

Track Access Charge Discounts – 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

– Caitlin Scarlett

Workshop purpose

- This is the eighth of our workshops exploring options for GBR's future charges scheme: today we will focus on future policy options for Track Access Charges Discounts. Today's workshop **focuses primarily on traction discounts**, following feedback from stakeholders in the March workshop.
- If you would like to recap **the provisions in the Railways Bill** that permit GBR to offer Track Access Charge Discounts, and the broader context of the **Subsidy Control Act 2022**, further information can be found here: [Discounts Workshop \(March\)](#). This remains central to our research.
- During today's workshop, we will summarise the advice and options that Oxera has presented to us on future approaches to offering traction discounts to non-GBR operators. We have circulated the report from Oxera. **We ask that stakeholders familiarise themselves with the options presented in this report ahead of the workshop discussion.**
- The main priority for this work is to seek stakeholder views on our **current early-stage proposals** for how we can implement a traction discount scheme in FP1.
- 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.

Summary of Oxera's 2026 research on traction discounts

– *Conor Murrells*

Oxera research

We commissioned Oxera to provide independent advice on how GBR could provide traction discounts to non-GBR operators under the revised legislative framework set out in the Railways Bill.

- **Scope:** Examined European case studies and relevance of current CP7 discount scheme; identified approaches; and tested options against the Railways Bill and emerging AUP.
- **Output:** Oxera's research identified 3 distinct policy models.
- Crucially, the research does not recommend a preferred option. It provides options to inform GBR's future policy decisions, which we will test with stakeholders today.
- Oxera developed design considerations (right) to help inform the structure of the eventual policy. In addition, Oxera has considered evidence requirements and impact on operator behaviour or choices.

DESIGN CONSIDERATIONS

Applicability to existing fleet: Should the policy apply to existing lower-carbon traction rolling stock, or new, or both?

Duration: What is a necessary amount of time to achieve a lasting behaviour change? What signals can the scheme provide to support long-term incentives to invest, and is this desirable?

Operating cost differential, or capital cost: Should the policy target the operational costs or incentivise investment in new/modified rolling stock?

Bi-mode vs full electric vs alternative fuels: Should the policy only discount EC4T costs, or support the take up of lower-carbon fuels too?

Interaction with other discounts: Where GBR may also offer mode-shift discounts through the VUC, how could a traction discount be delivered alongside?

Structure of the discount: Provided through a rebate, and made available to which low(er) carbon traction types?

Option 1 – Uniform discount to the VUC

- This approach would apply a uniform, fixed-percentage discount to the VUC set by GBR, which would be determined during the Funding Periodic Review and recalibrated every 5 years.
- Calculating the total cost of the policy would comprise of three high-level steps:
 1. Calculate the cost of the discount based on existing traffic levels;
 2. Forecast the cost of additionality (i.e., traffic flows that switch from diesel to lower carbon traction); and
 3. Consider any additional costs from new-to-rail traffic flows. Different discount levels and caps may be required to remain within a defined budget.



DESIGN CONSIDERATIONS

Evidence requirements: confirmation of traffic running and traction-type profiles.

Interaction with existing discount schemes: it could run concurrently with a mode-shift discount, but the sum total of both discounts cannot exceed 100 % of the VUC.

Electric traction vs alternative fuels: discrimination between traction types is minimised, but some traction choices may bring greater environmental benefits than others.

Advantages	Administrative requirements for both operators and GBR are relatively low – the approach is unlikely to require periodic applications, panel assessment, or detailed carbon impact analysis.	Minimises discrimination and market distortion – ensures the discount is available on equal terms to all operators undertaking comparable activities using low-carbon traction.
Disadvantages	Environmental incentives – a uniform discount across all low-carbon traction types does not target the specific benefits associated with each traction type.	Overlap with other discount schemes – by coupling the policy to the VUC it risks creating complexity and duplication with modal shift discounts also administered through the VUC.

Option 2 – Discount to EC4T

- This approach would apply a fixed-percentage discount to EC4T for all operators using electric traction, which would be determined during the Funding Periodic Review and recalibrated every 5 years.
- There are two models for how this discount could be implemented:
 1. As a percentage reduction on the unit rate (KW/h) of electricity billed; or alternatively,
 2. As a proportion of a pre-defined budget based on electrified train miles.
- It is assumed that the discount rate would become part of the annual EC4T process, not administered through periodic rebates.



