



PR23 draft determination:

Policy position – access charges

15 June 2023



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About this document

This policy document sets out our draft decisions in respect of the regulated access charges that train operators will pay to use the national rail network in control period 7 (CP7, which will run from 1 April 2024 to 31 March 2029). It covers charges paid by all operators (passenger, open access, freight and charter) for the use of both track and stations owned and operated by Network Rail, the current infrastructure manager. It is one of four policy documents of our draft determination for the 2023 periodic review (PR23).

PR23 will determine what the infrastructure manager for the national rail network, Network Rail, is expected to deliver with respect to its operation, support, maintenance and renewal (OSMR) of the network during CP7, and how the available funding should be best used to support this.

This strongly influences:

- the service that passengers and freight customers receive and, together with taxpayers, ultimately pay for; and
- the charges that Network Rail’s passenger, freight and charter train operator customers pay to access its track and stations during CP7.

Our draft determination sets out:

- our review of Network Rail’s strategic business plan (SBP); and
- decisions on its proposed outcome delivery and its planned expenditure to secure the condition and reliability of the network;
- changes to access charges and the incentives framework; and
- relevant policies on managing change and the financial framework.

In addition to **this document**, we have also published as part of our draft determination:

Document type	Details
Executive summaries of our determination	Our key proposals from our draft determination for: <ul style="list-style-type: none">• England & Wales• Scotland

Overviews of our determinations	What Network Rail will need to deliver and how funding will be allocated in: <ul style="list-style-type: none">• England & Wales• Scotland
Consolidated decisions	A summary of our draft decisions across Great Britain
Introduction	An overview of PR23 and background to our draft determination
Settlement documents	Detailed draft decisions for each of: <ul style="list-style-type: none">• Scotland• Eastern region• North West & Central region• Southern region• Wales & Western region• System Operator
Supporting documents	Technical assessments of: <ul style="list-style-type: none">• Health and safety• Outcomes• Sustainable and efficient costs• National Functions• Other income
Policy positions	How we intend to regulate Network Rail during CP7 in relation to: <ul style="list-style-type: none">• Financial framework• <u>Access charges</u>• Schedules 4 & 8 incentives regimes• Managing change

Responding to the consultation on our draft determination

We are consulting on our draft determination and welcome comments from stakeholders on any of our documents which form the draft determination on or before 31 August 2023.

Responses should be submitted in electronic form to our inbox: PR23@ORR.gov.uk. We request stakeholders provide their response using [this proforma](#).

We intend to publish all responses on our website alongside our final determination in October 2023. Annex A to our proforma document sets out how we will treat any information provided to us, including that which is marked confidential.

Next steps

As set out above, we welcome comments on this document and/or the other documents which form part of our draft determination, by 31 August 2023. In advance of then:

- a) In July, we will publish a consultation on drafting changes to Schedules 4, 7 and 8 of model access contracts, to give effect to our policy decisions set out in this document¹. We invite responses to this consultation also by 31 August 2023.
- b) Network Rail will publish a set of draft price lists for track and station charges, reflecting the draft decisions set out in this document. These will be published by the end of July 2023².

We will then confirm our decisions on all charging issues in our final determination, which will be published by 31 October 2023.

We will review and approve Network Rail's charges during autumn 2023. This stage of the review will confirm that Network Rail has correctly implemented the agreed recalibration methodologies, as well as our decisions on the charging framework, in deriving price lists. It will also seek to ensure that the calculations are accurate, though the focus will be on identifying any major issues and ensuring Network Rail's own quality assurance processes have been followed.

¹ This will also include drafting changes to the Traction Electricity Rules.

² This is with the exception of the draft Schedule of Fixed Charges (setting out Fixed Track Access Charges for CP7), which we understand may be published shortly after this point.

Following this, Network Rail will publish final price lists in December 2023, consistent with the decisions made as part of our final determination. These will be published alongside Review Notices setting out the full set of detailed changes that will be applied to affected contracts.

Table 1.1 below summarises the key milestones for the rest of the PR23 charges review.

Table 1.1 Key remaining milestones for PR23 charges review

Milestone	Information	Date
Implementing PR23: consultation on drafting changes to access contracts	ORR consultation on drafting changes to Schedules 4, 7 and 8 of model access contracts.	July 2023
Draft CP7 price lists	Publication of draft price lists by Network Rail, reflecting ORR draft determination.	By end July 2023
Draft determination deadline for responses	Deadline for responses to draft determination and consultation on changes to model access contracts.	31 August 2023
ORR final determination	ORR's final view on structure and level of all charges.	By end October 2023
Review notices and final CP7 price lists	Publication of review notices by ORR, confirming changes to track access contracts for CP7. Publication of final price lists by Network Rail, consistent with final determination.	December 2023

1. Introduction

- 1.1 As part of PR23, we have been reviewing Network Rail's access charging framework and specific charging rules. This will determine what train operators will pay to use the national rail network during CP7.
- 1.2 In October 2022 we published our [conclusions on the charging framework for CP7](#). We confirmed that we will maintain the overarching framework in its current form, while making some incremental changes to certain charges to ensure that this framework remains effective once Great British Railways (GBR) is in place. We also noted that we would keep some decisions under review until our draft determination, as it was more appropriate to reach a final view closer to the start of the next control period.
- 1.3 Since October, Network Rail has been carrying out the recalibration of charges for CP7. It recently published its [conclusions](#) on recalibration issues, which confirm the methodologies that it has followed to carry out the recalibration exercise.
- 1.4 The rest of this document:
 - (a) Presents our draft decisions on the aspects of the **CP7 charging framework** that we have been keeping under review since last October. This includes our policy on capping / phasing-in of Variable Usage Charge (VUC) rates for freight and charter operators; and on the charging approaches for traction electricity (EC4T).
 - (b) Sets out our view on **Network Rail's recalibration exercise**. The draft decisions set out in this document are based on the latest information that Network Rail has provided to us on its recalibration of variable and station charge rates. This indicates that these rates are set to increase, compared to CP6. We have been engaging closely with Network Rail on the reasons for this, and will continue to work with Network Rail during the rest of PR23 as its recalibration exercise is refined. We will also ensure it reflects our provisional decisions set out in the rest of this document, e.g. in respect of Network Rail's planned spending on maintenance and renewals during CP7.

Our formal approval of all charges will be provided later this autumn, once Network Rail has finalised its recalibration exercise and we are satisfied that it reflects all the decisions made in our final determination.

- (c) Presents our draft decisions on the level of **infrastructure cost charges (ICCs)** paid by some freight and open access services. The level of these charges takes account of the ability of relevant market segments to bear an ICC, which is assessed by ORR.
- 1.5 Our full set of draft decisions on regulated access charges is set out in Section 5 of our [PR23 draft determination: consolidated list of decisions, proposals and actions - England & Wales and Scotland document](#). This includes some decisions on the charging framework that we confirmed in our October 2022 conclusions document. We have not discussed those matters in detail in the rest of this document.
- 1.6 We have taken our decisions on the CP7 charging framework based on the existing legal requirements governing access charging, while also ensuring the framework can be applied by GBR when it takes on responsibility for the national rail network. As such, this framework will apply for the duration of CP7. While we refer in this document primarily to Network Rail, our decisions are also relevant for GBR once it is established and begins carrying out the charging functions that are currently undertaken by Network Rail. We expect this transition to occur during CP7.

Charges income and Network Rail's strategic business plan

- 1.7 Network Rail's charges income assumptions in its CP7 strategic business plan (SBP) are primarily based on 2023-24 rates, held constant in real terms for CP7. As noted above, and explained in this document, the recalibration of variable and station charges has generally resulted in an increase in rates (in real terms) compared to the final year of CP6. This means that its income assumptions will need to be revised.
- 1.8 However, we do not expect this to significantly affect Network Rail's overall forecast income from access charges. This is because we set the fixed track access charge (FTAC) – paid by publicly-contracted passenger operators – to be equal to the difference between Network Rail's net revenue requirement and its income from other sources (including network grant and income from other access charges).
- 1.9 For the draft determination, we have presented Network Rail's income assumptions consistent with its SBP. However, as part of our final determination, we will set out revised income assumptions – including for FTAC – which take account of the recalibrated charges rates for CP7.

2. Infrastructure cost charges

Summary

Network Rail has received around £1.3 billion in annual income from infrastructure cost charges (ICCs) in CP6, the vast majority of which (more than 99%) is from the fixed track access charge (FTAC).

For CP7, all passenger operators on concession-style agreements will continue to pay the FTAC. This will be set as a lump-sum annual charge, based on Network Rail's fixed cost allocation methodology, but net of any network grant payments.

For open access operators, we consider that it would be appropriate to broadly maintain the ICC that is levied on interurban services in real terms. This is equivalent to an ICC of £5 per train mile, in 2023-24 prices. Separately, we are undertaking further work in relation to the relevance of a mark-up for open access services to major airports, and will provide an update on this by the end of July.

For freight operators, we are confirming that we will continue to permit Network Rail to levy an ICC for services transporting ESI coal, as well as iron ore, spent nuclear fuel, and ESI biomass. Draft rates for each of these ICCs, in £ per thousand gross tonne miles (kgtm), are presented in this chapter.

Fixed Track Access Charge (FTAC)

- 2.1 We confirmed in our October 2022 conclusions document that we will retain the FTAC in CP7 for all passenger operators on concession-style agreements. We said that the FTAC paid by each operator – which is net of any network grant payments – will continue to be based on Network Rail's existing fixed cost allocation methodology developed for CP6, subject to some minor changes that Network Rail will consider as part of its recalibration exercise.
- 2.2 Network Rail has since consulted on a simplification to the fixed cost allocation methodology³. Network Rail has explained in its recalibration conclusions document the rationale for and benefits of this simplification, and that this has not necessarily resulted in a less accurate allocation of fixed costs to different service groups. It has

³ This relates to the geographic allocation of costs to sections of the network. See appendix 1 of Network Rail's [conclusions document](#) for further details.

also amended how this simplification would be implemented, following industry feedback on its consultation proposal.

- 2.3 We are content with this change. We are therefore confirming that Network Rail's updated fixed cost allocation methodology will be used as the basis for each operator's FTAC in CP7. Network Rail is currently in the process of recalibrating its fixed cost model, based on this amended methodology, to reflect updated costs and traffic forecasts for CP7, and will use these recalibrated fixed cost allocations to derive draft FTACs for its price list.
- 2.4 As noted above, the actual FTACs paid by each operator in CP7 will be affected by the level of network grant funding from funders. In England & Wales, DfT (the Department for Transport) has confirmed the maximum network grant that will be made available to Network Rail, as part of its [Statement of Funds Available](#) (£27.5 billion in cash terms). Network Rail's draft FTAC price list will be based on this maximum level of grant funding.
- 2.5 In Scotland, the level of network grant that Transport Scotland will provide to Network Rail is still to be confirmed⁴. The balance of funding between FTAC and network grant in Scotland will affect the FTAC paid by two services – ScotRail Trains Limited and Caledonian Sleeper – which are either provided by the Scottish Government, or due to be provided by the Scottish Government shortly. We will work with Transport Scotland to confirm the level of grant funding in advance of our final determination, so the FTACs for these two operators can be confirmed⁵.
- 2.6 We have also set out our expectations around the process and specific timings for confirming network grant arrangements in our separate PR23 draft determination: [policy position on the financial framework](#) document (see section 4).

