Statement of methodology – Application of freight and charter VUC caps

5 September 2018

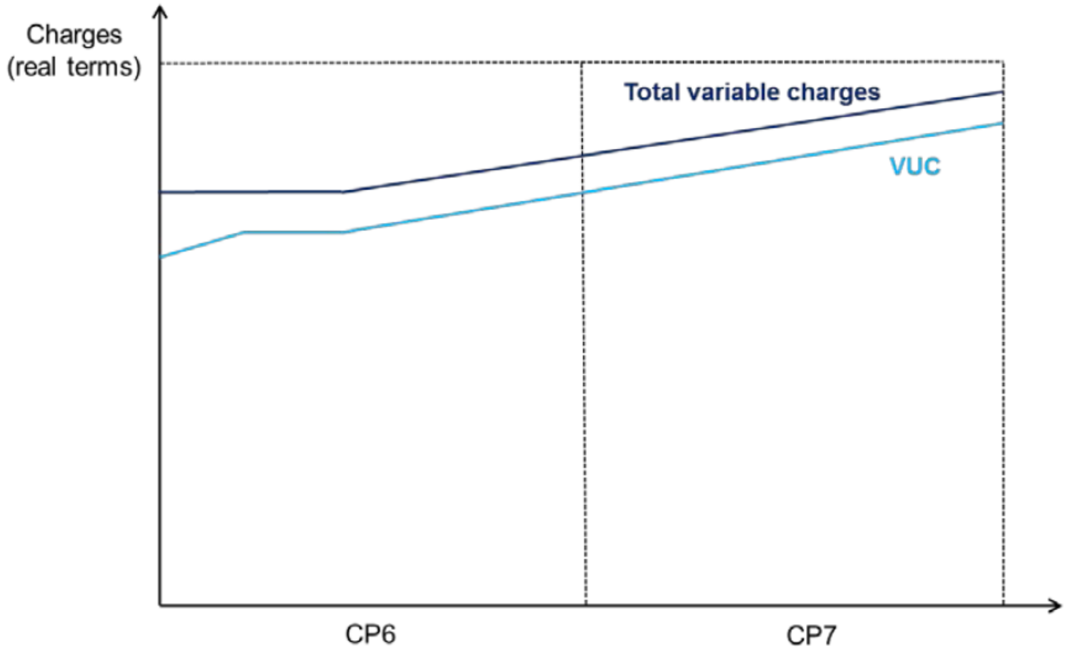
Purpose

The purpose of this note is to set out, in detail, Network Rail's methodology for implementing ORR's decision to cap the increase in Variable Usage Charges (VUCs) for freight and charter operators in CP6. Network Rail's spreadsheet model, which applies ORR's capping policy to freight and charter VUC rates, has been assured internally to confirm that it reflects the methodology set out in this note.

This methodology has been agreed with ORR to confirm that it reflects the decision set out in its Draft Determination. If in its Final Determination ORR refines its proposal for capping VUCs for freight and charter operators in CP6, this will necessitate a change to Network Rail's capping methodology.

ORR's Draft Determination

In its Draft Determination, ORR illustrated its approach to capping freight and charter VUCs in CP6 using the following diagram:



ORR described its approach set out in the chart, above, as follows:

- The increase in costs will be reflected in the VUC for freight and charter operators in CP6 based on a transition to cost-reflectivity over a 10-year period (i.e. over CP6 and CP7).

- In years 1 and 2 of CP6, total variable charges (including forecast VUC, EAUC and EC4T, the capacity charge and the coal spillage charge) for freight and charter operators will be held constant in real terms (i.e. equal to the final year of CP5). This will necessitate an increase in the VUC charge in year 1 to offset the fall in total variable charges due to the removal of the capacity charge and the coal spillage charge in CP6.

- In the following three years of CP6, the VUC will be based on a straight-line transition to full cost reflectivity by the end of CP7 (i.e. reaching the current estimates of the uncapped charges level).

- North Yorkshire Moors Railway's services and West Coast Railway Company's Jacobite services will also be subject to this capped VUC transition profile.

Detailed Network Rail methodology

To produce a draft CP6 VUC price list, consistent with ORR's Draft Determination, Network Rail must apply ORR's policy to calculate the individual VUC rates. The Network Rail methodology is set out, in detail, below.

