Explanatory note on charges & incentives impacts model for PR18

Version 2: June 2018

OFFICE OF RAIL AND ROAD

Summary

It is important that we consider the financial impacts on operators of the decisions that we make as part of the 2018 Periodic Review (PR18). To help us do so we have, in consultation with industry representatives, developed a financial model that estimates the overall financial impacts on train operators of PR18-related changes to the levels of contractual charges and incentives.

In July 2017, we published a preliminary version of the model [link here] and a preliminary version of this note [link here] and invited comments on our proposed approach. Since then we have continued to refine the model as new information has become available. The model is now completed and has been used to inform our decisions on the levels of charges (especially the Variable Usage Charge and the Infrastructure Cost Charge) and incentives for PR18. This note describes the scope and features of the model and its limitations.

This model is intended to provide a high-level estimate of the impacts of our decisions on different types of operators, rather than seeking to model the impacts on each operator. It is one element of the overall evidence base that we have used to inform our policy-making. Inevitably, given the information available and the need for tractability, the modelling has involved some simplifications and assumptions. This note sets out those simplifications and assumptions, and the rationale for them, in more detail.

This note has been prepared so that stakeholders understand the nature of the analysis that we have undertaken, so that they can better understand what, if any, additional evidence they may wish to submit in response to our consultation on the PR18 draft determination.

Background

1. As part of PR18, we have reviewed Network Rail's access charges and incentives. In December 2016, we published a consultation setting out some of our proposals for access charges and incentives for Control Period 6 (CP6).

2. Having considered the responses to that consultation, in June 2017, we set out conclusions on a range of charges and contractual incentives including infrastructure cost charges, variable charges, station charges and Schedules 4 and 8. Among other decisions, we also said that the Capacity Charge will be removed in CP6. This is likely to have a significant impact on the overall level of charges faced by operators.

3. We have also published a number of other documents setting out some of our policy and implementation decisions. These include our September 2017 consultation on some areas of the approach to infrastructure cost charging (which discussed the market segmentation for freight services, a potential approach for defining market segments for passenger services, and the design of infrastructure cost charges for passenger services). They also include our April 2018 letter to stakeholders, which provided a progress update on our charges work with particular focus on the Variable Usage Charge (VUC) and the Infrastructure Cost Charge (ICC).

4. In our April 2018 letter, we indicated that our June 2018 draft determination will include a proposal to cap / phase-in the Variable Usage Charge (VUC) for freight and charter services over a time-limited period. We also said that we are considering whether such a proposal is appropriate for open access passenger operators.

5. Our letter also confirmed that our draft determination will set out our final proposals on ICC, for consultation. These will include i) cost allocation to different services in CP6, ii) market segments that will be subject to ICC in CP6 (in light of the market-can-bear test's recommendations), iii) the structure/design of that charge, iv) the levels of the charge for each market segment.

6. All these decisions, and others that we will be outlining in our draft determination, will together have a significant bearing on the overall financial impact of charges and incentives on operators.

7. While we take these decisions, we pay due regard to our statutory duties. These duties include promoting efficiency and economy on the part of persons providing railway services, having regard to protecting the interests of users of railway services, enabling persons providing railway services to plan the future of their businesses with a reasonable degree of assurance and having regard to the funds available to the Secretary of State.

8. Therefore, one part of our considerations relates to understanding the financial impacts of our proposals on different types of operators. We have done this in a number of ways, not least through close engagement with operators.

Financial impacts model

9. To support this work, we developed a financial model that helps to estimate some of the financial impacts of a series of charges decisions. This model is inevitably a highly simplified representation of the impacts and, given the information available and the need for tractability, we had to make a number of simplifications and assumptions for it to work. However, it provides useful evidence of the broad impacts that might result from different policy decisions. Reflecting this, the model is one of the tools we have used to inform our decision-making. It is, of course, just one element of our overall evidence base.