⁴ Transport Scotland's [Statement of Funds Available](#) said that £4.2 billion of funding will be made available to Network Rail in CP7, through direct grants to Network Rail and FTAC payments, with the balance to be agreed with ORR and Network Rail.

⁵ As noted in our April 2022 consultation, the calculation of these FTACs will also maintain the current approach of only allocating costs on the Scotland route to Scottish operators and not to allocate any costs to Scottish operators for the other routes they run on. This is to reflect the existing funding arrangement between Department for Transport and Transport Scotland.

ICC for open access services

- 2.7 In our October 2022 conclusions document, we confirmed that we would continue to permit Network Rail to levy an ICC on interurban services as defined in PR18⁶. We said that we would review the level of the ICC for interurban services, and set out specific proposals for this charge in our draft determination.
- 2.8 In the rest of this section, we firstly set out our draft decision on the level of ICC that will apply to interurban services in CP7. We then discuss a separate issue that has arisen since our October 2022 conclusions document was published, in relation to the relevance of a mark-up for open access services to major airports. We will provide an update on this specific issue by the end of July 2023, subject to undertaking further work.

Level of ICC for interurban services

- 2.9 An ICC is a mark-up charge. The level of mark-up charges must be set according to what can be borne by train services which are liable to pay them. This reflects the requirements of the Railways (Access, Management and Licensing of Railway Undertakings) Regulations 2016 ('the 2016 Regulations'), which state that the effect of levying a mark-up "must not be to 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"⁷.
- 2.10 Furthermore, in considering the most appropriate ICC to set in accordance with the requirements outlined above, we also consider our general duties under Section 4 of the Railways Act. This includes our duty to exercise our functions in the manner we consider best calculated to, amongst other things:
- (a) Promote competition in the provision of services.
 - (b) Have regard to the funds available to the Secretary of State (SoS) for the purposes of his functions in relation to railways or railway services (and to the expenditure that is to be incurred by the Scottish ministers).

⁶ An interurban service is defined as one for which: at least one station served has average entries / exits above 15 million passengers per year, or the station served is within two miles of a station meeting that criterion; at least one other station served has average entries / exits above 10 million passengers, or is within two miles of a station meeting that criterion; and two of the stations meeting these demand thresholds are at least 40 miles apart. The full set of journeys that qualify as interurban is set out in this [origin and destination matrix](#) (Option 1).

⁷ Paragraph 2(3) of Schedule 3 of the 2016 Regulations.

- 2.11 The rest of this section firstly summarises our updated market-can-bear assessment for the interurban ICC. We then set out our draft decision on the level of this ICC for CP7, taking account of all relevant considerations.

Assessment of ability to bear

- 2.12 In PR18, we commissioned CEPA/Systra to undertake an analysis of operating surplus (or ‘net revenue’) for passenger service on the network⁸. The net revenues generated by interurban services provide an indication of the mark-up that can be borne by these services, while continuing to profitably operate. CEPA/Systra looked more closely at net revenues generated by some specific interurban services, to identify a candidate ICC. This case study analysis indicated a minimum range of £6 to £7 per train mile for an ICC (and some of the services the consultants examined had substantially higher surplus values).
- 2.13 We then set the ICC at £4 per train mile for CP6 (in 2017-18 prices). We said that given this was a new approach, and the first time we had undertaken this type of analysis, an overall conservative approach for the setting of ICCs was appropriate.
- 2.14 For PR23, we have updated our assessment of interurban services’ ability to bear a mark-up, to ensure that the open access ICC continues to be set appropriately in CP7. The starting point for our updated assessment is [Steer’s PR23 market-can-bear analysis for passenger services](#), which was published in April 2022. As part of this study, Steer estimated expected net revenues for passenger services in year 1 of CP7, taking account of changes in costs and revenues since PR18 (as well as forecasting how passenger demand is likely to recover from the Coronavirus (COVID-19) pandemic). We have subsequently refined Steer’s April 2022 analysis to reflect the latest industry work to forecast passenger demand recovery over the medium-term, which takes account of passenger market developments since then.
- 2.15 We have used this analysis to assess what proportion of existing interurban services are forecast to generate a net revenue in excess of the existing ICC (around £5 per train mile, in 2023-24 prices)⁹ – both as a proportion of all interurban services, and as a proportion of profitable interurban services (as these are the routes for which it is most likely that open access propositions are potentially viable, with or without an ICC). We consider the latter metric provides a better indication as

⁸ Net revenue was calculated as passenger fare revenue minus operating costs (staff; rolling stock; fuel; corporation tax; financing costs; and other expenditure recorded in ORR [Rail industry finance](#) data).

⁹ The current fully phased-in ICC rate is £4.96 per train mile, but we have rounded it to the nearest 10p to avoid spurious accuracy.

to what proportion of the commercially viable interurban market segment can profitably operate services in CP7, in the presence of an ICC set at this level.

- 2.16 Using Steer’s central case assumptions in its April 2022 study, but with updated passenger demand recovery forecasts, we estimate that just over half of all existing interurban services – and around three quarters of profitable interurban services – are forecast to generate net revenues in excess of the current ICC in year 1 of CP7¹⁰. This is shown in Table 2.1, along with the equivalent proportions for a hypothetical charge set roughly £1 either side of the current ICC.

Table 2.1: Distribution of forecast net revenues for interurban services (2024-25)

ICC (£ per train mile, 2023-24 prices)	% of interurban services with average net revenue above ICC	% of profitable interurban services with average net revenue above ICC
£4	59%	86%
£5	53%	77%
£6	50%	73%

- 2.17 Based on this updated net revenue analysis, we consider that an ICC within the range of values presented in Table 2.1 above would be consistent with the requirements governing mark-ups. This is because while some potential open access propositions may be affected by the presence of an ICC which is set around this level, the analysis indicates that it would still allow considerable scope for commercially viable propositions to be developed, as the majority of services on interurban routes are forecast to generate higher net revenues than this.

Sensitivity to revenue and cost assumptions

- 2.18 Given that we are forecasting net revenues, there is inevitably a degree of uncertainty with the figures presented above. We have considered below how the main sources of uncertainty around these forecasts would affect our assessment of ability to bear.

¹⁰ This includes all interurban passenger services – both open access and publicly-contracted – that were included in Steer’s study. The estimates for publicly-contracted services have been adjusted to remove access charges that are not paid by open access operators (primarily the FTAC).

Passenger demand forecasts

- 2.19 A key assumption in the net revenue analysis is how passenger demand will continue to recover from the pandemic. The estimates in Table 2.1 are based on central case forecasts from industry work on forecasting passenger demand recovery. This work also forecasts ‘low’ and ‘high’ growth demand scenarios, driven primarily by different assumptions about the long-term profile of commuter and business travel.
- 2.20 Table 2.2 below shows how the distribution of net revenues is affected by these different scenarios. Under the low growth scenario, a significantly lower proportion of profitable interurban services (around half) are forecast to generate net revenues in excess of £4-6 per train mile. In the high growth scenario, the vast majority of profitable interurban services (83%) would be forecast to generate net revenues in excess of this range.

Table 2.2: Distribution of forecast net revenues for interurban services (2024-25) under different passenger demand growth scenarios

ICC (£ per train mile, 2023-24 prices)	% of profitable interurban services with average net revenue above ICC		
	Low case	Central case	High case
£4	53%	86%	92%
£5	47%	77%	88%
£6	42%	73%	83%

- 2.21 The estimates under the low growth scenario are closer to some separate revenue forecasting work which has been led by the Great British Railways Transition Team (GBRTT). This work takes account of a different range of factors, including changes in yields. Its core assumptions for commuter and business travel recovery fall between the low and central growth demand scenarios used in Steer’s analysis.
- 2.22 On the other hand, Network Rail’s passenger demand assumptions used to develop its SBP are more consistent with the high growth scenario, particularly for the last two years of CP7 (where it has assumed that passenger demand will be 95% of 2019-20 levels). Passenger demand is forecast to be closer to 90% of 2019-20

levels for the first part of CP7 – but based on current track access rights, only Lumo will be paying the ICC in this period, at a phased-in rate¹¹.

- 2.23 Furthermore, our own monitoring of the open access market indicates that open access services have generally recovered more strongly than the rest of the passenger market. Our most recent [update](#), published in May 2023, shows that the number of passenger journeys for two of the major open access operators (Grand Central and Hull Trains) had by 2022 recovered to roughly 2019 (i.e. pre-pandemic) levels, while other long distance passenger services remained some way below. This is likely to reflect the strength of recovery of leisure travel demand, which has been particularly beneficial for *existing* open access operators since they all target leisure passengers. However, real terms revenues in 2022 remained markedly below 2019 levels for both open access and publicly-contracted operators, which likely reflects an impact of the pandemic on yields (as well as demand).
- 2.24 Our monitoring work also considered operators' own views about the impact of the pandemic on their business plans. The general view expressed by potential entrants was that it had not materially undermined the business case for new services.
- 2.25 Overall, this evidence demonstrates that there remains considerable uncertainty over the profile of passenger demand recovery during CP7, and, by extension, how this will affect commercial prospects for interurban open access services (which is relevant for their ability to bear an ICC). However, taken in the round, we consider the central net revenue forecasts presented in Table 2.1 reflect a credible assessment of forecast net revenues for the market segment as a whole.

Changes in other track access charges

- 2.26 Another assumption in Steer's analysis is the level of other track access charges paid by passenger operators in CP7. Steer's net revenue analysis is based on the level of charges paid in CP6. However, Network Rail's recalibration of the variable usage charge (VUC) and electrification asset usage charge (EAUC) indicates that these rates are set to increase in CP7¹². Furthermore, traction electricity (EC4T) rates have increased significantly compared to the base year in Steer's analysis (2019-20), due to changes in energy prices.
- 2.27 We have considered the potential impact of an increase in these other track access charges on open access operators' ability to bear a mark-up. As open access

¹¹ Specifically, 25% of the full ICC rate until October 2024, and 50% between then and October 2025.

¹² This is discussed in Chapter 3 of this document.

operators primarily compete with other passenger operators, and all passenger operators face similar increases in variable charges, we would expect higher charges to be passed onto passengers to some degree, by way of higher rail fares.

- 2.28 However, if passenger operators' ability to pass on higher costs is constrained by farepayers' willingness to pay for rail travel, an increase in variable charges could affect ability to bear. This may also depend on how publicly-contracted passenger operators set fares in practice. Some of these fares are regulated and subsidised, and could therefore be expected to have a weaker link to the level of variable charges incurred in running services. This would further constrain open access operators' ability to pass higher variable charges onto passengers.
- 2.29 We have considered the impact on Steer's analysis if there was an increase in VUC and EAUC rates to reflect Network Rail's latest recalibration outputs, without any commensurate increase in revenues – noting this will likely overstate the actual impact on net revenues, given that it assumes no ability to pass on higher charges¹³. We estimate that this would serve to slightly reduce the proportion of profitable interurban services forecast to generate net revenues in excess of the current ICC (from 77% to 71% in the central case presented above).
- 2.30 Overall, this sensitivity analysis indicates that the profile of net revenue forecasts for interurban services is reasonably robust to changes in other track access charges.

