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Ben Worley,
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1st February 2013

Dear Ben,

Consultation on the allocation of the Variable Usage Charge

This letter sets out the views of TfL on the questions raised in Network Rail's consultation on the Variable Usage Charge. Where no response to a question has been provided in this letter TfL has no comment to make on the content of the question. TfL is content for the contents of this response to be published and shared with third parties.

Question 1: What is your view on the surface damage percentages estimated for each activity in Appendix 2 and our proposal that 78% and 22% of track variable usage costs should be attributed to vertical and horizontal rail forces respectively?

TfL accepts the results of the analysis.

Question 3: Do you consider that for CP5 we should use the revised 'hybrid' track damage formula derived by Serco, incorporating the existing Ct factor in its current format, to apportion vertical track variable usage costs between vehicle classes? Do you consider that the existing equivalent track damage formula should be retained for CP5, alongside a commitment from the industry to, as part of the wider charges review in early CP5, to better understand the Serco analysis for potential implementation in CP6?

TfL considers that the revised “hybrid” track damage formula derived by Serco should be used to apportion vertical track variable usage costs between vehicle classes because it delivers the best fit to the predicted values. The approach used must be able to assess fully the impact of vehicles with one motor bogie and one trailer bogie on the track, as well as vehicles with one motored axle and one trailer axle. The rolling stock used on the Overground and Crossrail may employ these configurations in future. This comment applies to all the elements used to calculate the Variable Usage Charge.

Question 4: Do you have any comments on the analysis in Appendix 3? What is your view on our proposal to update the existing methodology such that it incorporates a new damage calculation methodology (comprised of separate components for grinding, RCF and wear), a coefficient of friction on the flange of 0.1 (to reflect better lubrication), sample track alignment variations and values of T for the trailing wheelset of a bogie?

TfL supports Network Rail’s proposal as this will encourage the use of rolling stock that minimises the damage caused to the track by the operation of trains.

Question 5: Would you like to provide any tare or laden vehicle dynamics models in order to facilitate revising an existing or creating a new curving class for CP5?

TfL is currently evaluating the rolling stock bids for the new train that will provide services on the Crossrail network. TfL would be content to share the dynamic model for the winning train once the bidding process is complete. It should be noted that the Crossrail train is being procured against a track-friendliness target expressed as a T-Gamma curve which has been agreed with Network Rail as part of the Train Infrastructure Interface Specification.

Question 6: What is your view on our proposal to retain the existing equivalent structures damage equation for apportioning metallic underbridge variable usage costs but using a modified axle load exponent of 4 rather than 4.83?

TfL supports the proposal.

Question 7: What is your view on our proposal to use the revised equivalent track damage equation for apportioning embankments, culverts and brick and masonry underbridge variable usage costs?

TfL supports the proposal.

Question 8: What is your view on our proposal to apportion the 50% of signalling variable usage costs estimated to be load related using the equivalent track damage formula and the 50% of signalling variable usage costs estimated not be load related based on vehicle miles?

TfL supports the proposal.

Question 10: What is your view on our proposal that for existing vehicles, not subject to vehicle modification, VUC rates should 'locked down' for CP5?

TfL agrees that this proposal is sensible as it gives certainty concerning the VUC rates in use during CP5. However, there should be a mechanism permitting any individual rate to be recalculated in the event that a particular rate can be demonstrated to have been calculated incorrectly.

Question 11: What is your view on our revised freight operating speed estimates and the methodology used to derive them? Would you like to provide any further information in relation to freight operating speeds?

The proposal is acceptable provided that the exclusion of stopping time does not make the predicted amount of track and asset damage caused by a freight train during its operation less accurate. It is important that the stresses exerted during acceleration and deceleration are accounted for in the VUC calculation process, particularly so for freight trains that can be very heavy.

Question 12: What is your view on our proposal that the default approach should be that passenger operating speeds are estimated using the existing CP4 formula unless evidence, based on the timetable, that an alternative operating speed is more appropriate is provided? Would you like to provide any evidence, based on the timetable, that an alternative operating speed is more appropriate?

TfL considers that evidence from the timetable should be used to validate the existing CP4 formula.

Question 13: What is your view on our proposal to retain a default rate for freight vehicles and introduce a default rate for passenger vehicles in CP5?

TfL agrees to the introduction of a default rate for passenger vehicles during CP5, provided that Network Rail are prepared to commit to reasonable timescales for processing the data required to create a new VUC rate for new or modified vehicles. The approach proposed will encourage operators to submit the information required to allow a VUC rate to be calculated in a timely fashion.

Question 14: What is your view on our proposed default rate 'bands' and that the respective rate for each of these bands should be the highest relevant vehicle rate on the CP5 price list?

TfL agrees to the proposed default rate bands, provided that an adjustment is made to compensate for any difference between the default and bespoke rates once the bespoke rate is calculated.

Question 15: What is your view on our proposal to adjust VUC rates during the control period in light of vehicle modifications?

TfL agrees that VUC rates should be adjusted to reflect modifications undertaken during CP5. This will give operators an incentive to consider modifications to their fleet to lessen the wear their trains cause to the infrastructure. It is important that such modifications are consulted on and approved by the ORR to ensure that they do not result in a material disadvantage to other operators.

Yours sincerely,

Alan Smart,
Principal Planner – Forecasting,
Rail Planning team.