

# Meeting Summary

## TNUoS Task Force Meeting 7.5

<b>Date:</b> 18/08/2023	<b>Location:</b> Virtual - MS Teams
<b>Start:</b> 10.00	<b>End:</b> 14:00

### Participants

Attendee	Attend/Regrets	Attendee	Attend/Regrets
Adam Morrison (AM)	Attend	Joseph Dunn (JD)	Regrets
Aled Moses (AMo)	Attend	Joshua Logan (JL)	Attend
Anthony Diccico (AD)	Attend	Jo Zhou (JZ)	Attend
Binoy Dharsi (BD)	Attend	Lauren Jauss (LJ)	Regrets
Brendan Clarke (BC)	Attend	Martin Cahill (MC)	Attend
Christian Parsons (CP)	Attend	Niall Coyle (NC)	Attend
Charlotte Friel (CF)	Regrets	Nick Everitt (NE)	Regrets
Dave Tooby (DT)	Attend	Nicky White (NW)	Regrets
Deborah Spencer (DS)	Attend	Paul Jones (PJ)	Regrets
Elana Byrne (EB)	Attend	Sam Davies (SD)	Attend
George Moran (GMO)	Regrets	Sam Hughes (SH)	Regrets
Grace March (GMa)	Attend	Simon Lord (SL)	Attend
Harriet Harmon (HH)	Attend	Sinan Kufeoglu (SK)	Attend
Jacqueline Wilkie (JW)	Attend	Stephen McKellar (SM)	Regrets
James Stone (JS)	Attend		
John Tindal (JT)	Attend		
Jon Wisdom (JW)	Attend		

### Agenda Point 1: Introduction and Welcome

The Chair welcomed those attending the virtual meeting, noting the absences of Task Force members unable to attend. New ESO Subject Matter Experts (NE & MC) were introduced to the Task Force, and CP was introduced as the new lead ESO representative to take over from JS in September. The Chair informed the group that a previous Task Force member (Graham Pannell) would be returning to the Task Force in due course as an alternate representing Generators.

## Agenda Point 2: Action Review

Actions were reviewed and updates noted (please see the Actions section at the end of the document).

**ACTION 1** (JS): share Backgrounds Case for Change document with the Task Force for review and comment.

## Agenda Point 3: Stakeholder Feedback

A Task Force progress update was shared with the Task Force in June to allow members to engage with wider industry and stimulate stakeholder feedback, however it was noted that little feedback has been received to date. A Task Force member suggested that a revised format may be beneficial to help those less familiar with the intricacies of charging, i.e., a 'straw man' outlining the proposed change, implications (pros/cons), importance etc. and that the workstream proposals may better serve this purpose for gathering feedback.

Feedback from a previous Non-Domestic Energy Supplier Forum was shared by JS such as their agreement on the topics the Task Force is tackling, their areas of particular interest and an anticipation and need for visibility of the timings to raise modifications and potentially implement changes.

Feedback from the Transmission Charging Methodology Forum (TCMF) (shared by JS) was similar to that of the Non-Domestic Energy Supplier Forum re: topics and timings, plus it was commented that workstream projects groups should ensure the right representation and consideration of related work when progressing discussions (e.g. ensuring visibility of work relating to the Review of Electricity Market Arrangements and Locational Marginal Pricing, so as to improve awareness and avoid possible duplication of work).

**ACTION 2** (Task Force): Consider using initial workstream proposals as alternative format for information to stimulate stakeholder feedback.

## Agenda Point 4: OTNR Sub-Group Update

A Task Force member provided an update on the recent work by the Offshore Transmission Network Review (OTNR) Sub-group as to which elements of that work impact the Task Force's work and vice versa.

Topics from the sub-group identified as impacting the Task Force work were:

- The definition of offshore Main Interconnected Transmission System (MITS) nodes, with potential overlap then into onshore MITs and charging impacts for existing generators – N.B. the ESO representative confirmed that their view was that there wasn't sufficient evidence to justify that a change to the CUSC was needed and therefore no changes to current definitions are to be proposed by the ESO.
- Load flow modelling as a result of more complex meshed networks and the complexities of manual pro rata calculations involving onshore and offshore users vs use of the Transport Model load flow.
- Modelling High Voltage Direct Current (HVDC) circuits in the load flow model, e.g., impedance values being applied to then treat them like High Voltage Alternating Current circuits.
- Offshore charging zones, i.e., if and how these zones are created as part of the rezoning question, the size of zones, interactions with sharing, updates to the connectivity diagram – N.B. the ESO representative confirmed a modification has been drafted and is being taken to CUSC Panel by the ESO in August re: offshore charging zones.

With the sub-group beginning to complete its discussion topics, it was suggested by the ESO that a closure report was planned to cover the key topics and ensure all views raised were reflected to build on meeting minutes from the sub-group. It was noted that any resulting modifications should be raised as soon as possible.

