Public

Code Administrator Meeting Summary

Workgroup Meeting 2: Improving Transmission Connection Asset Charging

Date: 03 December 2025

Contact Details

Chair: Jessica Rivalland, Jessica.Rivalland@neso.energy

Proposer: Joe Colebrook, joe@innova.co.uk

Key areas of discussion

The aim of Workgroup 2 was to discuss updates to the Terms of Reference, Charging Infrastructure Assets, worked examples, the four Proposal options, and Retrospectivity.

Action Log Review

The Chair led a review of the Actions Log.

Action 1: The Workgroup member confirmed progress and agreed to provide an update at the next meeting.

Action 2: The Proposer presented the worked examples during the Workgroup meeting. This action was closed.

Action 3: The Proposer presented the NESO response on charging Infrastructure Assets. This action was closed.

Action 4: The Chair provided Ofgem's position, noting that further guidance would be shared if developed. This action was closed.

Action 5: This action was closed. However, NESO Legal provided feedback on the practicalities of changing asset definitions and retrospectivity. They emphasised the need for precise wording and a comprehensive review of the charging methodology, including Sections 3 and 11, to ensure consistency and accuracy. Action 14 will follow on from this.

Action 6: Remains open with further work required.

Action 7: The spreadsheet was updated and circulated to Workgroup Members. This action was closed.

Action 8: The changes were approved by the CUSC Panel. However, further changes were suggested during the Workgroup meeting, therefore this action remains open.
Action 9: Action is closed with a follow up action 17 on all Workgroup members.

Terms of Reference (ToR) Discussion

The Chair explained that the CUSC Panel reviewed the Terms of Reference, changing the wording and broadening the scope.

A Workgroup Member raised concerns that the revised wording for Terms of Reference b) was very broad and could require the Workgroup to consider all related modifications, suggesting it should specify "relevant" modifications to avoid unnecessary work. The Proposer clarified that the intention was to allow consideration of other relevant modifications beyond DCP461 and agreed to take the suggestion of adding "relevant" back to the CUSC Panel.

A Workgroup Member mentioned DCP464 as another potentially relevant modification and suggested reviewing it for possible interactions. The Proposer agreed to take an action to review DCP464 and DCP392, and invited others to raise any other relevant modifications.

The Chair noted that the consultation for DCP461 had closed, and an update would be provided at the next Workgroup.

The Workgroup discussed whether the wording for Terms of Reference f) should remain as revised. There was a debate about whether the deletion of certain text diluted the clarity regarding cost recovery, especially for DNOs, but consensus was reached to keep the Panel's update.

A Workgroup Member highlighted the link between terms f) and h), emphasising the need to consider commercial implications and regulatory funding uncertainties.

Charging Infrastructure Discussion

The Proposer presented the response from the TNUoS charging team regarding how Infrastructure Assets are charged. The discussion on Infrastructure Assets and charging

clarified the parameters that determine local substation charges for directly connected generation. These charges are influenced by factors such as voltage, redundancy, and total generation volume, and are standardised across the country. Therefore, the proposer confirmed that the local substation charge is not directly proportional to the number of Super Grid Transformers at the Grid Supply Point (GSP) and adding additional infrastructure assets at a GSP may not increase the local substation tariff.

There was a discussion that revolved around the distinction between shared and non-shared assets in energy infrastructure, particularly substations, and how these classifications impact charging mechanisms. Shared assets are those used by multiple customers, while non-shared assets are dedicated to a single User, but the concept of "shareable" assets introduces the potential for future shared use, influencing cost allocation and predictability.

The Workgroup highlighted the need to evaluate whether current charging models, particularly for substations, are fair and cost-reflective, and whether changes in asset classification (e.g., from connection to infrastructure) impact tariffs. Moving assets from connection to infrastructure increases the total costs recovered by Transmission Owners, which are then spread across all Users, potentially leading to inequities in cost distribution. The workgroup noted that due to the €2.50/MWh cap on generation tariffs, the majority of the cost is likely to be put on demand Users via the Transmission Demand Residual (TDR) tariff.

The Workgroup noted the need to balance cost reflectivity with simplicity and fairness. They highlighted the potential for unintended consequences, such as incentivising inefficient connections or creating discrepancies between transmission and distribution charging. The importance of considering how changes to infrastructure asset charging would interact with other regulatory frameworks, such as the Strategic Spatial Energy Plan (SSEP), the Regional Energy System Plans (RESP) and DNO charging methodologies was also discussed.