Other factors affecting ability to bear

- 2.31 We recognise that an analysis which focuses exclusively on net revenues can only provide an indication of ability to bear a mark-up, as there are other factors which will be relevant to open access operators' decision-making (particularly for prospective services).
- 2.32 For instance, while Steer's net revenue analysis includes operating and some financing costs, the cost component of their analysis does not include a minimum return required on investments. This means that an ICC which is set equivalent to total net revenue for a given service would likely not be sustainable in the long run.
- 2.33 Additionally, if a *prospective* open access operator is expecting to compete with an incumbent operator, post-entry net revenues on certain routes may be lower than those observed in the absence of competition on that route. This means that

¹³ EC4T rates are not set as part of the periodic review, so are harder to forecast, but we have also assumed an illustrative 50% increase in these rates compared with 2019-20 rates (based on Network Rail's forecast income from EC4T for CP7, relative to CP6).

forecast net revenues (based on Steer’s analysis) may overstate ability to bear an ICC for some interurban routes. However, on other routes where there is existing on-rail competition, such as the East Coast Mainline, this consideration is likely to be less relevant and Steer’s analysis will more closely reflect expected post-entry net revenues.

- 2.34 It is difficult to quantitatively adjust for these factors, given that they are likely to affect different prospective interurban services to different degrees. We consider that these factors mean we should continue to be cautious in interpreting the evidence on net revenues, and what it means for ability to bear an ICC.

Considering our wider duties

- 2.35 We have also considered the impact of adjusting the level of the ICC on our wider statutory duties. We set out below our views in respect of two duties which we consider are particularly relevant to this issue.

Impact on competition for passenger services

- 2.36 Levying an ICC on open access operators potentially makes open access entry less attractive, as it increases what they must pay to use the network. However, as we take forecast ICC revenue into account when assessing open access applications, a higher ICC would (all other things equal) increase the likelihood that an application is granted, which supports competition in the passenger market. We therefore consider our competition duty is served by balancing the benefits of setting an ICC up to what interurban services can bear, against the risk of setting it in excess of this level.

Impact on funds available to the SoS (and Scottish Ministers’ expenditure)

- 2.37 All other things equal, a higher ICC would be expected to reduce Network Rail’s reliance on SoS and Scottish Ministers’ funds (by increasing its forecast income in CP7 from other sources). However, if an ICC is set above what operators can bear, this would exclude open access services from the network. This would not promote passenger interests, and would inadvertently increase Network Rail’s reliance on SoS funding as it would reduce the contribution from non-publicly contracted operators towards its fixed costs. We therefore consider this duty is also served by setting an ICC up to what interurban services can bear (but not in excess of this).
- 2.38 In practice, the impact on Network Rail’s CP7 income (and by extension on SoS and Scottish Minister funds) of different ICCs is limited. This is because Lumo is the only existing open access operator that Network Rail is forecasting to pay this

charge in CP7, on a phased-in basis¹⁴. By way of illustration, we estimate that open access income would be around £6 million higher over the whole control period if the ICC increased by £1 (equivalent to around 0.02% of Network Rail's forecast income from network grant and FTAC (which is paid largely by passenger operators contracted by DfT))¹⁵. This is set against the risk that a higher charge could deter some prospective open access applications in the interurban market segment.

Overall view

- 2.39 Taking all the above into consideration, we consider that it would be appropriate to broadly maintain the ICC in real terms for CP7. We consider this ICC would:
- (a) reflect the updated market-can-bear analysis, which indicates that the majority of interurban services would be capable of generating net revenues above this (after accounting for the impact of the pandemic);
 - (b) be consistent with our decision taken in PR18, where we set the charge conservatively, but for a rail passenger market which was less challenging than that faced by open access operators today; and
 - (c) balance the risks of setting the charge too high (in terms of deterring open access applications) against the drawbacks of setting it too low (primarily the impact on SoS funds, and on facilitating greater access to the network).
- 2.40 Maintaining the level of the ICC also sends a stable long-term signal to prospective open access operators about the cost of potential entry to the interurban market (recognising that our ICC policy is still relatively new, having only been in place for less than one control period which has been significantly affected by the pandemic).
- 2.41 We therefore intend to set the ICC for interurban open access services at **£5 per train mile** for CP7 (in 2023-24 prices).
- 2.42 As set out in our October 2022 conclusions document, this charge would be subject to the same phase-in arrangements that are currently in place – as shown in Table 2.3 below. These arrangements mean that, in addition to Lumo, only prospective

¹⁴ We have also approved access rights for Grand Union Trains (GUT) to run services between London Paddington and Carmarthen from December 2024. This service would be liable for an ICC on a portion of this service. However, Network Rail has not included this in its CP7 income forecasts because the service is yet to launch. If forecast ICC income from GUT's service is also included in its plan, we estimate this would increase the impact of a £1 increase in the ICC by around £0.5 million.

¹⁵ This assumes that a change in the ICC level has no impact on service levels. If it caused a withdrawal of some services, this would serve to reduce this income impact.

interurban services that have access rights approved and begin operating services before April 2027 would pay an ICC in CP7.

Table 2.3: Transitional arrangements for new services liable for an ICC in CP7

Year of operation of new service	Year 1	Year 2	Year 3	Year 4	Year 5
% of ICC set for CP7	0%	0%	25%	50%	100%

2.43 Finally, we said in our October 2022 conclusions document that we would also have regard to the fixed costs that are allocated to operators under Network Rail’s fixed cost allocation methodology. We consider it would not be appropriate for open access operators to pay an ICC which exceeds their total traffic-avoidable fixed cost allocation. Based on PR18 fixed cost allocations, we are confident that an ICC of £5 per train mile would be below the avoidable fixed cost allocation (on an equivalent basis) for the major interurban routes. However, once Network Rail has completed its recalibration of its fixed cost model for CP7, as discussed earlier in this chapter, we will review this aspect of the analysis.

Relevance of a mark-up for airport services

2.44 Our existing market segmentation of open access services defines two market segments: interurban and other. We said in our October 2022 conclusions document that we would only revisit our market segmentation decisions if there are major changes during the rest of PR23 that we consider clearly affect the basis for these decisions.

2.45 Since publishing our conclusions document, we have been made aware of discussions between Network Rail and Heathrow Express – an open access operator running services between London Paddington and Heathrow airport – about the track access agreement that these parties hold. Heathrow Express currently operates on a bespoke track access agreement which is not subject to the periodic review. We understand that both parties are discussing the future of this contract, and considering moving Heathrow Express onto a model track access contract from the start of CP7¹⁶. Under a model contract, it would pay the normal suite of regulated access charges that are set through the periodic review.

2.46 We have not previously considered the relevance of a specific mark-up for open access services to airport rail stations. This is because there have been no such

¹⁶ See ‘Other costs and income’ chapter of Wales and Western’s [CP7 Strategic Business Plan](#).

operators providing airport links other than Heathrow Express, which (as explained above) has been operating under a bespoke track access agreement. There has also been little indication of prospective interest in operating such services from potential entrants. Furthermore, unlike interurban (versus urban or regional) services, it is not one of the pairs of services that we are required to consider under the 2016 Regulations for the purposes of levying mark-ups.

- 2.47 The potential change in Heathrow Express' contractual position has highlighted whether these types of service could bear a mark-up. However, as this issue has arisen at a late stage in the PR23 process, we are still giving consideration to the full implications of this. We intend to provide a further update on this issue by the end of July. If we consider there is a basis on which to establish a mark-up for airport-based services, we will set out a full proposal then.
- 2.48 We would then seek to conclude on this issue in our final determination, alongside our decisions on other charging issues.
- 2.49 For the avoidance of doubt, this would not affect our decision on the scope of the interurban market segment, or our draft decision for the ICC that applies to that market segment (as set out earlier in this section).

ICC for freight services

- 2.50 We said in our October 2022 conclusions document that we will continue to permit Network Rail to levy an ICC on services carrying iron ore; spent nuclear fuel; and electricity supply industry (ESI) biomass. We were also minded to retain the ICC for ESI coal, though we said that we would confirm this decision later in PR23, pending updated information on forecast volumes for this commodity.
- 2.51 The rest of this section provides an update on each of these four freight commodities, including draft decisions for the level of each ICC (in thousand gross tonne miles, or kg_{tm}).

ESI coal

- 2.52 We have reviewed the latest information on ESI coal volumes. Recent trends show that ESI coal volumes have continued to increase since the second half of 2021, primarily driven by changes in the UK energy market¹⁷. However, there remains an

¹⁷ Total ESI coal moved almost doubled between April 2022 and March 2023 compared with the previous year and was more than three times higher than in the first year of CP6. Source: ORR analysis of data provided by Network Rail (available [here](#)).

expectation that volumes of this commodity will fall over the course of CP7, in line with the previous direction of travel. This reflects government energy policy, and is consistent with recent announcements by energy providers about phasing out the use of coal power generation.

- 2.53 Overall, there remains some uncertainty over future trends in energy production and the implications for ESI coal. But based on the latest picture, volumes of this commodity may persist for at least the first part of CP7, and so we remain of the view that it is proportionate to maintain an ICC for this commodity for CP7¹⁸.
- 2.54 We said in our October 2022 conclusions document that we would set the ICC for this commodity to broadly maintain the overall level of track access charges (excluding any EC4T payments) between CP6 and CP7, as we did in PR18. This reflected the available evidence that we commissioned for PR23, which indicates that there have been no major changes in ability to bear for these commodities.
- 2.55 The variable access charges paid by freight operators (specifically VUC and EAUC) are set to increase between the final year of CP6 and CP7. This is due to the partial unwinding of caps that are applied to some freight VUC rates; and an increase in EAUC rates resulting from Network Rail's recalibration exercise¹⁹.
- 2.56 We have considered how the expected increase in variable charges will affect the ICC for ESI coal – based on Network Rail's latest recalibration outputs and our draft decision for the unwinding of VUC caps (noting that the level of these charges may be refined further between now and our final determination). The forecast increases in VUC and EAUC mean that the ICC will fall, to maintain the same overall level of cost recovery (in line with our evidence regarding ability to bear for these commodities). We have calculated an average ICC rate for CP7 to achieve this of around **£1.25** per kgm (in 2023-24 prices). This is around a third lower than the current ICC – which is £1.87 per kgm for year 5 of CP6.

Iron ore

- 2.57 As with ESI coal, we said in our October 2022 conclusions document that we would set the ICC for iron ore traffic to broadly maintain the overall level of track access

¹⁸ We note that, in its response to Network Rail's recalibration consultation, the Rail Wagon Association queried whether ESI coal can be deemed able to bear an ICC when the tonnage remaining could easily be moved by road. In reviewing this market segment for PR23, CEPA considered the impact of declining volumes on ability to bear, but concluded that it could continue to bear an ICC in CP7.

