cost apportionment approach on charges during the period of 2 August 2019 to 31 March 2020 through a wash-up following the end of CP2. However, we want to keep Operators informed regarding how the new apportionment is going to affect charges this year. We have therefore assessed the impact using our charging model to show the original CP2 rates as determined by ORR, compared with the same rates applying the new apportionment. This is shown in the following table.

CP2 Operation, Maintenance and Renewal charges (13/14 prices)

Option and charge	International £ per minute	Domestic £ per minute	Freight £ per train-km
Original determination			
OMRCA1	7.40	2.58	2.77
OMRCA2	12.94	3.12	2.59
OMRCB	20.07	22.89	0
OMRCC	7.73	7.73	0
Total OMR charge	48.14	36.32	5.36
Revised apportionment			
OMRCA1	7.34	2.56	2.75
OMRCA2	9.22	2.25	2.24
OMRCB	22.46	24.45	0
OMRCC	7.73	7.73	0
Total OMR charge	46.75	36.99	4.99

Note that the figures in the above table are based on the originally determined rates before taking account of any volume reopeners.

The charges consultation documents we issued in May 2019 included proposed drafting changes for access contracts, namely the access terms and the template access agreements for both passenger and freight services. We suggest that the next step is to discuss the proposed drafting with operators and ORR and prepare revised draft contract documents soon after ORR publishes its draft determination on 30 September. Once ORR publishes its final determination (**FD**) in January 2020 the contract documents, along with the determined CP3 charges, can be finalised.

After the FD is published, we will also finalise the CP2 rates shown in the table above. Following the end of CP2 we will calculate the wash-up to reflect the revised rates compared to the amount that was actually billed between 2 August 2019 and 31 March 2020.