DESIGN CONSIDERATIONS

Interaction with EC4T wash-up: additional complexity with the modelled consumption wash-up and incentivising On-Train Meters.

Minimising market distortion: the discount should balance recognising past investment and current electric traction, without over-rewarding based on existing market share.

Demonstrable additionality: the policy should monitor the greater use of electric traction at the margin.

Advantages	Avoids discount policy overlap – by detaching the discount from the VUC there is no risk of overlap with modal shift incentives.	Financial incentives – it targets the operating cost differential with diesel, incentivising the uptake of electric traction mileage.	Evidential requirements for both operators and GBR are relatively modest – data is readily accessible and easy to understand.
Disadvantages	Limited traction scope – by definition, it would not apply to alternative fuels (without a separate scheme in place), which distorts investment.	Comparatively more complex – the EC4T process is inherently more complex than periodic VUC rebates, which requires careful consideration.	Wash-up transparency – need to provide operators with visibility of subsidy award.

Option 3 – Calibrated discount based on cost differentials

- Option 3 draws on the principles of the DfT's Mode Shift Revenue Support (MSRS) scheme – essentially applying a discount based on the lowest of two values: financial need and carbon reduction.
- Unlike MSRS, the carbon reduction and financial need would be calculated on an average basis, rather than for each flow. GBR could establish these values on a £/kgm and p/vm for freight and passenger operators, respectively. Diesel would provide the baseline for both financial need and carbon reduction.
- The discount could then be applied through either the VUC or EC4T (as per Options 1 and 2), with the rate structured to reflect the differences between alternative fuels and electric traction.



DESIGN CONSIDERATIONS

Upfront calibration: policy requires an extensive assessment of average carbon reduction and financial cost differences.

Complexity: there is an inherent trade-off between a complex MSRS-model that requires flow-by-flow applications, or a simpler average-based approach.

Funding Period Review planning: may not appropriately consider how diesel prices change during the duration of the policy.

Advantages	Environmental incentives – by calibrating a discount rate for electric traction and alternative fuels, the policy reflects the specific benefits associated with each traction type.	Structured support – by building a two-tier assessment it prioritises schemes that generate largest carbon reduction
Disadvantages	Evidential requirements for both operators and GBR are relatively complex during the upfront calibration – policy requires an assessment of average cost differences.	

Our key conclusions from Oxera's research

GBR's future approach to traction discounts should support decarbonisation whilst preserving incentives for investment and innovation.

To achieve this:

- **Support should be targeted at delivering additional decarbonisation outcomes.** Discounts should incentivise changes in traction choices or operating behaviour that would not otherwise occur. This is important to demonstrate additionality and ensure compliance with the Subsidy Control Act.
- **The treatment of existing services requires careful consideration.** Excluding existing electric or alternative traction services risks penalising operators that have already invested in lower-carbon technologies, whereas including them risks funding behaviour that would have occurred in any event.
- **Discounts could be linked to incremental improvements rather than absolute outcomes.** For example, support could be focused on increases in the proportion of traffic operated using lower-carbon traction, helping to balance investment protection with the need to demonstrate additionality.
- **Scheme design should recognise differing costs and commercial barriers across traction types.** Differentiated levels of support may be justified where they reflect differing decarbonisation benefits, maturity of technologies, or barriers to adoption.

Overview of our current thinking: traction discounts

– *Conor Murrells*

Traction discounts policy scope – key assumptions

Applicability to existing fleet: the discount should be available on a comparable basis for the whole fleet, reflecting current, planned and future investment choices.

Bi-mode vs full electric vs alternative fuels: traction discounts should as far as possible provide support for electric traction rolling stock and alternative fuels.

Duration: in response to stakeholder feedback on the need for longer-term certainty, we envisage a five-year period of discount support (linked to railway funding cycles).

Interaction with other discounts: as far as possible, traction and modal shift discounts should be administered through different mechanisms and remain separable.

Operating cost differential, or capital cost: we recognise the need for support with upfront investment, however, the intended scope is to support operating costs only.