10. We developed this model with the support of Europe Economics. The model (in its form and scope) was shared and discussed with industry representatives (including from RDG, Network Rail, FOCs and TOCs), whose inputs greatly contributed to its refinement. We subjected the model to internal and external quality assurance.

11. Many of the data inputs used in the model are confidential, and therefore cannot be made publicly available. For this reason, the version of the model we made available in July 2017 used only 'dummy' traffic data and removed references to individual operators. This helped us to make the structure of the model available in a timely way, without sharing confidential information. However, this also, unfortunately, means that stakeholders cannot use the model to estimate the impact of various decisions on operators.

Purpose of this updated note

12. This updated note describes the scope, limitations and features of our work to estimate the impacts on operators of PR18 decisions on charges and incentives. It reflects the changes that we have made since July 2017.

Scope of the model

13. The model currently covers the following charges and incentives from CP5: fixed track access charges, the freight specific charge, the freight only line charge, the Variable Usage Charge (VUC), the capacity charge and the coal spillage charge. As part of the modelling exercise, but outside of the main model, we have also modelled the Electrification Asset Usage Charge (EAUC), station charges, and Schedule 8.

14. The model excludes the Access Charge Supplement (ACS) paid by franchised passenger operators for Schedule 4 payments because, on expectation, any changes to the ACS should be offset by compensating changes in Schedule 4 payments. Currently, open access and freight operators do not pay a Schedule 4 Access Charge Supplement.

15. We also excluded the Electric Current for Traction charge (EC4T) as we are not making any policy change that could affect operators' payments in CP6 and EC4T payments are anyway mainly determined by market prices. Similarly, we do not estimate the impacts of changes in the price of diesel.

16. The model reports changes at sector level i.e. franchised passenger, open access and freight, although it does also contain functionality that allows some analysis at individual operator level.

17. The model's baseline is 2018/2019 i.e. the final year of CP5. It calculates the charges (and incentives) payments in CP6 as compared to payments in the final year of CP5 and then estimates the change resulting from our policy proposals (and from changes in traffic levels).

18. Traffic data used in the model is based on actual traffic up to financial year 2016/17. Then we use Network Rail's SBP forecast for the remaining years of CP5 and for the whole of CP6.

Limitations of the model

19. In calculating the impacts on operators of PR18 decisions on charges and incentives, we have used the best current estimates of what the levels of the relevant charges will be for CP6. There is bound to be some discrepancy between the estimated parameters and the final ones, but our approach to estimation has sought to minimise the discrepancy, as far as reasonably possible. For some parameters, this has meant using the draft recalibration results (e.g. Schedule 8 payment rates). For other parameters where the results of draft recalibrations are not available (e.g. Schedule 8 benchmarks), we have developed our own estimates based on historical levels and any projected changes.

20. We have also, in some areas, simplified the calculations themselves to make the model more tractable. These simplifications should have neither a significant nor a systematic impact on any of the results.

21. We have sought to develop the best estimate of impacts with the information and resources we have available. However, we are aware it may not be possible to consider all of the impacts on individual companies in this way, and we will continue to work closely with stakeholders to understand any additional impacts that should be factored into our decision-making.

Features of the model

22. For each type of operator (franchised passenger, freight, open access passenger and charter), the model compares CP5 and CP6 by calculating the following:

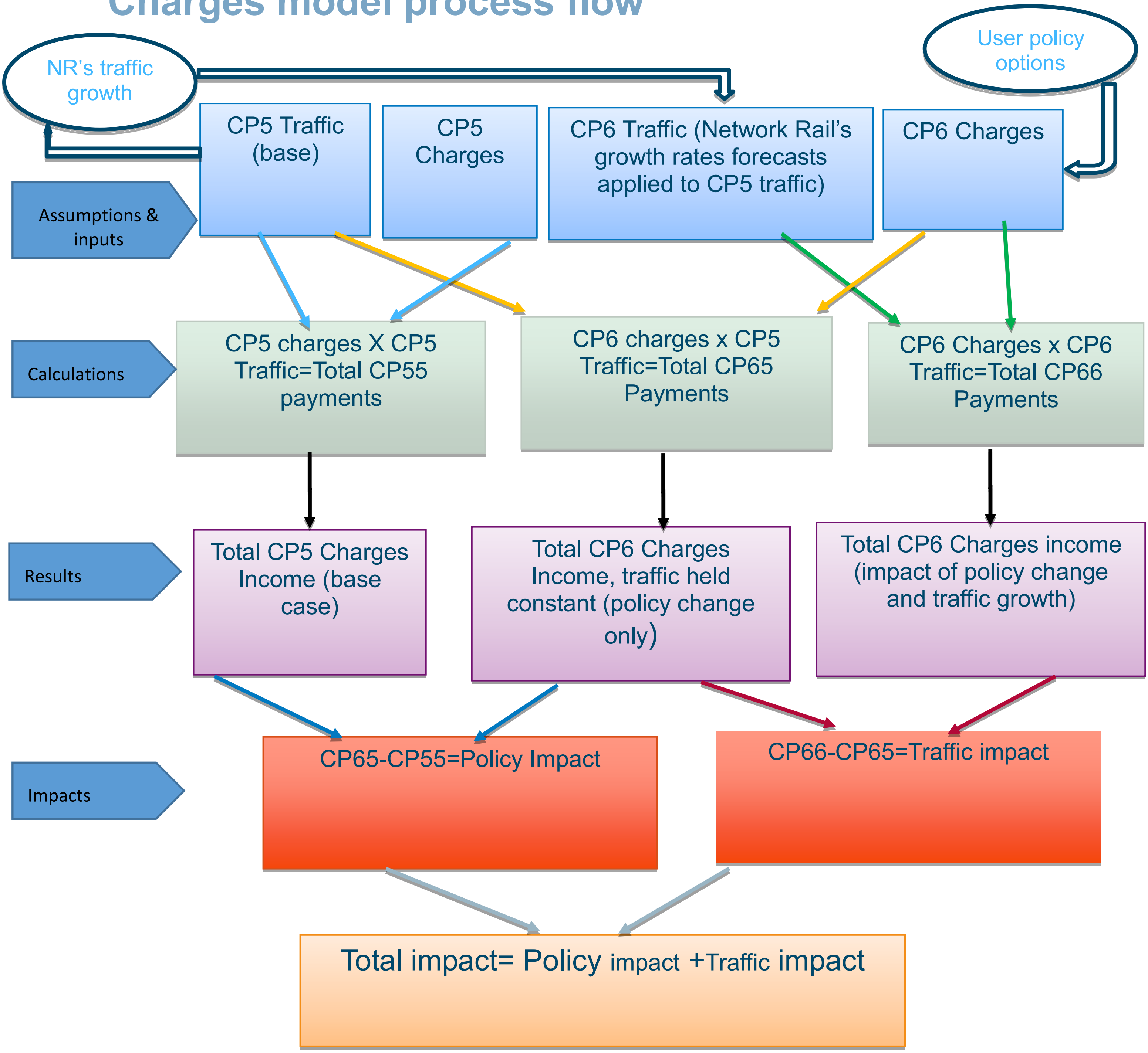
    i) The estimated financial impact of policy changes: this holds CP5 traffic and Network Rail cost levels constant and evaluates the impact of policy changes in charges (and incentives) only;

    ii) The estimated financial impact of traffic changes: this holds the CP5 charges (and incentives) policy and Network Rail cost levels constant and evaluates the financial impact of changes in traffic forecasts only; and

    iii) The estimated total financial impact, which is the sum of policy and traffic financial impacts.

23. The figure below summarises the model's calculation process flows.

Charges model process flow



Next steps

24. We used this model to inform a range of decisions that we have set out in our PR18 draft determination. Following stakeholders' feedback to our consultation, we will continue to develop this model to inform our final decisions that we will publish in our PR18 final determination in October 2018.