¹⁹ This is discussed in more detail in Chapter 3. Cost-reflective VUC rates are also set to increase in CP7, but our revised capping / phasing-in proposals for this charge mean that increases in these rates would reflect the unwinding of existing caps set in PR18.

charges (excluding any EC4T payments) between CP6 and CP7. Given the expected increases in Network Rail's variable charges, as explained above, this also implies a reduction in the iron ore ICC for CP7.

- 2.58 Based on the latest information provided by Network Rail, and our draft decision in respect of VUC capping, we estimate the iron ore ICC would be **£1.28** per kgtm (in 2023-24 prices). This is also around a third lower than the current ICC for iron ore of £1.91 per kgtm.

Spent nuclear fuel

- 2.59 We said in our October 2022 conclusions document that we will set the ICC for spent nuclear fuel to recover the total traffic-avoidable fixed costs that are allocated to services transporting this commodity. We consider that this fixed cost allocation is the maximum ICC that can be levied on a market segment (and the evidence indicates that this commodity can bear a charge set up to this level).
- 2.60 Network Rail is currently in the process of recalibrating its fixed cost model for CP7. As such, we do not yet know the draft rate for this ICC. However, by way of illustration, Network Rail has previously estimated that setting the ICC at £19.46 per kgtm (in 2022-23 prices; **£21.23** in 2023-24 prices) would broadly recover the total traffic-avoidable fixed costs that were allocated to spent nuclear fuel traffic in the final year of CP6²⁰. We will ask Network Rail to publish an updated figure based on its recalibration of fixed cost allocations for CP7, once it has completed this exercise. We will confirm the final ICC rate for this commodity in our final determination, based on updated information.
- 2.61 The ICC for spent nuclear fuel is currently only applied to wagons, not locomotives. This is not consistent with how the ICC is applied to other freight commodities. We consider that the structure of this ICC should be aligned such that the ICC is applied to both locomotives and wagons. We will liaise with Network Rail to understand any issues with doing this. We note that this will not affect the total forecast income from this charge, as it should recover the total traffic-avoidable fixed costs allocated to spent nuclear fuel traffic, but it would affect the final ICC rate in kgtm that is calculated to achieve this (as it would be billed on a greater number of vehicles).

²⁰ See Network Rail's [response](#) to our April 2022 consultation on the PR23 charges review (Table 2).

ESI biomass

- 2.62 We said in our October 2022 conclusions document that we would revisit the evidence underpinning the level of the ICC for ESI biomass, to ensure that it continues to be set appropriately for CP7.
- 2.63 The main evidence underpinning the existing ICC is a study of relative biomass transport costs by MDS Transmodal (MDST), which was undertaken as part of our PR18 charges review. For this study, MDST developed a model to represent the transport choices faced by Drax, the main consumer of biomass in the UK²¹. Drax sources its biomass from overseas and imports it to several ports, before transporting it to its power plant via rail. It also uses road transport to transport a proportion of biomass. The relative costs of these transport options will affect the overall transport choices used by Drax.
- 2.64 We commissioned MDST to update this analysis for PR23, taking account of updated volumes and forecast transport costs for CP7. MDST has estimated the impact of potential changes in track access charges on volumes of biomass transported by rail (in *tonne kilometres*), focusing on the final year of CP7.
- 2.65 MDST's [full report](#) is published alongside this document. The updated modelling estimates that biomass traffic in tonne kilometres would be between **9.9% and 10.4%** lower in the final year of CP7 if we maintained the existing biomass ICC in real terms, compared to a scenario in which the ICC was not levied on this traffic²². This is based on a scenario under which existing caps on VUC rates for biomass are removed during CP7, to reach cost-reflective levels as calculated in PR18. This is consistent with our draft decision in respect of VUC capping / phasing-in, as explained in Chapter 3²³.
- 2.66 We have previously considered that a commodity can bear an ICC which is associated with less than a 10% modelled reduction in rail freight demand, and we have set ICCs on this basis. MDST's updated results indicate that maintaining the current ICC in real terms for CP7 would be broadly consistent with this. Although the upper end of the estimated demand impact (10.4%) is slightly above this

²¹ Biomass transported to Lynemouth power station was also included in the analysis.

²² See Table 1 and Table 5 of MDST's report (reduction in tonne kilometres from 'zero FSC' scenario to reference case). MDST has expressed changes as a proportion of the reference case, but we have considered the change in tonne kilometres with respect to the 'zero FSC' scenario, as this represents the impact of an ICC.

²³ To understand the sensitivity of these results to different levels of VUC, MDST also modelled an alternative scenario whereby VUC rates are 20% higher in the final year of CP7. Under this scenario, the equivalent impact on biomass volumes would be 10.5% - 10.9%. See revised tables 5 and 7.

threshold, this includes the estimated impact of a reduction in *total* biomass generation due to a change in the UK’s energy mix (i.e. a reduction in biomass tonnage transported), as the overall cost of burning biomass will have increased. This impact is much more uncertain, as it depends on the position of biomass with respect to other energy sources at a given point in time, which is harder to accurately forecast than changes in the mix of transport options used to deliver a given volume of biomass.

- 2.67 Furthermore, most of this modelled reduction is driven by changes in the pattern of rail use, as Drax is assumed to switch to nearby ports (with shorter inland rail legs) to source its biomass, rather than a reduction in the absolute tonnage of biomass transported by rail. Only a proportion of this modelled reduction in rail usage is accounted for by modal shift to road, which is a key consideration when setting mark-ups (due to the loss of environmental benefits associated with this).
- 2.68 For these reasons, and reflecting our incremental approach to the PR23 charges review, we consider that it would be appropriate to maintain the biomass ICC in real terms, for CP7. This is equivalent to an ICC of **£1.74 per kg_{tm}** (in 2023-24 prices).

Summary of draft ICC rates for freight commodities

- 2.69 Table 2.4 summarises the draft freight ICC rates for each commodity. The ICC for spent nuclear fuel has fallen, to reflect our view on the appropriate upper bound for an ICC, while the ICCs for ESI coal and iron ore have fallen so as to broadly maintain the overall level of track access charges. The ICC for biomass is flat in real terms, as the updated evidence on ability to bear indicates this ICC can be borne even with an increase in other access charges.

Table 2.4: Draft freight ICC rates for CP7 (2023-24 prices)

Commodity	Year 5 CP6 rate (£ / kg _{tm})	CP7 rate (£ / kg _{tm})	Average annual income in CP7 (£ million)
ESI coal	1.87	1.25	0.5
Iron ore	1.91	1.28	0.2
Spent nuclear fuel ²⁴	41.27	21.23	-
ESI biomass	1.74	1.74	2.7

²⁴ As explained above, the CP7 rate for spent nuclear fuel is purely indicative at this stage as it has not yet been updated to reflect the PR23 recalibration. No income forecast has been produced for this commodity as we do not have specific volume forecasts at this level of granularity.

- 2.70 We note that the figures presented in Table 2.4 are likely to change following the draft determination, as a result of the ongoing recalibration work (including for the VUC) and quality assurance processes²⁵. We are including draft rates here to provide industry with a view around the likely scale of ICCs in CP7. As explained above, Network Rail will publish draft CP7 price lists in July 2023, and we will ask Network Rail to include updated ICC rates as part of this.

²⁵ In the case of ESI coal and iron ore, these rates will also be affected by Network Rail's freight traffic forecasts at commodity level, which we understand may be refined between now and our final determination (particularly for ESI coal, given the uncertainty in these volumes).

3. Variable charges

Summary

Network Rail has received around £700-800 million in annual variable charges income in CP6. This comprises around £250-300 million in variable usage charge (VUC) income, with most other variable charge income coming from traction electricity (EC4T) charges.

Network Rail's recalibration of the VUC indicates that cost-reflective VUC rates are set to increase in CP7. We have reviewed our existing phasing-in policy for increases in VUC rates paid by freight and charter operators, in light of this. We have revised our policy such that average VUC rates would increase during CP7 along the same trajectory as set in PR18, instead of increasing to the new (higher) cost-reflective rates as recalibrated for PR23. This means that rates would continue to be capped below fully cost-reflective rates throughout CP7. VUC rates would then increase further towards being fully cost-reflective by the end of CP8.

This revised policy will limit the financial impact on freight operators of additional increases in VUC rates, over and above those planned for in CP7, while still ensuring that this charge more closely reflects the direct costs incurred in using the network.

We are also confirming our decision to streamline the charging approaches for EC4T, by removing the partial fleet metering (PFM) charging approach; and, in respect of modelled consumption, by removing generic consumption rates as well as the facility to obtain a new bespoke modelled rate from the start of CP7.

Variable Usage Charge (VUC)

- 3.1 We confirmed in our October 2022 conclusions document that we will retain the existing approach to setting the variable usage charge (VUC) for PR23. In particular, we confirmed that we would not make any changes to the cost categories recovered through the VUC, or the underlying track damage formulae used to calculate VUC rates.
- 3.2 We also said that we remain minded to retain the existing VUC phasing-in policy as set in PR18, under which VUC rates for some freight and charter vehicles will increase (in real terms) at a uniform rate to reach full cost reflectivity in the final year of CP7. However, we said we will review this policy at the PR23 recalibration stage.

We said that if the recalibration exercise results in significant changes in cost-reflective VUC rates at the end of CP7, we would review our position.

- 3.3 The rest of this section firstly provides an update on Network Rail's recalibration of the VUC. We then set out our draft decisions on the phasing-in of VUC increases for freight and charter operators.
- 3.4 Finally, we set out our view on some other issues primarily related to the administration of the VUC.

Network Rail's recalibration of the VUC

- 3.5 Network Rail has recalibrated VUC rates for CP7. This is based on the existing methodology (as explained above, and in Network Rail's recalibration conclusions document), but updated to reflect its forecast maintenance and renewal costs, efficiency assumptions and traffic forecasts that are included in its SBP. We have worked closely with Network Rail to ensure that this exercise is based on appropriate assumptions, particularly in respect of the forecast maintenance and renewals expenditure for its track, civils and signalling assets.
- 3.6 This indicates that uncapped VUC rates are set to increase by an average of 9% in real terms in CP7, compared to CP6. The average increase for passenger rates is 7%, the average increase for freight rates is 13% and the average increase for charter rates is 9%²⁶. These increases are over and above any increases that are due to CPI inflation. Furthermore, there is considerable variation in the increases in individual VUC rates, as the charge is broken down by vehicle class and (for freight) commodity type.
- 3.7 We understand that this increase in rates is primarily due to a combination of:
- (a) Higher track costs. Track costs make up around 85% of the expenditure that is recovered through this charge. Network Rail is planning a significant reduction in track renewals expenditure in CP7, compared to CP6 (as set out in our PR23 draft determination: [supporting document on sustainable and efficient costs](#)). However, the reduction in track renewals expenditure *compared to forecast expenditure used to derive VUC rates in PR18* is smaller – because this forecast was lower than its CP6 Delivery Plan costs. This (smaller) reduction is more than offset by an increase in planned

²⁶ To derive these increases, we have made some adjustments to Network Rail's recalibration outputs to reflect a wider set of VUC rates (i.e. the new rates that have been added to the Track Usage Price List in CP6). We have also amended the inflation assumptions used to compare CP6 and CP7 rates in real terms, to be consistent with the adjustments used to calculate the latest price list (2023-24).

maintenance expenditure for CP7 – so overall forecast track costs are slightly higher in CP7, relative to VUC-related track costs in PR18.