Structure of the discount: the discount should be calibrated at a different levels reflecting the green credentials of traction, but not based on 'old' or 'new' rolling stock

Our emerging position – discounts for electric traction

Our policy intent is to introduce a traction discount policy that subsidises the cost of EC4T for all non-GBR operators using electric traction

Eligibility: all non-GBR operators using any form of electric traction (e.g., fully electric or bi-mode) would be eligible for a traction discount administered through EC4T.

➤ Key design consideration: we are exploring whether or not eligibility should be restricted to operators with On-Train Metering, to incentivise the roll-out of meters.

Policy aim: incentivise the up-take and continuation of the use of electric traction, predicated on GBR's duty to deliver in the public interest (which includes the effect on the environment).

Calculating the policy scope: The scale of the discount 'budget' would be based on an overarching assessment of the cost difference between diesel and electric. This would be calibrated and fixed during the Funding Period Review to ensure that there is a clear financial link between the subsidy and the operating cost differential.

Subsidy award: During calibration, we would calculate an operator baseline of electrically hauled train miles. The subsidy would be awarded by apportioning a fixed yearly budget between operators of electric traction, in a manner that is proportionate to each operator's additionality (averaged over 13 periods). This means that we would not receive applications or oversee a governance panel. The discount would be administered annually for each year of the Funding Period.

➤ Key design consideration: we are exploring how to strike an appropriate balance between treating all operators equally and not over-rewarding operators with the largest share of the electric traction market.

Workshop discussion point: When operators achieve the same percentage growth in electric mileage, should they receive the same subsidy award, or should awards reflect the absolute increase in electric mileage delivered?

Alternative approaches to allocating the discount

The allocation of the fixed subsidy award varies depending on whether the scheme rewards the percentage rate of growth or the volume of additional electric mileage, which creates a policy choice.

All three operators increase electric mileage by the same 23.7 %. Multiple defensible interpretations follow:

(1) Equal percentage growth

Treat the same growth rate equally. Each operator receives one third of the budget, irrespective of starting scale. This is represented in Approach A, whereby the allocation share = operator growth rate ÷ total growth rates.

Operator	Baseline electric miles	Growth rate	Additional electric miles	A: growth rate-only allocation	B: volume-based allocation	C: total share of electric miles
A	30,000	23.7 %	7,110	33.3 %	57.1 %	57.1 %
B	15,000	23.7 %	3,555	33.3 %	28.6 %	28.6 %
C	7,500	23.7 %	1,778	33.3 %	14.3 %	14.3 %
Total	52,500		12,443	100%	100%	100 %

(2) Growth-related mileage

The allocation follows each operator's share of the additional electric miles realised. This is represented in Approach B, whereby the allocation share = operator additional electric miles ÷ total additional electric miles .

(3) Baseline and growth-related mileage

The allocation also considers the original baseline of electric miles, ensuring that current volume is not ignored. This is represented in Approach C, whereby the allocation share = operator electric miles (including baseline) ÷ total electric miles (including baseline)

Workshop discussion point: Should discount allocations recognise an operator's existing electric mileage base, or focus solely on incentivising additional electric mileage?

Recognising both growth and scale

Weighting the growth rate by the baseline converts percentage growth into additional electric mileage and avoids small baselines dominating solely through high percentage growth.

Operator	Baseline	Growth rate	Additional miles	A: growth rate-only allocation	B: volume-based allocation	C: total share of electric miles
A	30,000	21.3 %	6,390	16.7 %	39.2 %	52.9 %
B	15,000	26.1 %	3,915	20.5 %	24.0 %	27.5 %
C	7,500	80.2 %	6,015	62.8 %	36.8 %	19.6 %
Total	52,500		16,320	100 %	100 %	100 %

What changes?

Rate-only: Operator C receives 62.8 % because the 80.2 % growth rate dominates the calculation.

Volume-based: Operators A and C receive similar shares because both deliver about 6,000 additional electric miles.

Total share of electric miles: Operator A receives over double Operator C, despite having comparable additional miles, because of a larger baseline.

Our emerging position – discounts for alternative fuels

In parallel, our policy intent is to introduce a traction discount policy that subsidises the cost of the VUC for all non-GBR operators using alternative, lower-carbon fuels

Eligibility: all non-GBR operators using lower-carbon fuels (e.g., Hydro-treated Vegetable Oil, HVO) would be eligible to apply for a traction discount administered through the VUC.

