EC4T and TERs– GBR's Charges Scheme

Industry Engagement ahead of Funding Period 1 (2029 to 2034)

Please note, these slides will be published online and will be available, here.

Introduction and purpose

– Conor Murrells

Workshop purpose

- This is the ninth of our workshops exploring options for GBR's future charges scheme: today we will focus on future policy options for Electricity Current for Traction (EC4T) and Traction Electricity Rules (TERs). Today's workshop focusses on ***policy options***, rather than purchasing strategies, with the aim of securing better outcomes for the industry in Funding Period 1 (FP1; 2029 to 2034).
- We will provide an overview of **the provisions in the Access and Management Regulations** (AMRs) that permit GBR to recover the costs of electric traction (through EC4T charges), and the broader context of what GBR will be permitted to do. This is central to our emerging policy options.
- During today's workshop, we will summarise the key findings of our research into the current set of policies, including the limitations we have found. We will then talk through a series of options which we think address these limitations.
- The main priority for this work is to seek stakeholder views on our **current early-stage options for FP1,** for how we could simplify EC4T for all operators, and provide greater predictability in billing which operators have told us is important to them.
- Caveat: All policy options discussed during the workshop carry no legal weight or commitment that they will come into effect. We are seeking industry views to help shape our proposals, ahead of formal consultation.

Legislative context

– Conor Murrells

Understanding rail reform

ORR has an established role in relation to EC4T and the Traction Electricity Rules (TERs). However, the Railways Bill will transfer access and use functions managed by ORR to Great British Railways (GBR)

- Rail reform will change the institutional responsibilities for determining track access charges:
  - *GBR will develop and set the Charges Scheme for access to and use of GBR infrastructure. ORR will lose its current statutory decision-making powers in relation to policy design and determination of charges.*
- In anticipation of GBR's formal establishment, Network Rail is leading a structured programme of industry engagement to inform the development of GBR's Charges Scheme in FP1.
- Stage one of this engagement is a series of workshops to: review the existing charging framework, capture stakeholder views and test policy options ahead of formal consultation in Spring 2027. Further detail about this engagement can be found, here: Developing GBR's Charges Scheme.
- Today's workshop is a continuation of this policy development work, with a particular focus on testing EC4T policy options for potential implementation in FP1. Feedback from this workshop will help to inform our policy development.

Key link: https://www.gov.uk/government/publications/railways-bill/railways-bill-making-best-use-of-the-rail-network

Key legislative principles – traction charges

With respect to traction charges, our assumption is that GBR will remain subject to the existing rules in the Access and Management Regulations (2016)

SCHEDULE 3 (7): If the additional or ancillary services *(…)* are offered by only one supplier the charge imposed for the supply of those services must not exceed the cost of providing the service, plus a reasonable profit.

- This is a material difference from our other regulated track access charges, because it means traction charges will sit ***outside the scope of the Railways Bill 2026.***
  - As a result, GBR will pay EC4T charges. Traction charges can be based on the cost of provision instead of cost directly incurred, and can include a profit element.
- Consistent with its role under reform, ***GBR will be be responsible for setting policy and establishing a methodology for the calculation of traction charges associated with use of GBR infrastructure.*** We are working on the assumption that ORR will not have a legislative duty to set, approve or regulate any aspects of traction charges.
- Decisions taken by GBR about traction charges will be appealable to ORR ***consistent with the appeal process today (Regulation 32).*** Here: Access & Management Regulations (Schedule 3).

Key link: https://www.gov.uk/government/publications/railways-bill/railways-bill-making-best-use-of-the-rail-network

Context and assessment

– Gareth Russell

EC4T: Problem statement

We have reviewed how the policies governing EC4T are currently working, and have identified limitations that add complexity and uncertainty for operators

Reform

- Today, Network Rail oversees a pass-through of EC4T cost to operators. The Industry is moving to a model where an integrated body will have a stake in both passing through that cost, but also incurring it through its own services.

Rates

- The Default Modelled Rate inflates the value of the wash up, and contributes to large fluctuations in payments to or from operators. The result is a complex and inefficient process to move 'hypothetical' money around the industry for no benefit.
- The approach to assumed consumption where meters are not present needs to be reviewed, where the current modelled rates are possibly too granular for purpose.

Billing

- The Consumption Wash Up leads to unpredictable financial outcomes for operators each year. This leads to uncertainty in financial planning
- A modelled operator's bill is in part dependent on the behaviour choices of other operators and how this impacts on the allocations in the consumption wash up. This issue is compounded for operators who travel through multiple ESTAs.