We are working with Network Rail to better understand the differences between its CP6 costs and the forecast expenditure used to derive VUC rates in PR18, though this would not affect the level of track renewals expenditure that is used to recalibrate VUC rates for PR23.

- (b) Lower passenger traffic forecasts for CP7. Although the VUC is intended to recover the costs that Network Rail incurs as a result of small (or marginal) changes in traffic levels, these costs do not simply rise linearly with traffic. This is due to a degree of ‘lumpiness’ in the maintenance and renewals activities that vary with traffic. This means that changes in traffic levels can affect these costs, with lower traffic levels tending to result in higher variable unit costs for all vehicle types (all other things equal)²⁷. Network Rail is forecasting lower passenger traffic in CP7 compared to CP6, although this is partly offset by an increase in freight traffic²⁸.

3.8 We are continuing to work with Network Rail to understand the impact of these factors on recalibrated rates, as we have had limited time to review these recalibration outputs and discuss with industry. Furthermore, the VUC recalibration will also be affected by some draft decisions we have made as part of our draft determination, for instance in respect of Network Rail’s track renewals plans for CP7²⁹. As such, these figures remain subject to change following our draft determination, as Network Rail refines and updates the recalibration exercise.

3.9 Notwithstanding this, we have considered the implications of an increase in VUC rates of this level, for each class of operator (passenger, freight and charter). We have given particular consideration to our capping / phasing-in policy for freight and charter operators, which we said we would review at the PR23 recalibration stage.

3.10 We note that Network Rail has not made any changes to its approach to reflecting the Commission Implementing Regulation 2015/909 in its calculation of VUC rates³⁰, besides correcting an error that it has identified as part of PR23. For the

²⁷ Network Rail discusses this effect in more detail in appendix 2 of its recalibration [conclusions document](#).

²⁸ Table A.2.1 of Network Rail’s SBP (England & Wales) sets out Network Rail’s passenger and freight traffic assumptions for CP7. The SBP for Network Rail Scotland is still to be published.

²⁹ It may also be affected by potential changes in the classification of some of Network Rail’s operating, maintenance, and support costs (as discussed in our supporting document on sustainable and efficient costs).

³⁰ CIR 2015/909 is a retained EU regulation which sets out further detail on what qualifies as directly incurred costs.

reasons explained in Network Rail’s recalibration consultation document, this has not had a material impact on VUC rates³¹.

Implications for VUC phasing-in policy

- 3.11 In considering the policy implications of an increase in VUC rates, we have had regard to the legal requirements underpinning the VUC³². The 2016 Regulations require that direct costs must be recovered from train operators. As set out in PR18, we are satisfied that we have the flexibility to allow for changes to the level of the VUC (driven by major changes in direct costs) to be brought in over a period of time. However, such capping / phasing-in must not be open-ended or indefinite and there must come a time when direct costs are fully recovered.
- 3.12 In developing our PR18 capping and phasing-in policy for freight and charter operators, we also had regard to our statutory Section 4 duties. We identified the following considerations that were particularly relevant in this context:
- (a) Better use of the network: A cost-reflective VUC will encourage operators to invest in track-friendly vehicles and only to use the network where the marginal benefit is greater than or equal to the marginal cost. Setting VUC rates at cost-reflective levels as soon as possible therefore supports our duties to promote the use of the network, and promote efficiency and economy on the part of persons providing railway services.
 - (b) Impact on funding: All other things equal, the use of capping/phasing-in will reduce the variable charges income received by Network Rail. This is relevant to our duties to have regard to the funds available to the SoS (and to Scottish Ministers’ expenditure) for the purpose of railway services, and to not render it unduly difficult for Network Rail to finance its activities.
 - (c) Supporting rail sector growth and stability: We have a duty to protect the interests of users of railway services, and to enable persons providing railway services to plan the future of their businesses with a reasonable degree of assurance. This requires us to consider the growth and stability of different rail markets, and, by extension, the impact of changes in VUC rates on that objective. In doing so, we have also taken account of expected changes in other charges and payments that are determined through PR23.

³¹ See paragraphs 3.20 to 3.25 of Network Rail’s PR23 [consultation](#) on regulated access charges in CP7.

³² The 2016 Regulations (particularly paragraph 1(4) of Schedule 3) and CIR 2015/909.

- 3.13 We consider these factors remain equally relevant for this review. We are also mindful that funders have placed a strong emphasis in PR23 on the growth and development of freight services – including by way of targets for freight growth over CP7 (as set out in both HLOSs for England & Wales and Scotland).
- 3.14 Against this background, we have separately considered the implications for each type of operator³³.

Passenger operators

- 3.15 For publicly-contracted passenger operators, the impact of changes to variable charges is mitigated by their contractual arrangements with rail authorities – through which train operators are reimbursed for charges payments. We expect that the financial impact for rail authorities would also be offset by lower FTAC payments (due to higher forecast VUC income).
- 3.16 Open access operators would see an increase in their charges due to higher VUC rates. However, this group is not forecast to incur a material increase in charges due to the increase in VUC rates in CP7. We estimate that the specific increase in VUC rates for these operators would be between 4 and 8%. This represents an increase of between 0.1 and 0.3% as a proportion of the main open access operators' total expenditure³⁴.
- 3.17 We do not therefore consider that it is necessary to consider a cap or phasing-in of the increase in VUC rates for these operators, particularly when set against the benefits (in terms of promoting use of the network and securing Network Rail's funding) of setting VUC rates at a level which reflects the full costs of network use. As such, we are not proposing to introduce any capping or phasing-in arrangements for passenger operators.

Freight operators

- 3.18 In CP6, a significant number of individual VUC rates for freight traffic are capped below their fully cost-reflective level. This is a result of our PR18 capping and phasing-in policy described above. Under this policy, the increases in VUC for

³³ Based on the high-level market segments established in the Regulations. These segments all differ in terms of access regime and the nature/purpose of the service. The charging scheme should take account of these differences and we do not consider that adopting a different approach across these different operators is unduly discriminatory. Indeed, it would risk undue discrimination if we were to not reflect such differences in a charging scheme.

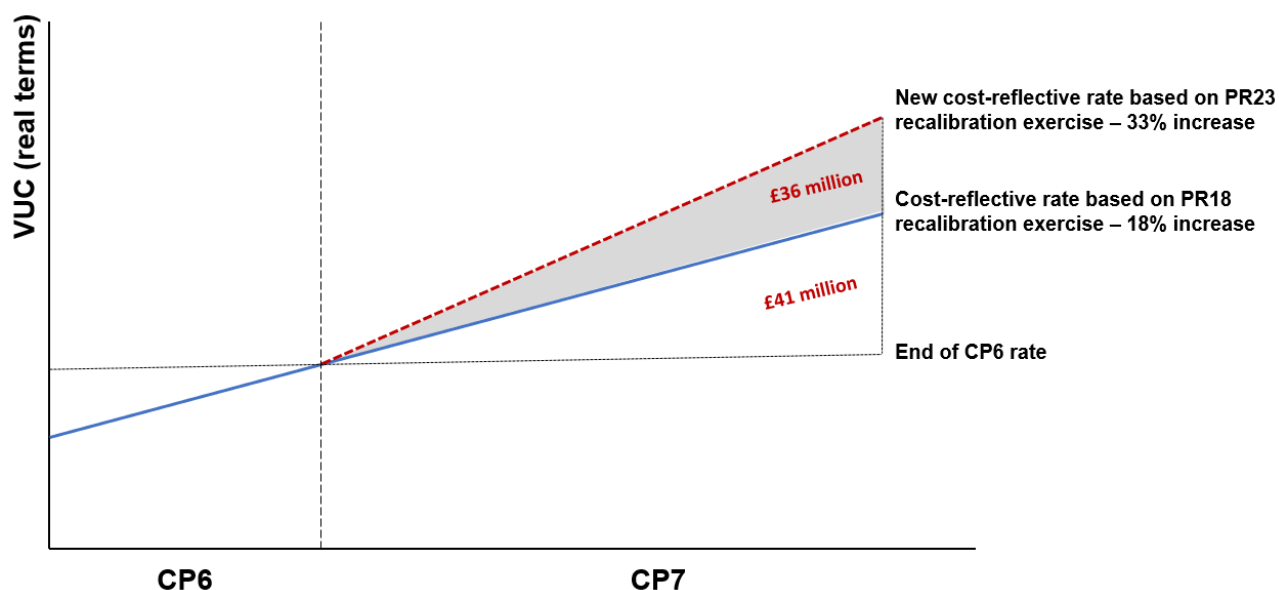
³⁴ Based on total expenditure (staff, fuel, rolling stock and other expenditure) for 2021-22 as reported in ORR's latest rail financials document. This also takes account of the estimated impact of an increase in EAUC rates, discussed in more detail in the next section.

freight (and charter) services that were due to take place at the start of CP6 (following recalibration) are instead being phased-in over CP6 and CP7.

- 3.19 These VUC rates have been increasing in real terms since year 3 of CP6. The impact of phasing-in the remaining increases in VUC rates to reach the uncapped (i.e. fully cost-reflective) levels as calculated in PR18 would be a further increase in rates of approximately 18% on average (in real terms) over the course of CP7, relative to current rates being paid in year 5 of CP6³⁵. This would be the average increase in VUC rates faced by freight operators in CP7, absent any changes to cost-reflective VUC rates due to Network Rail's PR23 recalibration exercise.
- 3.20 If the phasing-in profile was set so that VUC rates reach the latest cost-reflective rates by the end of CP7, the total increase faced by freight operators would be significantly greater than this. This is because, as explained above, the latest recalibration outputs show an average increase in cost-reflective rates of around 13% for freight. We estimate the total average increase in VUC rates across all freight traffic would be around 33% by the end of CP7. Furthermore, there is significant variation in the increases in cost-reflective rates for different vehicle and commodity types, with some rates increasing by significantly more than 13%.
- 3.21 Figure 3.1 illustrates the profile of increases in VUC rates if we fully unwind all caps to equal the latest cost-reflective rates for CP7, compared to the existing trajectory to reach cost-reflective rates as calculated in PR18. It also shows the additional VUC income from freight operators that Network Rail would expect to receive under each profile, relative to holding rates constant at CP6 exit levels. These estimates are based on Network Rail's SBP freight forecasts for CP7, which we understand may be refined at a commodity level between now and our final determination.

³⁵ On a straight-line basis, this is equivalent to an annual real terms increase of just over 3% over CP7.

Figure 3.1: Illustration of phase-in profiles for freight VUC rates subject to capping



Note: Diagram is not to scale.

