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Dear Chris

Request for approval of the recalibration of the variable and station charges and Schedule 4 Access Charge Supplement for CP6, led by Network Rail

The purpose of this letter is to seek ORR's formal approval of the recalibration of the variable and station charges and Schedule 4 Access Charge Supplement (ACS) for CP6, which reflect ORR's 2018 Periodic Review (PR18) Final Determination. This letter supersedes the previous letter we wrote to ORR on 28 August 2018, seeking ORR's approval of the recalibration of the track access charges for CP6, which reflected ORR's 2018 Periodic Review (PR18) Draft Determination. The reason that we have sent this second letter is that it includes additional checks that we have carried out as a result of incorporating ORR's Final Determination into our recalibration work.

Context

Track Access Charge	Purpose of charge
Variable Usage Charge (VUC)	To recover the variable track, civils and signalling 'wear and tear' costs that Network Rail incurs.
EAUC	To recover the variable costs (costs that vary with changes in the level of electrified traffic) of maintaining and renewing electrification assets.
EC4T, including losses mark-ups for metered operators	To recover the costs of traction electricity supplied by Network Rail to train operators to power electrified services.
Managed Stations LTC	To recover Network Rail's efficient maintenance, repair and renewal (MRR) costs for each of the managed stations it owns.
Franchised Stations LTC	To recover Network Rail's efficient maintenance, repair and renewal (MRR) costs for each of the franchised stations it owns.
Schedule 4 ACS	To recover the estimated Schedule 4 payments incurred by Network Rail as a result of an appropriate number of effectively planned possessions.

At the start of PR18, ORR delegated the recalibration of the existing track access charges for CP6¹, set out in the table below, to Network Rail.

¹ As set out in ORR's December 2016 consultation on changes to charges and contractual incentives (page 6), available here: http://orr.gov.uk/_data/assets/pdf_file/0019/23482/charges-and-incentives-consultation-document.pdf

Recalibration of track access charges for CP6

Over the past two years, Network Rail has led the recalibration of the above variable and station charges and Schedule 4 ACS for CP6. We have summarised in the table, below, the process that we have adopted for the recalibration of each of these charges.

Step	Date	Description of step in the process
1	May 2016 – July 2017	Proposed an approach to the recalibration of each of the variable and station charges to the industry.
2	May 2016 - September 2017	Discussed the approach with stakeholders at RDG hosted working groups (for many of these charges there have been multiple discussions with industry on the recalibration).
3	July 2017 - September 2017	Published formal consultations which set out the proposed approach to the recalibration of the variable and station charges. This provided the industry with an opportunity to formally set out their views on our proposals.
4	November 2017 – May 2018	Considered the responses received and updated our proposed approach to the recalibration of the variable and station charges to reflect industry comments, where appropriate.
5	February 2018 – May 2018	Discussed our proposed methodology for calculating the Schedule 4 ACS for CP6 with industry on several occasions seeking their views, at the RDG Schedule 8 recalibration Working Group.
6	May 2018	Discussed our proposed conclusions with stakeholders at an RDG hosted working group and sought views on our emerging proposal.
7	May 2018	Published formal conclusion documents setting out our conclusions to the recalibration of variable and station charges. We highlighted any changes to our proposed methodology following industry feedback.
8	April 2018 – August 2018	Recalibrated the variable and station charges and Schedule 4 ACS, consistent with ORR policy decisions and our conclusion documents.
9	May 2018 - July 2018	Procured consultants to provide external assurance of the recalibration of the variable and station charges and Schedule 4 ACS for CP6, by completing an independent audit of the models (more detail set out in the section, below).
10	November 2018	Updated the variable and station charging and Schedule 4 ACS models to reflect ORR's decisions, as set out in its Final Determination.

In addition to the process, described above, we have undertaken further work for the recalibration of EAUC, Managed Stations LTC and Franchised Stations LTC for CP6, following the publication of our May 2018 conclusions documents. This was because our May 2018 conclusions document made a few additional proposals for these charges. As part of this work, we made minor changes to the methodology for the recalibration of these charges for CP6 to address a few outstanding issues¹ which we discussed in our May 2018 conclusions documents (for example data limitations which impacts the recalibration of franchised stations LTC has resulted in a change in approach). ORR requested further information regarding aspects of the station LTC recalibration, in particular:

- Further information regarding the assurance that Network Rail has undertaken of data from the Operational Property Asset System;
- Further information regarding the model used to estimate long-run annual average renewal estimates for operational property assets; and
- Further information regarding the classification of franchised stations.

We have provided this information to ORR. We have also engaged with industry on several occasions to ensure that they are fully sighted of these changes.

Traction electricity charges

In July 2017, we consulted on:

- Introducing default modelled consumption rates for passenger services, set equal to the highest current consumption rate for electric multiple units and loco-hauled passenger services respectively;
- Updating the regenerative braking discounts applied to modelled consumption rates where modelled units are capable of regenerative braking;
- Removing the Power Factor Correction Values from Appendix 2 of the Traction Electricity Rules; and
- Updating the Network Rail Distribution System Loss Factors contained in Appendix 3 of the Traction Electricity Rules.