Policy aim: incentivise the up-take of alternative fuels, predicated on GBR's duty to deliver in the public interest (which includes the effect on the environment).

Calculating the policy scope: The scale of the discount 'budget' would be based on an overarching assessment of the average cost difference between diesel and alternative fuels, most likely HVO. This would be calibrated and fixed during the Funding Period Review to ensure that there is a clear financial link between the subsidy and the operating cost differential. This is consistent with the approach for electric traction.

Subsidy award: Unlike our previous proposal, we think the structure of the subsidy award would be comparable to Network Rail's current modal shift policy. We envisage that an operator would apply for a subsidy outlining that the traffic flow seeking a discount demonstrates that the alternative fuel costs are more expensive. We would expect to see evidence from the operator or end-user that alternative fuel has been procured. The length of the subsidy award would be linked to the amount of fuel procured, up to a period of no more than 5 years.

➤Key design consideration: we would like to better understand the strategy for procuring alternative fuels (including the mobilisation time and scale of HVO), as well as the extent to which an operator can provide evidence that HVO has been procured and deployed.

Key differences between the policies

Workshop discussion point: How do stakeholders expect the HVO market to evolve over FP1, and what implications does this have for the duration, scale and evidential requirements of any subsidy scheme?

Our approach in effect would see GBR publish two distinct traction discounts policies, which we assume would be funded independently.

	Electric traction	Alternative fuels
Eligibility	All non-GBR operators using electric traction.	All non-GBR operators using lower-carbon fuels
Duration	Policy would be established and implemented for Funding Period 1, with a subsidy awarded yearly for these five years.	Policy would be established and implemented for Funding Period 1, with a subsidy awarded linked to the procurement strategy (but up to 5 years).
Application process	No applications or governance panel; the subsidy award would be apportioned yearly based on electric-hauled mileage.	Periodic applications from operators detailing the flows that are switching to alternative fuels.
Evidential requirements	No additional evidence required from operators; GBR will be able to calculate electric train miles based on billing.	Written evidence from the operator or end-user as part of application process.
Governance & assurance	GBR could work with operators to quality assure electric hauled mileage figures to ensure accuracy, if appropriate.	Similar to today, we would establish a formal governance panel for taking decisions and managing the budget.
Charging mechanism	Yearly discounts administered through EC4T, with a defined budget apportioned between operators	As today, periodic discounts administered through rebates to the VUC, on a first come, first served basis.

Overview of our current thinking: modal shift discounts

– *Conor Murrells*

Our emerging position – modal shift discount policy (Bulk freight)

Our policy intent is to introduce a separate discount policy specifically for ‘bulk’ new-to-rail freight.

- The focus of the policy will continue to be the introduction of new-to-rail services that would otherwise not have started. As now, it would be awarded through the VUC and EAUC.
- However, we have heard from stakeholders that a new approach is needed for bulk sectors, as the commercial reality is that volumes do not build iteratively in the same manner as Intermodal services.

Rail-served quarry to rail-served in land terminal		
Trains per day	Operating days per week	Total number of services to be cost neutral
1	1	28 services (or two trains per week)
Rail-served quarry to rail-served in land terminal – hypothetical financial appraisal		
Total rail costs	£15,500	FOC and end-user provided cost details
Total road costs	£14,750	
Net difference	-£750	Subsidy award is £600 (lowest of the two values).
Track access charge	£600	
Total subsidy award	£16,800	Subsidy ends when 28 services run, or sooner if two trains per week is established

A hypothetical application under the ‘Bulks’ discount scheme, where an operator forecasts 28 services over 7 periods before achieving sustainability.

Workshop discussion point: Should a bulks discount follow the existing new-to-rail model based on net revenue loss, or should it be developed as a bespoke policy focused on reducing the cost differential with road transport, and if so, how should it be designed?

KEY DIFFERENCES

Structure of the discount: Rather than a default reduction, we would award the lower of either 100 % of the variable charges or the net-loss per service.

Duration: Rather than specifying a set number of periods, the duration of the discount would be structured to support the operator with running the total forecast number of trains (within two years of the first service running).

Evidential requirements: Under this model, an applicant would need to set out:

1. How many trains it forecasts to run before becoming profitable. This would determine the discount ‘allowance’ (i.e. the ‘28’ trains in the example);
2. The cost differential between road and rail. Unlike today’s model, we would need evidence that the rail costs exceed the road costs.