- 3.22 We have considered the impacts of these VUC increases on freight operators, focusing on the incremental impact of the higher cost-reflective VUC rates over and above the planned phasing-in of VUC increases (as forecast in PR18).
- (a) In respect of financial impacts, we estimate that this would result in freight operators paying around £36 million more in VUC payments over the course of CP7. This is represented by the grey shaded area in Figure 3.1. We estimate that around £1.7 million of this £36 million difference relates to lower income for Network Rail Scotland (with the rest relating to England & Wales).
 - (b) We have refreshed our understanding of the likely impacts on freight traffic volumes of increases in VUC rates. We commissioned MDST to update its March 2022 study on rail freight demand elasticities with respect to track access charges, to reflect the latest available information on the relative costs of transporting goods by different transport modes³⁶. This [report](#) is published alongside our draft determination.

This updated evidence shows that the impact on rail freight volumes of phasing-in the increase in VUC to cost-reflective levels as forecast in PR18

³⁶ In particular, MDST has updated a number of input assumptions drawn from DfT's Transport Analysis Guidance, such as driver wages; fuel costs; and road/rail duty.

remains broadly in line with the expected impacts we considered when we developed this policy³⁷. However, the impact on volumes is more significant if VUC rates increase over and above this trajectory. Due to the variation in the increases in cost-reflective rates for different commodity types, some commodities would see an increase in cost-reflective VUC rates of closer to 20%. In several cases, the estimated demand impacts associated with an increase in VUC rates to these levels are twice as much, compared with the phase-in profile that was envisaged at PR18.

- 3.23 We have also considered these impacts in the broader context of PR23. In particular, traction electricity rates are significantly higher now than when we set our capping / phasing-in policy in PR18, while EAUC rates are also set to increase in CP7. While these factors are only relevant to electrified freight services, they nevertheless affect the overall competitiveness of rail freight.
- 3.24 In light of the above, we now consider it would be appropriate to maintain some form of capping arrangements for VUC rates paid by freight traffic in CP7. This means that freight VUC rates would not reach their fully cost-reflective levels by the final year of CP7. This represents a change to our minded-to position, as set out in our October 2022 conclusions document. We consider this is necessary to reflect the balance of our statutory duties.
- 3.25 We emphasise that this is a response to new information provided through Network Rail's recalibration on the direct costs of remedial wear and tear work. There has been a clear expectation within industry that further increases in VUC rates will be phased-in over CP7, as we have signalled this both in PR18 and throughout our PR23 charges review. This has afforded freight operators and their customers significant advance warning and time for them to adjust to a higher level of charges. Our revised policy is specifically intended to address the impact of a further increase in VUCs, over and above that which has been envisaged thus far.

Revised capping and phasing-in policy

- 3.26 We have considered how best to address the impact of a further increase in VUC rates, as explained above. **We now propose that average VUC rates should increase during CP7 along the same trajectory as set in PR18, instead of increasing to the new (higher) cost-reflective rates as recalibrated for PR23.** This means that by the final year of CP7, VUC rates would be equivalent to the

³⁷ For most commodities, the impact on volumes has fallen slightly compared to the estimates produced in March 2022. This can be seen by comparing Table 8 in MDST's report with the revised Table 8 presented in the appendix.

cost-reflective rates that were calculated in PR18. These rates are lower than the fully cost-reflective rates based on Network Rail’s PR23 recalibration exercise.

3.27 We note that around a quarter of individual freight VUC rates are currently uncapped, i.e. they are equivalent to the cost-reflective rate calculated at PR18. Under this revised policy, these rates would be held constant in real terms across CP7. Overall, though, the increases in other VUC rates over the course of CP7 means that this charge would move closer to recovering the total directly incurred costs from freight traffic by the end of CP7. Based on the latest recalibration outputs, we estimate that Network Rail will recover around 83% of directly incurred costs from freight traffic in CP7 (based on new cost-reflective rates), compared to around 80% of total directly incurred costs in CP6³⁸.

Summary of impacts

3.28 Table 3.1 below summarises the expected increase in average VUC rates under this policy, relative to fully unwinding all caps by the end of CP7. As outlined above, it should be noted that these figures may change following the draft determination, due to the ongoing VUC recalibration and quality assurance processes.

Table 3.1: Average increase in real (CPI-adjusted) VUC rates relative to year 5 of CP6

	Uncapped increase	Capped increase
Total increase in average rate by final year of CP7	33%	18%
Annual increase in average rate over CP7	5.8%	3.3%

3.29 We have assessed the impact of our revised capping and phasing-in policy for freight operators, Network Rail and funders – relative to fully unwinding all caps by the final year of CP7. We have published an [impact assessment](#) alongside this document setting out these impacts. We have identified the key impacts as follows:

- (a) For **freight operators**, we recognise that continuing to cap freight VUC rates below fully cost-reflective rates will affect the incentive properties of this charge. Specifically, operators may continue to operate services for which the marginal benefits are less than the marginal costs, and may also have

³⁸ Network Rail would recover around 90% of directly incurred costs if rates increased on a straight-line basis to new uncapped rates by the end of CP7.

less incentive to invest in more track friendly vehicles. However, compared to CP6, this policy will still move VUC rates closer to levels which reflect the full marginal cost of network use, and keeps rates on a clear pathway to eventually recovering this full cost.

- (b) This policy would limit the impact on rail freight volumes, and therefore on the growth and stability of the freight sector. The estimated volume impacts for an increase in VUC rates of this level are set out in MDST's report accompanying our draft determination (scenario 1). The maximum estimated impact is a reduction in net tonne kms of 3.8%, for the construction sector. This compares to an estimated reduction of around 6.2% if VUC rates increased to uncapped levels by the end of CP7³⁹. The equivalent impacts for the other largest commodity group – intermodal – would be 1.4% under our policy, compared to between 3.2% and 5.3% if all caps were removed⁴⁰.
- (c) In turn, by limiting the impact on rail freight volumes relative to fully unwinding all caps by the end of CP7, this policy is also likely to generate **wider benefits** for the environment, productivity benefits from lower congestion, and potential safety benefits.
- (d) For **Network Rail**, our revised policy would reduce the income that it receives through this charge, compared to setting VUC rates to reflect full cost-reflectivity. However, given the magnitude of this reduction (around £36 million over the whole of CP7) relative to its total funding envelope, we do not consider this would make it unduly difficult for Network Rail to finance its activities. Furthermore, Network Rail's SBP has been based on a flat (real terms) income assumption for VUCs so our policy means that it will receive around £41 million *more* in freight VUC income, relative to its planning assumptions. We also do not consider this would materially affect Network Rail's incentives to accommodate additional freight traffic on the network.
- (e) For **funders**, for the reasons explained in point (d) above, this policy would not trigger additional funding requirements beyond those which have been set out in the Statements of Funds Available (on which Network Rail's SBP is based). We also consider, in light of the updated evidence provided by MDST on the impacts of higher access charges on freight traffic, that this policy will

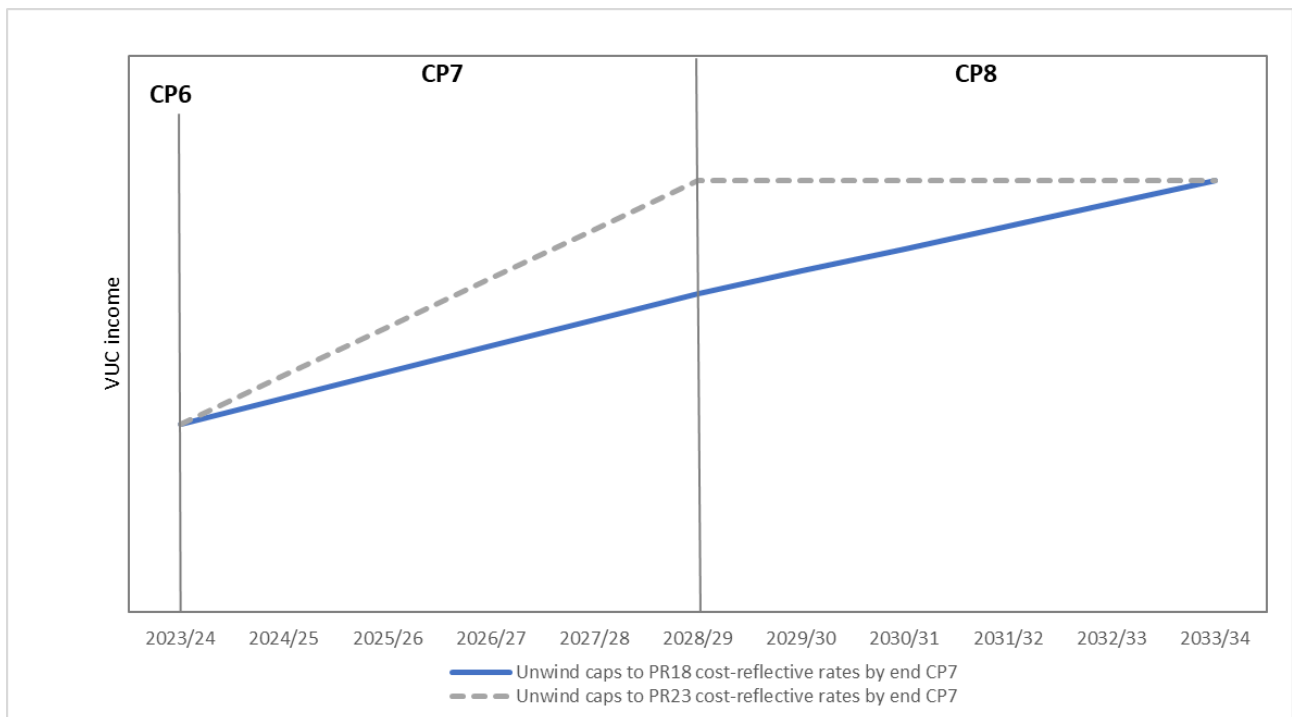
³⁹ See MDST's scenario 3. We estimate the increase in uncapped VUC rates for this sector is around 11%, so broadly equivalent to this scenario (which assumed an increase in VUC rates of 10% over and above the unwinding of caps to uncapped levels as calculated in PR18).

⁴⁰ We estimate the increase in uncapped VUC rates for this commodity is around 14%, which falls between the increase in MDST's scenarios 2 (+20%) and 3 (+10%).

better support funders’ objectives in respect of rail freight growth and development⁴¹.

- 3.30 Overall, we consider that this policy would limit the most significant impacts of the phasing-in of increases in the VUC for freight operators; funders’ objectives (particularly in respect of freight growth); and other areas such as the environment, while preserving the beneficial incentive properties of this charge by ensuring that rates continue to move closer to full cost-reflectivity during CP7.
- 3.31 We also consider this revised policy would be consistent with the legal requirements that any caps on variable charges must be time-limited. This is because the remaining caps that apply to VUC rates would be unwound over CP8. As such, it keeps freight users on a clear pathway to paying the full directly incurred cost of network use, as required by legislation. The implied profile of increase in VUC rates is illustrated in Figure 3.2 below.

Figure 3.2: Implied profile of freight VUC payments over CP7 and CP8⁴²



⁴¹ The basis for Network Rail’s freight growth forecasts assumes that VUC rates will increase in line with the trajectory under our revised policy, so our freight growth trajectories are fully consistent with our revised capping policy for VUC rates. Our PR23 draft determination: [supporting document on outcomes](#) discusses freight growth forecasts in more detail.