Worked examples

The Proposer led a detailed walkthrough of worked examples illustrating current asset classification and charging practices. These examples served to establish a baseline

understanding of existing practices to classify assets, and to identify potential areas for change.

One notable example involved a single DNO at a Grid Supply Point (GSP). In this case, the 400 kV bus bar and transformers were classified as connection assets, while the 132kV bay was also classified as a connection asset. The boundary between connection assets and User assets was typically established at the 132kV bay. In scenarios where multiple DNOs share a GSP, the classification differed significantly; the 400 kV bus bar and transformers were classified as infrastructure assets, and the 132 kV bays for each DNO were classified as connection assets. This scenario emphasised how the shared use of assets affects their classification.

Further discussions included tertiary connections. For instance, when a single User connects via a tertiary winding of a transformer, the Super Grid Transformer (SGT) is classified as an infrastructure asset, while the 33 kV transformer and switchgear are classified as connection assets. There was some debate about whether all SGTs at a site should be classified as infrastructure assets when a tertiary connection is involved.

In the context of Grid Parks, a single-user Grid Park classified the SGT and 33 kV bus bar as connection assets, with the 33 kV bay and feeder classified as User assets. Conversely, in a multiple-user Grid Park, the SGT and 33 kV bus bar were classified as infrastructure assets, while the 33 kV bays for each User were classified as connection assets. Also discussed were directly connected final demand users, such as data centres, where the 400 kV bay, transformers, and 132 kV bay were classified as connection assets, indicating that the User assets began at the 132 kV bay.

The worked examples will be updated to incorporate the discussions. This includes clarifying ownership boundaries, adding scenarios that involve multiple Users at a single GSP, and ensuring consistency in the classification of assets across different scenarios, as well as updating the keys. These revised examples will be used to create workbooks for each Proposal option.

Proposal Options

Option One:

Option one proposes socialising all shareable or triggered reinforcement costs through to new Users, with the Workgroup discussing the need to define 'shareable' assets and the potential impact on locational signals and User incentives, noting that time to connect may become a more significant factor than cost to connect under future network planning regimes. The additional costs of reinforcement would be recovered through TNUoS charges. Due to the generation tariff cap, the majority of the additional burden would likely fall on demand customers, particularly domestic and industrial Users.

By socialising costs, this option removes the locational signal for embedded customers. This means that embedded customers would no longer see a direct cost difference between connecting to one GSP (Grid Supply Point) versus another. There was concern that this could lead to inefficiencies, as embedded customers might not consider the overall system cost when choosing where to connect.

This approach simplifies the charging structure by removing the need for DNOs to pass through specific reinforcement costs to individual embedded customers. It could be seen as fairer, as the costs of reinforcement are shared across all Users of the transmission system, reflecting the shared benefits of a stronger network. It was noted that this option might reduce cost reflectivity, as the costs of reinforcement would no longer be directly attributed to the triggering party. The additional costs would likely increase the transmission demand residual charge, which could lead to higher bills for demand customers.

There was concern that this could discourage competition by removing the cost signal for embedded customers, potentially leading to inefficient network usage. It was noted that time (i.e., how quickly a connection can be made) might become a more important signal than cost under this option. There was a concern about how this option would align with existing TNUoS methodologies. There was a discussion about the possibility of modifying the way local substation charges are calculated to make them more cost-reflective. This would involve moving away from the current high-level weighted average national figure to a more detailed and location-specific approach. However, it was noted that this would require a follow-on CUSC modification to address the complexities

and ensure fairness. It was also suggested that the current cap on generation tariffs (set at 2.5 €/MWh) might need to be reviewed. A potential future modification could involve adjusting this cap, possibly accounting for inflation or other factors, to ensure a more equitable distribution of costs.

Option Two:

Option two involves updating the definition of connection assets to ensure that Users triggering works, including at shared substations, are charged accordingly, aligning the treatment of connection and infrastructure assets, and ensuring that costs are allocated fairly and consistently across all types of customers.

The definition of connection assets would be clarified to include assets that are wholly or mainly used by a single customer. This would capture scenarios such as Grid Parks or tertiary connections where assets are used by specific customers. There was a concern that costs for these transmission works would be passed through to DNOs or directly to the embedded customers triggering the works. This option may result in DNOs being charged more than they currently are for transmission works, which could be passed on to their customers. This option could also increase barriers to entry for embedded customers due to higher upfront costs.