Our emerging position – modal shift discount policy

Our policy intent is to replicate the current modal shift policy for CP7 in FP1, with one amendment to the scale of the subsidy award.

Key difference: the subsidy award would be capped to the net-loss value per service or 100 % of the track access charges, whichever is lower. The principal benefit of this approach is that we can tailor support to meet the commercial need, thus maximising the number of potential beneficiaries of the policy.

- The target of the policy will continue to be the introduction of new-to-rail services that would otherwise not have started operation (to be subsidy compliant).
- As now, it would be awarded through VUC and EAUC, for up to 13 railway periods (based on commercial need).
- As today, the evidential requirement would be to demonstrate that the service is loss-making (i.e., net revenue information) with confirmation from the end-user that goods are new to rail.

Workshop discussion point: Do stakeholders support retaining the current modal shift discount framework, with targeted reforms to improve affordability and value for money?

Rationale for capping subsidy award

- We have seen many examples where consistent application of a 100 % VUC discount has had disproportionate benefits to parties where the commercial loss is marginal.
- Since we have extended the discount period, the mean value of intermodal discounts has increased significantly, and early indications show 13 period discounts are becoming the norm.

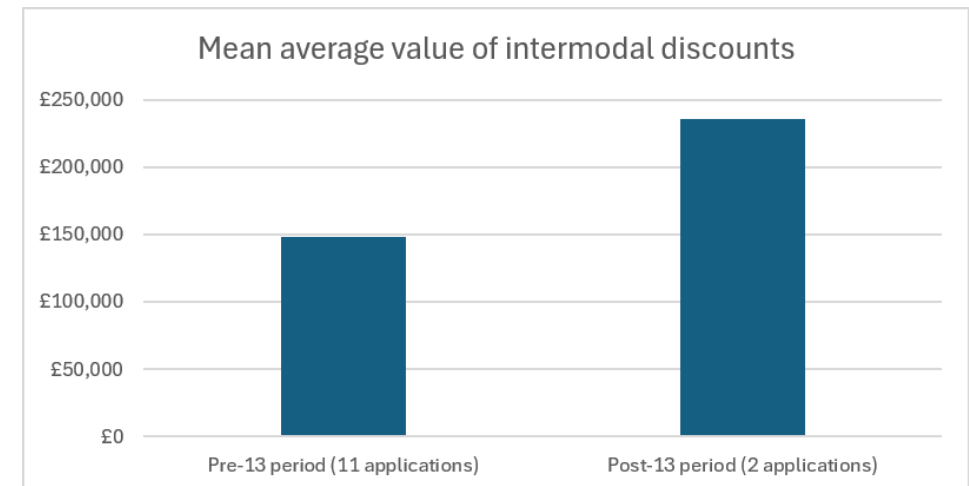


Figure 1: approved intermodal applications average value.

Next steps

– Caitlin Scarlett

Summary and next steps

- During this session, we have provided an overview of the research that Oxera has done on how GBR could administer track access charge discounts for alternative traction types.
 - It is our emerging policy intent that we will seek to set two separate traction policies in FP1: a discount administered through EC4T for electric traction, and for alternative fuels through the VUC.
 - We will continue to refine the development of these policies, ensuring they are subsidy compliant.
 - In parallel, we are seeking to strengthen the current modal shift policies by tailoring the approach for bulk rail freight services.
- **Outcome of our engagement in 2026:** the information shared and gathered during these workshops will help to shape our thinking on GBR's future approach to discounts, which will inform GBR's Charges Scheme Statement in FP1.

Key dates / Look ahead – upcoming charges workshops

EC4T and Traction Electricity Rules on 21 October [All non-GBR operators] – this will be an opportunity to discuss policy proposals for EC4T. Note: invites to be sent shortly.

Mark-ups Workshop No.2 on 17 November [Freight Operators] – we will use this session to share our early findings of market segmentation and demand elasticity analysis.

Mark-ups Workshop No.2 on 24 November [Open Access and Charter Operators] – we will use this session to share our early findings of market segmentation and introduce our net revenue methodology.

Overview of charges proposals in January 2027 – this will be a concluding session where we 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](#).

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:
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