Calculating 2019/20 and 2020/21 rates

The ORR capping policy requires that the 2019/20 & 2020/21 rates are equal. The steps, below, set out the methodology for calculating individual VUC rates for 2019/20 and 2020/21:

1. Take the 2018/19 rate from the CP5 Track Usage Price List (including supplements to the price list).

2. Uplift each 2018/19 rate by the same percentage value (c. 8% for freight) so that our total income from all variable charges, for the relevant operator group, remains constant in real terms between CP5 and CP6.

3. Step 2, above, is carried our separately for each of the following operator groups:
    a. Freight;
    b. Charter;
    c. West Coast Railway Jacobite Service (Jacobite); and
    d. North Yorkshire Moor's Railway (NYMR).

4. Step 2, above, assumes constant forecast 2018/19 freight traffic levels. However, for the other operator groups, outturn CP5 traffic levels are assumed (2016/17 for charter and NYMR and 2017/18 for Jacobite). The reason for this is that we do not have a robust traffic forecast for these minor operators due to the low mileages that they operate. When we publish final CP6 price lists, consistent with ORR's Final Determination, we will update the charter and NYMR outturn traffic data to also reflect 2017/18 levels (the latest year available).

5. Total variable charges are assumed to comprise the following for each operator group:
    a. Freight

        i. Variable Usage Charge, Electric Current for Traction, Electrification Asset Usage Charge, Capacity Charge, Coal Spillage Charge.
    b. Charter
        i. Variable Usage Charge, Electric Current for Traction, Electrification Asset Usage Charge, Capacity Charge.
    c. Jacobite:
        i. Variable Usage Charge and Capacity Charge (Jacobite do not operate electric services).
    d. NYMR
        i. Variable Usage Charge and Capacity Charge (NYMR do not operate electric services).

Calculating 2021/22 to 2023/24 rates

The steps, below, set out the methodology for calculating individual VUC rates for 2021/22 to 2023/24:

6. For each rate calculate the difference between the 2019/20 & 2020/21 rates from step 2, above, and the uncapped CP6 rate.

To implement the subsequent straight-line transition to full cost recovery over the following 8 years to the end of CP7, each year will recover a further 12.5% (100%/8) of the difference between the 2019/20 & 2020/21 rates and the uncapped CP6 rate.

7. To calculate the 2021/22 rate, take 12.5% of the value calculated in step 6, above, and add this amount to the 2020/21 rate.

8. To calculate the 2022/23 rate, take 25% of the value calculated in step 6, above, and add this amount to the 2020/21 rate.

9. To calculate the 2023/24 rate, take 37.5% of the value calculated in step 6, above, and add this amount to the 2020/21 rate.

Overarching assumptions

The following overarching assumptions apply to steps 1-9 set out, above:

- No individual VUC rate should exceed its uncapped CP6 level (this would result in charges exceeding the cost ‘directly incurred’ as set out in relevant EU legislation). Where this would have been the case, individual VUC rates are constrained to their uncapped level.

- All analysis is in 2017/18 prices.

Worked example of detailed Network Rail methodology

Below, we provide a worked example of the capping methodology described, above. This example relates to the rates in the <u>draft</u> CP6 price list (published on 31 July 2018) for a freight Class 66 locomotive carrying intermodal goods. However, the methodology is applicable to all vehicles/rates.

1. Take the 2018/19 rate of £2.9521/kgtm.

2. Take the uncapped CP6 rate of £4.2386/kgtm.

3. Calculate the 2019/20 and 2020/21 rate of £3.1846/kgtm by uplifting the 2018/19 rate of £2.9521/kgtm by c. 8% to recover income no longer payable through other variable charges.

4. Calculate the difference between 2020/21 rate and uncapped CP6 rate, which is £1.054/kgtm (£4.2386/kgtm - £3.1846/kgtm).

5. Calculate the 2021/22 rate of £3.3164/kgtm by taking 12.5% of the difference between 2020/21 rate and uncapped CP6 rate and adding this to the 2020/21 rate (£3.1846/kgtm + (12.5% * £1.054/kgtm))

6. Calculate the 2022/23 rate of £3.4481/kgtm kgtm by taking 25% of the difference between 2020/21 rate and uncapped CP6 rate and adding this to the 2020/21 rate (£3.1846/kgtm + (25% * £1.054/kgtm))

7. Calculate the 2023/24 rate of £3.5799/kgtm by taking 37.5% of the difference between 2020/21 rate and uncapped CP6 rate and adding this to the 2020/21 rate (£3.1846/kgtm + (37.5% * £1.054/kgtm))