Incentives

- The infill mechanism is currently too lenient, and the penalty mechanism is ineffective as it returns money back to all operators.

Case for change

While there is no legislative driver for change, GBR provides an opportunity to design EC4T as a coherent charging framework for the whole industry, rather than simply carrying forward arrangements developed under a different institutional model

Simplicity: A simpler approach would give non-GBR operators greater transparency, certainty and predictability over how their charges are determined.

Risk allocation: The future framework can make a clear policy choice about where differences between billed and actual electricity costs should sit, rather than reallocating them between operators through the consumption wash-up.

Incentive alignment: Rates, metering and infill arrangements can be designed as a coherent package that supports the efficient use of traction electricity and uptake of on-train meters.

Promoting wider traction-policy objectives: Subject to further legal and policy consideration, there is an opportunity to align EC4T charges with targeted decarbonisation incentives.

EVIDENCE

Risk allocation: 85 % of the EC4T charge would sit with GBR. 100 % of the Default Modelled Rate consumption sits with GBR.

Simplicity: The Consumption wash-up represents approximately 6 % of the pre-wash-up charge, with around 16 % of its value relating to non-GBR operators.

Incentive alignment: 71 % of modelled consumption costs and 82 % of infill currently relate to future GBR operators.

Guiding principles for EC4T + TERs reform

GBR provides us the opportunity to explore alternatives which could improve the process for all. We have been guided by the following principles in our work to date:

1. **Simplicity:**
   How GBR charges operators for their electric traction should be simple to understand, helping them make informed choices.
2. **Predictability/Transparency:**
   We want to make it easier for operators to be able to predict their EC4T bill, and to understand why it is what it is.
3. **Cross-Subsidy:**
   No operator should benefit financially from how costs are allocated between all operators.
4. **Reducing volatility:**
   The volatility in billing, as a result of the process today, makes financial planning more difficult.
5. **Incentives:**
   We want to retain (and strengthen) the incentive for operators to invest in On-Train Metering.

Emerging policy options

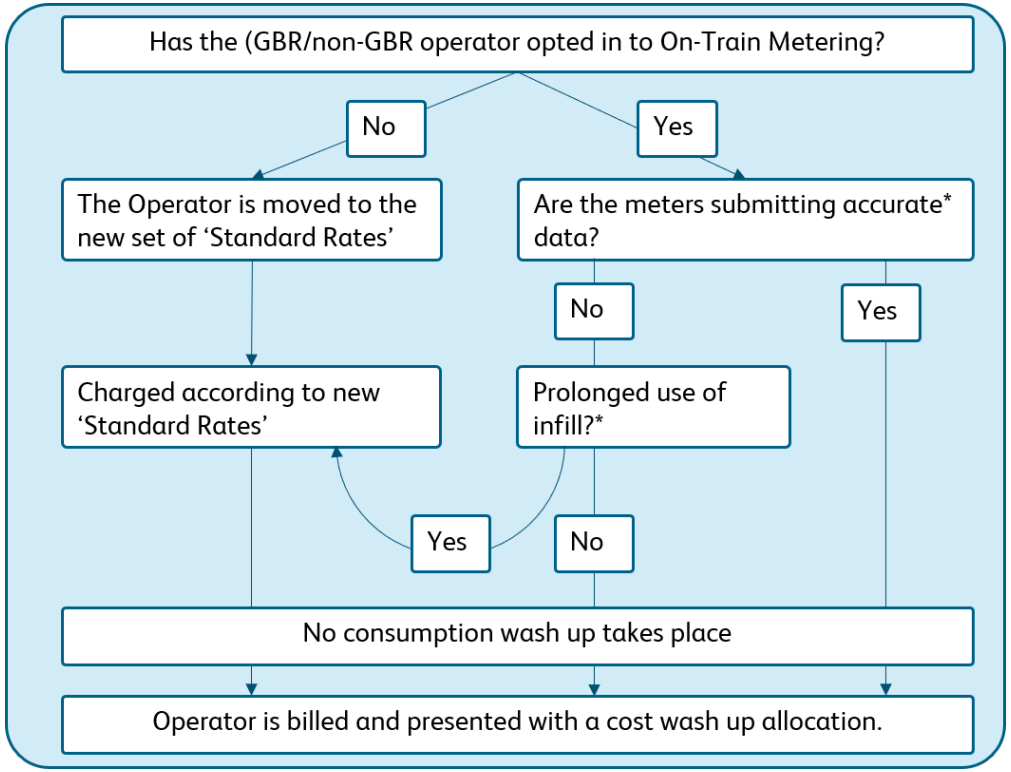
– Gareth Russell & Hannah Cropp

Summary of emerging options

We have developed a radical set of policy options for discussion which we think address our case for change, and to test stakeholder views for reforming this policy area

- There is no legislative driver for these changes. However, we recognise that with GBR comes the opportunity to redesign the EC4T process.
- Most of the emerging policy options can be 'implemented' on a standalone basis.
- However, we believe that, subject to stakeholder testing, they can be implemented as a coherent package.
- We are also keen to understand if some of our options require further refinement, and what that might look like.