It was discussed that this option could improve cost reflectivity by ensuring that customers triggering transmission works bear the costs. By updating the definition of connection assets, it would provide greater clarity on how costs are allocated.

There was a question about whether this option would apply retrospectively or only to new reinforcements going forward. If applied retrospectively, it could impact existing contracts and create complexities.

It was noted that this option could align with DCP 461, which focuses on socialising costs within the distribution network. However, it was emphasised that this option should ensure consistency between connection and infrastructure assets.

Option 3:

Due to time constraints, the Proposer was not able to go through the slides for Option 3. The Proposer suggested the Workgroup members look through the discussion points,

included in the Workgroup slides that were circulated, and provide feedback via email for all options.

Retrospectivity

Retrospectivity was touched on, with the Proposer noting that a slide had been included in the pack for the Workgroup members to review.

Next Steps

The Workgroup agreed to discuss retrospectivity and legal drafting in future sessions.

Actions

For the full action log, click here.

Action Number	Workgroup Raised	Owner	Action	Due by	Status
1	WG1	MPS	Clarify with NGET how Grid Park assets are classified (Connection vs Infrastructure Assets).	WG3	Open
2	WG1	JC	Create worked examples showing how Assets could be charged, requesting contributions from Workgroup members.	WG3	Closed
3	WG1	JC/JR	Seek clarification from NESO Charging Team on how Infrastructure Assets are charged.	WG3	Closed
4	WG1	CP	Confirm Ofgem's position on the TNUoS Review and the possibility of changing Connection / Infrastructure Asset definitions.	WG2	Closed
5	WG1	AH	Contact NESO Legal to discuss the practicalities of changing Asset definitions and retrospectivity.	WG3	Closed
6	WG1	JC	Formalise the data collection requirements for Impact Assessment.	WG3	Closed

7	WG1	MPS	Update and share the spreadsheet for the Proposer's fourth option, after correcting the net asset value column.	WG2	Closed
8	WG1	JR	Amend Terms of Reference b) and f) and take back to CUSC Panel.	WG2	Open
9	WG1	JC	Consider retrospectivity issue.	WG3	Closed
10	WG2	JC	Review DCP464 for relevance and report back to the next Workgroup.	WG3	Open
11	WG2	JR	Provide an update on DCP461 and report back to the next Workgroup.	WG3	Open
12	WG2	JC	Update the worked example slides, including colour adjustments and clarifications, and circulate them for review.	WG3	Open
13	WG2	JR	Email OFGEM's open letter to all Workgroup members	WG3	Open
14	WG2	JC/AH	Review potential changes to Legal Text with legal team (possibly Section 3 or 11)	WG3	Open
15	WG2	JC	Prepare a workbook for options 1, 2, and 3 against the baseline for the next meeting.	WG3	Open
16	WG2	JC	Review DCP392	WG3	Open
17	WG2	All	Comment on the retrospectivity slide before the next meeting.	WG3	Open

Attendees

Name	Initial	Company	Role
Jess Rivalland	JR	NESO	Chair
Prisca Evans	PE	NESO	Technical Secretary
Joe Colebrook	JC	Innova Capital Ltd	Proposer
Aishwarya Harsure	AH	NESO	NESO Representative
Brian Hoy	BH	SP Electricity North West	Workgroup Member
Claire Hynes	CH	RWE	Workgroup Member
Damian Clough	DC	SSE Generation	Workgroup Member
Ed Birkett	EB	Low Carbon	Workgroup Member
Edda Dirks	ED	SSE Generation	Workgroup Member Alternate
Dimitrios Terzis	DT	SSEN Transmission	Workgroup Member Alternate
Grahame Neale	GN	LightsourceBP	Workgroup Member
Hector Perez	HP	ScottishPower Renewables	Workgroup Member Alternate
Helen Stack	HS	Centrica	Workgroup member
Jack Purchase	JP	NGED	Workgroup Member
John Brereton	JB	Enviromena	Workgroup Member
Kyle Murchie	KM	Roadnight Taylor	Workgroup Member
Matthew Paige-Stimson	MP	NGET	Workgroup Member
Philip Bale	PB	Roadnight Taylor	Workgroup Member Alternate
Rob Smith	RS	Enso Green Holdings Limited	Workgroup Member
Will Bowen	WB	UKPN	Observer