In May 2018, we concluded that we continued to support these proposals. We have provided information to ORR regarding the proposed regenerative braking discounts and Network Rail Distribution System Loss Factors for CP6. In our conclusion, we confirmed the value of our proposed default modelled consumption rates. These are shown, below:

	Modelled Consumption Rate (for loco^{**}: kWh per electrified kgtm[*]) (for MU^{***}: kWh per electrified train mile)		
	1 Unit	2 x Unit	3 x Unit
Default rate for passenger electric multiple units	31.346	60.184	89.336
Default rate for passenger loco-hauled services	64.112	N/A	N/A

In July 2018, as part of its 'Implementing PR18: consultation on changes to access contracts', ORR consulted on removing provisions related to tolerance factors from the Traction Electricity Rules and Schedule 7 of track access contracts. In our response, we confirmed our support for this proposal.

Industry involvement in recalibration

We have worked closely and collaboratively with ORR and industry stakeholders to recalibrate the track access charges for CP6. We consider that the industry's involvement in this process has been hugely valuable and we have welcomed the input that we have received from the industry throughout the recalibration of the track access charges for CP6. We have welcomed ORR's attendance at the RDG hosted stakeholder meetings that have taken place during this process.

Audit of the recalibration of the track access charges

It is important that the industry is assured that the recalibration of the variable and station charges is consistent with ORR's policy decisions and our conclusions on the methodology for the recalibration of each of the track access charges for CP6. We also recognise that there is a risk of inadvertent errors occurring in the recalibration of the variable and station charges. Therefore, to mitigate against these risks, we have had the models externally audited by Steer Davies Gleave (SDG)². The purpose of these audits was to:

- Provide assurance to ORR and stakeholders that the spreadsheet models developed by Network Rail reflect the intended methodology for each charge (consistent with ORR's policy decisions and our conclusions on the methodology for the recalibration of each of the track access charges for CP6); and
- Provide assurance to ORR and stakeholders that the models are free from errors.

We worked closely with ORR in the development of the remit for the independent audit, to ensure that SDG's review meets ORR's assurance requirements of the recalibration. The links to the results of the independent audits of each of the variable and station charging models is set out in Annex 1 of this letter.

The audit of the CP6 VUC model was carried out by the Independent Reporter Arup³. Network Rail and ORR worked closely together throughout this review, including jointly developing the scope of work.

However, the Arup audit was carried out before ORR decided to cap VUC rates payable by freight and charter train operators for CP6. Additionally, the independent audit completed by Steer was carried out prior to ORR's Final Determination. Therefore, in addition to the assurance work carried out by Steer and Arup, we have separately completed detailed internal assurance checks to ensure that ORR's decisions, as set out in its Final Determination, have been correctly reflected in the track access charging models. Network Rail's assurance comprised a member of the Regulatory Economics Team (who has not been directly involved in the recalibration of the track access charges for CP6) confirming the following:

- Correct application of ORR's capping/phasing in policy for the VUC,

² On 16th July 2018, Steer Davies Gleave changed its name to Steer.

³ Available here: <https://cdn.networkrail.co.uk/wp-content/uploads/2018/07/Arup-Review-of-Network-Rails-CP6-Variable-Usage-Charge-Assessment-July-2018.pdf>

- Correct application of ORR's Final Determination efficiency assumptions, which applies to multiple track access charges,
- Correct application of ORR's indexation adjustment for CP6, which applies to multiple track access charges,
- Correct application of further changes following industry responses to the draft CP6 price lists, and

Publication of CP6 price lists

On 31 July 2018, Network Rail published draft CP6 price lists, consistent with ORR's Draft Determination⁴, for all variable track access charges. The draft CP6 price lists were also calculated using the methodologies that we have previously concluded on and are consistent with the decisions on variable and station charges in ORR's April 2018 letter on charges and contractual incentives⁵. Alongside the draft CP6 price list, consistent with ORR's Draft Determination, we also published a document setting out the key assumptions that we made in calculating the draft CP6 price lists. We invited the industry to provide comments on factual accuracy to the draft CP6 price lists, consistent with ORR's Draft Determination, by 28 September 2018. We have considered and reflected industry comments, where appropriate, in the CP6 track access charging models. These charging models will be used to create the CP6 price lists, consistent with ORR's Final Determination, which will be published on 20th December 2018.