Please note: As with all our engagement so far, the options we have suggested do not represent policy commitments.



Remove existing Modelled and Default Modelled Rates from the Price List and introduce a set of ‘Standard Rates’

Our first two options are designed to introduce simplicity, we think they would need to be introduced together

1 Remove the modelled rates from the price list

Policy option:
Take the ORR’s CP7 policy one step further, and remove all modelled rates from the price list. **All** Operators on a modelled rate would then have to choose between installing On-Train Meters, or run under a new ‘Single Rate’.

Rationale:
The Modelled Rates are outdated, and through continuing the ORR’s policy of not introducing new modelled rates, we see this as an opportunity to simplify the policy.

2 Devise a new set of ‘Standard Rates’

Policy option:
In parallel with removing Modelled and Modelled Default rates, calculate a set of ‘Standard Rates’ applicable to all operators. We will develop this further through a detailed piece of work.

Rationale:
Alongside the removal of all Modelled Rates, there is a need to devise a new set of rates for operators who cannot or do not opt-in to On-Train Metering.

Desired outcomes:
A set of assumed consumption rates that strike a balance between the punitive default rate, and the current modelled rates which we think are too specific. We will be undertaking specific work to determine a new set of ‘Standard Rates’. As well as a simplified Price-List that treats all non-metered operators equitably.

Discussion of our simplification options

Here we have set out the strengths and weaknesses of our first two options, with discussion points to help us shape this proposed policy option further

Strengths:
- A consolidated set of rates applied to all operators treats GBR and non-GBR operators equally.
- It should introduce a greater level of simplicity and transparency
- Depending on the approach taken, new rolling stock would not automatically attract the highest rate on the price list.

Weaknesses:
- Depending on the approach taken, the 'Standard Rates' could be less accurate.
- Initially, a new set of rates introduces some uncertainty for operators.

! **Design statement:**
The modelled price list for modelled rates today has a high degree of specificity. This could be an opportunity for simplification.

! **Design statement:**
Modelled rates today are fixed for the control period. This is an option we could continue for FP1.

Discussion points:
What would be an appropriate level of granularity for designing a set of default rates (e.g., Passenger/Freight, Long distance/inter-urban/commuter, vehicle class types)?

Remove the Consumption wash-up

Discussion point:
Do you support the option to provide operators with greater certainty over its consumption bill, instead of having exposure to the negative or positive financial outcomes of the consumption wash-up?

Our third option aims to give all operators greater levels of confidence over their final EC4T bill

Policy option:
Transfer the risk from operators to GBR (IM) for all operators by removing the consumption wash-up for all operators. The cost wash up would still apply to operators as it does today.

Rationale:
This option is developed to introduce greater certainty in the consumption operators are paying for. The trade-off being the current model where every operator's final bill is dependent to some degree on the behaviour choices of other operators, with positive or negative financial implications that are hard to predict.

Desired outcome:
Provides non-metered operators a greater degree of accuracy and predictability in their billing. No changes in how the cost wash up is implemented.

Strengths:
- Provides operators with greater certainty and ability to project EC4T spend.
- By not carrying out a wash up, operators are not impacted by any other operators own fleet and decisions it makes around On-train Metering.

Weaknesses:
- Operators will no longer have the possibility of benefitting from the consumption wash-up as they do today.

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Design consideration:
This option would move EC4T provision from a cost-neutral model for the infrastructure manager, to a profit model. Further legal & policy tests on how GBR treat an assumed profit will be carried out.

The potential impact of removing the consumption wash-up

Without calculating new Standard Rates, it is difficult to confidently model the impact of removing the cost wash-up. However, we have conducted an initial high-level summary of the potential impact on non-GBR operators

Simplicity: Across both non-GBR passenger and freight operators, less than half were involved in the consumption wash-up (and we forecast that due to changes in fleet even fewer could be involved in future).