⁴² For simplicity, the implied profiles in Figure 3.2 are calculated assuming constant traffic levels over the entire period.

- 3.32 It is important to note that while this profile illustrates the expected trajectory of charges, they will need to be recalibrated as part of the next periodic review and decisions regarding the level of the VUC for operators will be revisited at that time.
- 3.33 To this end, we intend to commence early work with Network Rail and industry during CP7 to consider the implications of a review of the Vehicle Track Interaction Strategic Model (VTISM) that has been undertaken by Serco (on behalf of RSSB), to understand the implications for VUC rates in the next control period⁴³. In light of the changes in VUC rates from the PR23 recalibration process, we consider there may be merit in also reviewing other aspects of the VUC methodology alongside this. This could lead to further changes in our understanding of the full directly incurred costs for different traffic types.
- 3.34 We will ensure this work is undertaken early in CP7 – alongside consideration of any other factors likely to materially affect this charge – so that any implications for the magnitude of potential further changes in VUC rates in the next control period are understood in good time, and we can prepare accordingly to ensure that the VUC fully recovers the direct wear-and-tear costs from freight operators.

Charter operators

- 3.35 As with freight operators, VUC rates paid by charter operators are capped below their fully cost-reflective rate. This includes VUC rates paid by North Yorkshire Moors Railway and the Jacobite services run by West Coast Railways, which we have treated as being akin to charter services for the purposes of this policy, given the nature of their services (primarily steam heritage services provided over summer).
- 3.36 In PR18 this capping policy meant that average increases in charter rates over CP6 were capped at 5% from the end of CP5 to the final year of CP6. Based on Network Rail's latest recalibration outputs, we estimate that the average increase under a revised trajectory to achieve full cost-reflectivity by the end of CP7 would be around 21% (compared to around 11% if rates instead increased to reach cost-reflective levels calculated in PR18).
- 3.37 We have less information on the potential impact that this increase would have on charter operators. Given the low level of income that is raised from this group of operators, and taking into consideration the commercial position of charter operators, we consider at this stage that it would be proportionate to align our

⁴³ We said in our April 2022 consultation that it was too late in the PR23 process to consider changes to the vertical track damage formula, based on the outputs of Serco's work.

capping and phasing-in policy for charter operators with our revised policy for freight, as described above. This means that all VUC rates would continue to increase along the same trajectory as was envisaged in PR18. As with freight, the remaining caps that apply to VUC rates would be unwound over CP8. This would also help to maintain simplicity in the overall charging framework by avoiding the need for different glide paths.

- 3.38 However, we intend to refine our understanding of the impact of Network Rail's PR23 recalibration exercise on charter rates between now and our final determination, to ensure this remains appropriate.

Next steps

- 3.39 The recalibration process for the VUC is continuing and we will keep our draft decisions under review, particularly if there are major changes in cost-reflective rates that materially affects the analysis presented here.
- 3.40 Network Rail will publish its price list in July 2023. This will reflect our draft decision on phasing-in of further VUC increases for freight and charter operators, as set out in this section. We intend to engage with industry shortly after the publication of draft price lists so that stakeholders have an opportunity to fully understand the implications of our policy, before submitting responses to our draft determination.
- 3.41 We will then confirm our decisions on this policy in our final determination in October 2023.

Other VUC issues

- 3.42 As part of its recalibration exercise, Network Rail has consulted and concluded on some proposed changes to the administration of the VUC for CP7. These include removing vehicles from the CP7 VUC price list that have not operated on Network Rail's network at any point over the last six years; and limiting the period during which train operators can be refunded for the use of default rates to a maximum of 12 months from the introduction of a vehicle to the network⁴⁴.
- 3.43 We are supportive of these changes. We will shortly be consulting on changes to model access contracts to give effect to all PR23-related changes to access

⁴⁴ Network Rail initially consulted on a proposal to limit refunds to the start of the financial year in which a new or modified VUC rate is agreed. It has now amended this proposal, following industry feedback, so that the maximum refund period is 12 months.

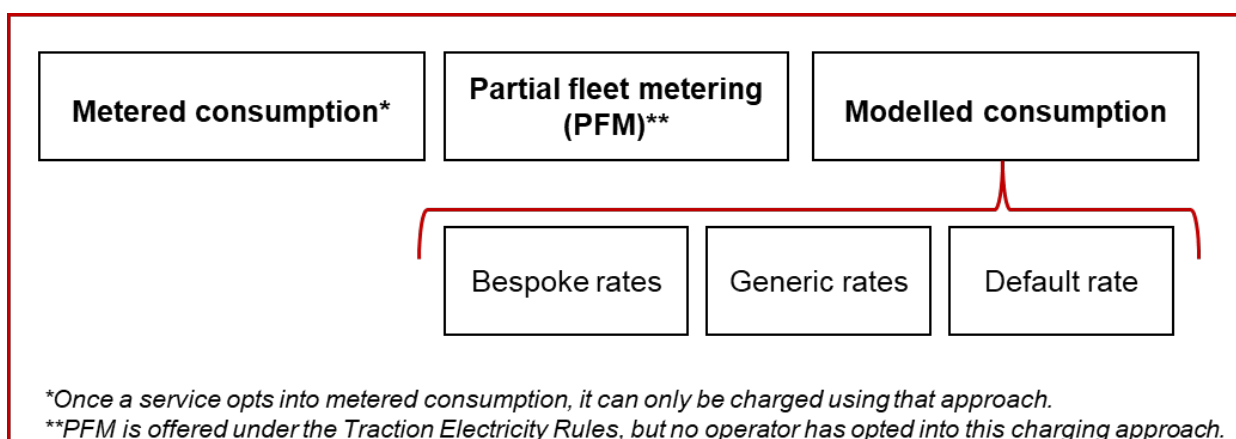
charges. As part of this, we will set out the changes to track access contracts that are necessary to amend the VUC refund period.

- 3.44 Network Rail’s recalibration conclusions document also confirmed that it will amend the VUC guidance for CP7 to include, among other things, a clause which stipulates that a new VUC rate should be calculated for existing vehicle types that are downgraded to a lower than heavy axle weight (HAW) route availability (RA). This followed on from a decision in our October 2022 conclusions document. We expect this guidance to be made available to the industry in advance of the start of CP7 and will update industry in due course.

Traction Electricity (EC4T) Charge

- 3.45 The traction electricity (EC4T) charge recovers the cost of electricity supplied by Network Rail to power trains.
- 3.46 The amount that is paid in EC4T charges depends on electricity prices – rather than being a charge set for the whole control period. The *calculation* of the charge is based on one of three approaches: (a) metered consumption (based on readings taken from meters on trains); (b) modelled consumption (based on estimated consumption, subject to an end of year volume reconciliation exercise); or (c) partial fleet metering, or PFM (which extrapolates metered consumption from metered trains to estimate consumption for un-metered trains). Modelled consumption can itself be estimated using one of the following types of consumption rates: (a) ‘bespoke’ rates; (b) generic rates; and (c) default rates.

Figure 3.3: Summary of EC4T charging approaches



3.47 In our October 2022 conclusions document, we provisionally confirmed some changes to these charging approaches⁴⁵. These changes are intended to simplify EC4T billing arrangements, as well as encouraging operators (particularly those introducing new services to the network) to make greater use of metered consumption. Metering is the most cost-reflective and accurate charging approach for traction electricity, and strengthens operators' incentives to optimise their traction electricity consumption on the network, as they pay the actual cost of their energy consumption.

3.48 These changes are:

- (a) Removing the PFM charging approach. This was on the basis that PFM appears to be complex but of little value to operators, given that no operator has chosen to use it since its introduction in PR13⁴⁶. However, we said that we would keep this decision under review until later in PR23, taking account of whether there has been any take-up of PFM during the rest of CP6, and if there has been any change in the prospect of its potential use in the future.
- (b) Removing the facility for new train services to obtain 'bespoke' modelled consumption rates from the beginning of CP7. However, we said the effectiveness of this policy in encouraging metered consumption depends on the removal of generic consumption rates for CP7, which we said we would consider in further detail.

3.49 The rest of this section sets out our draft decision on each of these proposed changes.

PFM charging approach

3.50 Since publishing our October 2022 conclusions document, we have continued to monitor the potential update of PFM. We are not aware that any operator has applied to use this charging approach under the Traction Electricity Rules. Furthermore, we are aware that some train operators are currently using on-train metering (OTM) on part of their fleet, so are able to opt into PFM, but are instead using modelled consumption rates to pay for EC4T usage on the rest of their fleet.

3.51 In light of this, and that no operator has used this approach since it was introduced in PR13, we do not see a significant prospect of PFM take-up in the near future. We

⁴⁵ We also confirmed that we would remove the loss incentive mechanism from the calculation of EC4T 'wash-up' payments.

⁴⁶ This change was also broadly supported in previous PR23 consultations on the charging framework.

also do not consider that removing PFM would discourage the use of full OTM, as we are not aware of any evidence suggesting that it has had any influence on train operators' incentives to take up OTM. We are therefore confirming that **we intend to remove the PFM charging approach for CP7.**

Bespoke and generic modelled consumption rates

- 3.52 In our October 2022 conclusions document, we said that we were minded to remove new bespoke modelled rates from the start of CP7 for all new train services. For the purposes of this policy, we defined a “new train service” as any service that uses vehicles that are brand new to the industry, or existing vehicles that require a new modelled consumption rate (for example, because their operator moves them to a new service code).
- 3.53 However, as explained above, we recognised that this policy would more effectively provide operators with an incentive to adopt OTM if we also removed the availability of generic consumption rates in CP7. This is because it could otherwise lead operators to instead adopt an existing generic consumption rate, rather than opting into OTM. This would mitigate the intended benefits of this proposal and could inadvertently lead to a less cost-reflective charging regime.
- 3.54 We therefore asked Network Rail to consult on the implications of removing generic consumption rates, as part of its recalibration consultation. This depends on the extent of use of existing generic rates, as well as operators' future plans, e.g. in respect of meter fitment.
- 3.55 Network Rail has sought industry views on the impact of removing generic consumption rates from the start of CP7, as well as undertaking further analysis on existing billing approaches. This has shown the following:
- (a) In respect of passenger train operators, current and future use of generic consumption rates is moderate. This is because many non-metered operators have already obtained a bespoke modelled rate for EC4T billing purposes. Furthermore, some operators are also planning to move to OTM in the near future (in some cases driven by contractual requirements). Network Rail has been liaising with the small number of train operators that it has identified as being most affected by the removal of this type of modelled rate,

to ensure that they are aware of the impact and the options available to them in advance of CP7⁴⁷.

- (b) In respect of freight operators, Network Rail is proposing to introduce a set of default consumption rates to replace the existing generic consumption rates available. This default rate would be set to equal the highest modelled consumption rate for each class of service⁴⁸. As these are very similar to the existing set of generic rates, the impact of making this change will be negligible for freight operators.