ORR approval of the recalibration of track access charges

To support ORR's formal approval of Network Rail's work on recalibrating the track access charges for CP6, we have included links to the following relevant documents in Annex 1 to this letter:

- Key presentations to industry on our proposed methodology for the recalibration of each of the track access charges for CP6 (including the subsequent conversations we have had with industry on EAUC, Managed Stations LTC and Franchised Stations LTC);
- Network Rail's methodology note for the recalibration of the Schedule 4 ACS for CP6;
- Network Rail's formal consultation documents which explain our proposed methodology for the recalibration of each of the track access charges and accompanying draft results;
- Network Rail's conclusions documents to each of the consultation documents. These summarise the feedback that we received from the industry on each of our proposals, and set out the changes that we made to the methodology in response to that feedback;
- ORR's decision letter on disputed aspects of Network Rail's Schedule 4 Access Charge Supplement calculation methodology;
- The additional information shared with industry, following the publication of our conclusions documents, in relation to the recalibration of EAUC, Managed Stations LTC and Franchised Stations LTC; and

⁴ Available here: http://orr.gov.uk/_data/assets/pdf_file/0005/27788/pr18-draft-determination-charges-and-incentives.pdf

⁵ Available here: http://orr.gov.uk/_data/assets/pdf_file/0010/27469/orr-variable-usage-charge-update-letter-april-2018.pdf

- The results of the audits of the recalibration models produced by Steer and Arup.

In addition, we have separately shared with ORR a summary of detailed internal assurance checks that we carried out to ensure that ORR's decisions, as set out in its Final Determination, have been correctly reflected in the track access charging models and the CP6 price list, consistent with ORR's Final Determination.

Next Steps

By way of this letter, we ask ORR to approve Network Rail's work on recalibrating the variable and station charges and Schedule 4 ACS for CP6, consistent with the methodology that we have concluded on and ORR's policy decisions, as set out in its Final Determination. We are also seeking ORR's approval of the following specific changes to EC4T:

- the removal of the power factor correction factor and the meter tolerance factor from the Traction Electricity Rules;
- the recalibrated Distribution System Loss Factors (DSLFs) used to charge metered train operators for their usage of traction electricity;
- the recalibrated regenerative braking discounts applied to modelled consumption rates where the modelled train operates a regenerative braking system; and
- introduction of default modelled consumption rates for electrified passenger services.

Subject to ORR's approval of the recalibration of the variable and station charges and Schedule 4 ACS for CP6 (as described in this letter), we will share with train operators and Network Rail Routes the draft CP6 price lists, consistent with ORR's Final Determination by no later than 23rd November 2018. Train operators and Network Rail Routes will then be asked to review the draft CP6 price lists, consistent with ORR's Final Determination, and raise any concerns with Network Rail by 30th November 2018. We will review and reflect, where appropriate, all issues raised by train operators and Network Rail Routes in the final CP6 price lists. Subject to ORR approval, we will publish the final CP6 price lists, consistent with ORR's Final Determination, on 20th December 2018.

Should you have any questions about this letter or require any further information to approve Network Rail's work on recalibrating the variable and station charges and Schedule 4 ACS for CP6, please do not hesitate to contact me.

Yours sincerely,

Peter Swatridge

Annex 1: Summary of key documents shared with industry stakeholders during the recalibration of the track access charges for CP6

Track Access Charges	Initial discussion at RDG Working Group	Network Rail consultation on methodology	Conclusions to Network Rail's consultation on methodology	Audit of recalibration
Variable track access charges and station charges	<p><u>Variable charges</u></p> <ul style="list-style-type: none"> NR consultation on variable and station charges slides available here (18 September 2017) <p><u>Electricity charges</u></p> <ul style="list-style-type: none"> NR consultation on EC4T and EAUC slides available here (20 September 2017) <p><u>Station charges</u></p> <ul style="list-style-type: none"> Update on CP6 station charges slides available here (27 September 2017) 	<ul style="list-style-type: none"> Consultation available here Appendices to consultation available here Industry responses (set out under heading: consultation on variable and station charges in CP6) available here 	<ul style="list-style-type: none"> Conclusions document available here EC4T CP6 DSLFs Methodology and Assumptions report available here VUC vehicle characteristics spreadsheet (set out under heading: Consultation on variable and station charges in CP6) available here June 2018 updated on CP6 Station long term charge calculation available here 	<ul style="list-style-type: none"> SDG Report available here Arup review of VUC available here Network Rail assurance of freight and charter VUC caps Network Rail assurance of update to the track access charging models to reflect ORR's Final Determination.
Further update on electricity and station charges	<ul style="list-style-type: none"> Station charges slides available here (18 June 2018) Email on methodology for Station Long Term Charge (25 June 2018) Update on CP6 EC4T and EAUC (18 June 2018) Email on methodology for EAUC (31 July 2018) 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> SDG report available here Network Rail assurance of update to the track access charging models to reflect ORR's Final Determination.
Schedule 4 ACS	<ul style="list-style-type: none"> Emails on methodology for Schedule 4 ACS to the RDG Schedule 8 recalibration Working Group (10th February 2018 and 6th March 2018) Email on methodology and areas of industry dispute for Schedule 4 ACS to the RDG Schedule 8 recalibration Working Group (2nd April 2018) 	<p>N/A</p>	<ul style="list-style-type: none"> ORR decision letter on disputed aspects of Network Rail's Schedule 4 ACS calculation methodology available here 	<ul style="list-style-type: none"> SDG report available here Network Rail assurance of update to the track access charging models to reflect ORR's Final Determination.