Risk allocation: GBR would take the risk that actual consumption outstripped what was billed. Moreover, no operator would receive a rebate or additional charge. Through our analysis, a number of wash up values were less than £100k.

Incentive alignment: The presence of Default Modelled Rates has increased the rebates provided to operators, which would be removed from this model. We anticipate that replacing Default Modelled Rates with newly calculated Standard Rates would reduce the overall amount billed.

Promoting wider traction-policy objectives: There is an opportunity to deliver whole-industry outcomes from assumed profit, which needs to be explored further.

	Operator	Participation in 2025/26 wash-up	Received rebate in 2025/26 wash-up
Non-GBR passenger	A	Y	
	B	Y	
	C	N	
	D	Y	
	E	Y	
	F	N	
	G	N	
	H	N	
	I	N	
Freight	J	Y	
	K	N	
	L	Y	
	M	Y	
	N	Y	
	O	Y	

Next steps: while we cannot share data for individual operators, we can talk you through what this option would mean for you specifically. We are doing further detailed analysis to model the potential impact of this option, using theoretical rates.

Strengthen the infill mechanism & incentive

Option 4 is to tighten the tolerances for the use of infill and remove the infill incentive charge

Policy option:
Reform the rules for infill use where meter readings are incomplete, but with clearly defined tolerances and thresholds. We would introduce a process to move Metered Operators onto the new 'Single Rates' for sustained breaches. We have yet to determine a set of scenarios for when this would be applied.

Rationale:
The current approach is not incentivising operators to fix meter issues, with a reliance on in-fill data over the long-term. The infill incentive charge, while adding complexity to the system, has not been as effective at driving positive outcomes as expected as these sums are returned to operators.

Desired outcome:
A clearer, more simple policy for incentivising accurate meters, and reducing reliance on infill over the longer-term.

Strengths:
- This option would provide a simpler mechanism for handling on-train metering issues
- This simplification would help reinforce consistent application across all operators
- Implications of using the infill mechanism would be better understood and easier to predict.

Weaknesses:
- It would introduce uncertainty in billing if meters are not maintained with the use of infill/transition to the 'Single Rate'.

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Design consideration:
We need to further develop the logic of this option into a policy if it is supported. What are the acceptable tolerances for the effective use of infill, and are there common scenarios across fleets where infill use would be acceptable?

Next steps

– Conor Murrells

Summary and next steps

- During this session, we have provided an overview of the emerging options we are developing, which could address recurring limitations that stakeholders have told us are important.
- It is our emerging policy intent that we will seek to simplify processes where there is industry appetite, and strengthen incentives to drive positive outcomes.
- **Outcome: the information shared and gathered during these workshops will help to inform GBR's Charges Consultation in Spring 2027 (ahead of FP1).**

Key dates / Look ahead – upcoming charges workshops
EC4T workshop on 10 November [GBR Operators] – We will use this session to share our current policy options for EC4T.
Mark-ups Workshop No.2 on 17 November [Freight Operators] – share early findings of market segmentation and demand elasticity analysis.
Mark-ups Workshop No.2 on 24 November [Open Access and Charter Operators] – share early findings of market segmentation and introduce our net revenue methodology.
Overview of charges proposals on 13 January 2027 – concluding session to present our proposals ahead of formal consultation.

For more information on our charges and performance workshops, please visit this link: GBR's Charges and Performance Schemes.

Emerging policy option	Next steps
Remove modelled (and 'the default rate') from the price list	Further analysis of the impact, in conjunction with the 'Standard Rates' option if preferred.
Introduce a new set of 'Standard Rates'	Commission detailed work to devise a new set of 'Standard Rates'
Remove the consumption wash up	Further analysis of the impact
Strengthen the infill incentive	Further develop a set of scenarios and thresholds where infills can be used

How you can help shape GBR's Charges Scheme and Performance Scheme Statements for FP1

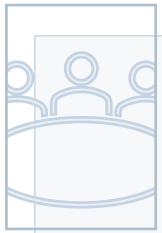
Ways to get involved:

- Technical workshops on important charges and performance scheme topics.
- Targeted engagement with freight, devolved bodies, open access, other infrastructure managers, and funders.

We are committed to:



Early visibility of emerging approaches.



Open feedback and transparent reporting.



Listening to concerns and perspectives.

For more information on our emerging proposals for charges and performance , please visit this link:
https://www.networkrail.co.uk/industry-and-commercial/developing-gbrs-charges-and-performance-schemes/

If you have any questions or would like to discuss this further, you can contact the team via our dedicated inbox:
chargesandperformanceschemes@networkrail.co.uk