- 3.56 This indicates that the impact of removing generic rates would be relatively limited, and in particular would not prompt a significant number of services to be automatically moved to a default consumption rate at the start of CP7. Operators with affected services have until the start of CP7 to obtain a bespoke modelled rate⁴⁹, which will be more accurate than their generic consumption rate, or move onto metered consumption.
- 3.57 Furthermore, respondents did not raise any other points in response to Network Rail’s recalibration consultation that we had not considered in coming to our provisional view on the availability of modelled consumption rates.
- 3.58 We are therefore satisfied that removing generic consumption rates would also be a proportionate change, and would strengthen our existing proposal to remove the facility for new train services to obtain ‘bespoke’ modelled consumption rates from the beginning of CP7. We have published an [impact assessment](#) alongside this document setting out all the factors we have considered in coming to this decision.
- 3.59 For the avoidance of doubt, this means there would be no provision to begin applying for, and have approved, a *new* bespoke modelled rate from the start of CP7. Existing modelled consumption rates that are currently in use can continue to be used to bill operators for EC4T consumption in CP7.

Electrification Asset Usage Charge (EAUC)

- 3.60 We confirmed in our October 2022 conclusions document that the Electrification Asset Usage Charge (EAUC) would be retained in its current form.

⁴⁷ We understand there are just three passenger operators who are routinely using generic consumption rates, two of which have OTM equipment partially installed on the impacted fleets.

⁴⁸ This is consistent with how passenger default rates are set.

⁴⁹ Network Rail has also said that if an application for a new bespoke consumption rate is in progress before the end of CP6, then the operator will be allowed to complete the application during the first year of CP7.

- 3.61 The main steps in calculating EAUC rates are as follows: (i) forecasting average annual maintenance and renewals costs of electrification assets over 35 years (for AC and DC assets respectively); (ii) estimating the proportion of these costs that are variable; (iii) allocating variable costs to passenger and freight operators based on their forecast share of electrified vehicle miles; and (iv) dividing these cost allocations by forecast electrified vehicle miles (for passenger) and forecast electrified thousand gross tonne miles (for freight), to derive a set of charges per electrified vehicle mile / kgm for passenger and freight.
- 3.62 Network Rail has recalibrated this charge for CP7, following the existing methodology as described above, and using the cost variability assumptions that were used to calculate EAUC rates at PR18 – but updated to reflect the latest cost and traffic forecasts contained within its SBP. Based on this information, EAUC rates are set to increase quite significantly, by between 13% (for passenger AC traffic) and 55% (for freight DC traffic). The primary reason for these increases is a change in the volume and mix of forecast electrified traffic on the network:
- (a) In the case of AC rates, there has been a fall in the forecast annual average traffic-driven cost of maintaining and renewing AC electrification assets. However, forecast electrified passenger vehicle miles have fallen by an even greater amount. This means that passenger EAUC rates (on a per vehicle mile basis) have increased. It has also led to an increase in freight EAUC rates because freight traffic is now being allocated a greater *proportion* of traffic-driven costs for AC electrification assets, based on its higher long-term share of AC vehicle miles.
 - (b) In the case of DC rates, there has been a slight increase in the forecast annual average cost of maintaining and renewing DC electrification assets. Combined with a fall in forecast electrified passenger vehicle miles, this means that passenger EAUC rates have increased. Freight traffic has previously been allocated an extremely small proportion of traffic-driven costs for DC electrification assets (less than 1%), so a small change in DC costs and the DC traffic mix drives a large change in freight DC rates (though this rate remains very low in absolute terms, as the new rate is forecast to recover less than £20,000 in traffic-driven costs per year from freight in CP7).
- 3.63 These changes in EAUC rates reflect an implicit assumption within the EAUC methodology that the variable cost of maintaining electrification assets does not vary linearly with traffic. In practice, it is possible that the cost variability assumptions used to calculate EAUC rates may be affected by a lower overall level of electrified traffic on the network (i.e. the proportion of costs identified as variable

with respect to traffic may also fall, which could partly offset these observed increases in rates). However, Network Rail has consulted on using the same cost variability assumptions as in PR18, and this was broadly supported. Network Rail has also said that it considers these assumptions remain appropriate for CP7.

- 3.64 As such, and noting that we have not considered any changes to the EAUC methodology thus far during PR23, we are broadly content with Network Rail's approach to the recalibration of this charge at this stage. However, Network Rail is still refining aspects of this exercise, which may lead to further changes in rates. We will continue to work with Network Rail on this. Our formal approval of the recalibrated EAUC will be provided later this autumn, once we are satisfied that it reflects all the decisions made in our final determination.

Charter slot charge

- 3.65 The purpose of the charter slot charge is to recover Network Rail's costs for activities undertaken specifically for charter services for which it is not otherwise funded (e.g. bespoke gauging activities).
- 3.66 We said in our October 2022 conclusions document that we would not be making any changes to the charter slot charge through PR23. However, we noted that Network Rail is considering combining the slot charges for steam services into a single uniform rate for all journey lengths, as part of its recalibration exercise. We said that we will consider the outputs of Network Rail's recalibration exercise – including views from industry – in deciding whether to confirm this change to the charter slot charge.
- 3.67 Network Rail has since formally consulted on this change to the structure of the steam slot charge. Respondents were broadly supportive of this change and raised no concerns with it. Network Rail confirmed in its conclusions document that it intends to implement this change.
- 3.68 In light of industry's views on this, and recognising that this would simplify the billing process for charter operators, we are content with this change to the steam slot charge. As the calculation of these charges is not directly affected by our assessment of Network Rail's SBP, we expect the slot charge rates set out in Network Rail's recalibration conclusions document will be the final rates in place for CP7 (in 2023-24 prices)⁵⁰.

⁵⁰ See Table 5 of Network Rail's conclusions document.

4. Station charges

Summary

Network Rail has received around £350 million in annual income from the station long term charge (LTC) and Qualifying Expenditure (QX) charge in CP6. The station LTC comprises around £250 million of this income.

Network Rail has recalibrated the station long term charge (LTC) for CP7, based on our October 2022 conclusions document and the methodology outlined in its recalibration conclusions document. We are reviewing the outputs of this recalibration exercise, in advance of the publication of new CP7 price lists for large and non-large stations.

Network Rail is also in the process of agreeing the Qualifying Expenditure (QX) charge with operators at managed stations. Once this has been completed, Network Rail will submit a proposal to us for the fixed element of the QX charge. We will provide an update on this in our final determination.

Station Long Term Charge (LTC)

- 4.1 We said in our October 2022 conclusions document that we would make two small changes to how the long-term charge (LTC) is set. Specifically, amending the list of large / complex stations for which an LTC will be calculated using station-specific expenditure forecasts; and setting the operational property element of new stations at 10% of that for equivalent existing stations, for a fixed five-year period from the date of opening.
- 4.2 Network Rail has recalibrated this charge for CP7, consistent with these decisions⁵¹. It has also amended the calculation of station LTCs for non-large / complex stations – which have previously been based on route-level expenditure forecasts – to reflect region-level expenditure forecasts. This reflects Network Rail's internal restructuring that has taken place since the start of CP6.

⁵¹ We note that our list of large / complex stations – as set out in Table 3.1 of our October 2022 conclusions document – listed Highbury and Islington station as a single station. This station is shared between two SFOs and has two LTCs. Network Rail has calculated both LTCs using station-specific forecasts of expenditure, reflecting the division of assets between SFOs. This means that the total number of large / complex stations is 33, rather than 32 as stated in our conclusions document.

- 4.3 We have been working with Network Rail to understand the recalibrated outputs and ensure they are consistent with its SBP. This shows that total forecast income from station LTCs is around 20% higher than in CP6. We understand that the primary reason for this is an increase in forecast operational property renewals spend, which is the largest component of this charge⁵². This reflects, firstly, that actual operational property spend on station assets has been higher in CP6 than was forecast in PR18 (when LTCs were last set). It also reflects that some regions – particularly Wales & Western – are forecasting a further increase in spend in CP7, relative to CP6. In the case of Wales & Western, which has the poorest overall station asset condition, the increase in forecast expenditure is partly to address a backlog in schemes that have been deferred from previous control periods.
- 4.4 We have reviewed Network Rail’s operational property forecasts as part of our assessment of Network Rail’s SBP. We are content with these plans at this stage. We will continue to work with Network Rail as it refines its recalibration exercise, in particular to ensure that it appropriately reflects our draft decisions in respect of key assumptions such as efficiency.
- 4.5 Furthermore, there have been some significant changes in individual station LTCs for CP7⁵³. We understand the main reason for this is that, as explained above, the increase in forecast operational property spend varies significantly by region – so, for example, the LTCs for stations in Wales & Western would increase on average by more than other regions. Additionally, we understand that:
- (a) Some stations have moved into different categories which are used to allocate regional-level expenditure (based on more recent data on daily station entries).
 - (b) The move from route-level to region-level expenditure forecasts means that stations are now being allocated a share of regional maintenance, renewal and repair expenditure, instead of route-level expenditure. Although this will not affect total station expenditure, it does affect the allocation of expenditure to individual stations particularly where different routes within a given region had significantly different station portfolios.
- 4.6 We consider that these changes are consistent with the overall station LTC methodology and reflect how Network Rail manages its station portfolio, as well as

⁵² This is partly offset by a fall in forecast station information and security systems (SISS) expenditure.

⁵³ This is distinct from the overall change in LTCs due to increases in underlying maintenance, repair and renewal (MRR) costs recovered through this charge (which, as explained above, we consider to be reasonable and consistent with Network Rail’s overall SBP).

the expected allocation of expenditure to different stations in the long run. We are continuing to work with Network Rail to understand the impact of these changes on specific operators. Our formal approval of recalibrated LTCs will be provided later this autumn, once Network Rail has finalised its recalibration exercise and we are satisfied that it reflects all the decisions made in our final determination.

- 4.7 We also note that Network Rail is producing a guidance document which will provide further explanation on the calculation of LTCs. We support this, as it should improve understanding of how LTCs are calculated for different station types, and help to facilitate more informed discussions between industry parties. Network Rail has confirmed that this will be published on its website before the start of CP7.

Qualifying Expenditure (QX)

- 4.8 The Qualifying Expenditure (QX) charge is made up of a ‘fixed’ element, recovering direct costs such as station staff, cleaning and refuse collection costs, and a ‘management fee’ element which recovers overhead costs and allows for a reasonable profit. Only the management fee element at managed stations is regulated by ORR; the fixed element is determined by negotiation. We understand from Network Rail that these negotiations remain ongoing.
- 4.9 We will continue to approve the management fee element of the QX charge for managed stations. Network Rail intends to submit a proposal to us for this element of the charge later this summer, once it has agreed the fixed QX charge with operators at its managed stations. We will consider this proposal when it is received, and will provide a further update on this in our final determination.

Annex 1: Supporting documents

Alongside this document, we have also published:

- a) [Updated impacts of changes in track access charges on rail freight traffic – revised report by MDS Transmodal.](#)
- b) [Updated impacts of changes in track access charges on the transport by rail of biomass – report by MDS Transmodal.](#)
- c) [Impact assessment](#) on capping / phasing-in VUC increases for freight and charter operators.
- d) [Impact assessment](#) on availability of modelled EC4T consumption rates.



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