**ACTION 3** (JS): Ownership and timings defined for the OTNR Sub-Group closure report.

Topics from the Task Force identified as impacting the OTNR Sub-Group:

- Security Factor, i.e., the treatment of the security factor and the impact on charges for offshore generators (reference was made to modification [CMP320](#) (Island MITS Radial Link Security Factor raised relating to Shetland link) and a suggestion for neutralising the effect of the security factor on local/wider circuits
- Usefulness of predictability vs cost reflectivity for addressing tariffs, i.e., consideration being needed for consequential impacts of meshed and shared circuits on load flows/direction, increased volatility for offshore tariffs and unknowns for the final circuit design and the use of the load flow approach for the Task Force to address the resulting unpredictability.

N.B. A Task Force member noted that there are different sources of risk which cause unpredictability in offshore tariffs with radial solutions (including factors such as interest rates) vs a coordinated/meshed solution. The Task Force member flagged this as a topic for the group to be aware of for consideration.

- Changing the Reference Node, i.e., impacting classification of offshore circuits and calculations for wider circuits and onshore local charges.
- Price signal vs revenue collection and the combination of charges/and credits based on how offshore grids are classified, and the impact of that on charges for offshore generators.

## Agenda Point 5: Reference Node Case for Change - Overview

The case for change for the reference node was reviewed by the group. This included the importance of the reference node post-TransmiT in producing different impacts on different parties (demand and generation) as well as changing both absolute and relative signals.

The author of the case for change outlined pros and cons for their suggestion of a generation-weighted reference node under the categories: Cost reflectivity (primary reasoning), Uncertainty and Effective competition.

Another Task Force member raised i) the increase in future demand, and ii) the reference node moving south due to electrification south, as support to the rationale for a change to a generation-weighted node. The member agreed with this as a newer reason to consider the change (considering the long-term discussions on this matter).

A separate Task Force member supported the theory for the change, and suggested scrutinising how the approach would reflect reality when the maths of the model is calculated.

An ESO SME suggested consideration should be made for how easy the change to the reference node would be and how this interacts with adjusting backgrounds, suggesting looking at what worked well pre-TransmiT.

When questioned as to whether the Authority were in favour of generation paying fewer charges as a result of possible changes, the Authority representative was open to conversation on the topic but felt that any proposal for a reference node change must be clearly justified and grounded with sufficient rationale.

It was discussed that, if a modification was raised, a possible Workgroup discussion could include evidencing impacts on costs to consumers as a result of possible changes to costs to generators.

## Agenda Point 6: Break

## Agenda Point 7: Reference Node Case for Change - Feedback & Further Discussion

Task Force members agreed that technical complexities and comprehensive solutions for the defect could be explored via Workgroups via a modification process.

The Chair collected agreement from the Task Force members present to move this issue to a draft modification proposal, The Chair also noted that consideration of any academic work being sourced should be incorporated into further discussions, and approaches substantiated relative to system investment and purpose.

**ACTION 4 (EB, DS):** For completeness, Task Force members not present at Mtg 7.5 are to provide their view on progressing the reference node case into a modification proposal.

JT volunteered for drafting the modification as a joint effort with members of the Task Force and the project workstreams to agree wording in a draft proposal form etc.

**ACTION 5 (JS):** A one-page report for the Charging Futures website to summarise the reference node modification plans and individuals involved.

**ACTION 6 (JT):** Draft modification proposal to be raised.

**ACTION 7 (JS, JT/CP):** BAU update to TCMF with ESO/Propose to agree who will present the Reference Node proposal to relevant TCMF.

## Agenda Point 8: Workstream Plan - Resource Allocation

The ESO representative presented the proposed allocation of lead and supporting members of the different workstreams, setting out general expectations for progression/development of the various defect work packages and suggested next steps and timings.

Next steps were identified as:

- Individual workstream teams to review the respective defects and key questions that have already been identified as the projects were scoped.
- Review the principle-based questions to provide initial viewpoints to be presented back for wider discussion with Task Force.
- For questions without a clear solution, recommend an approach to review these points (e.g., outline any further analysis/contributions required and timescales).
- Provide a draft 'straw man' overview (slides) of the points above by 11 Sept to then be collated and shared with the Task Force ahead of the next meeting (15 Sept).

The Authority representative suggested that project leads can request Authority representation in their workstream conversations if that would be of use.

**ACTION 8 (JS):** Co-ordinate with project leads about deliverables ahead of Mtg 8.

## Agenda Point 9: Lunch

Due to the swift progress of the meeting, the lunch break was removed.

## Agenda Point 10: Data Inputs Workstream – Initial Thinking

As the ESO are leading on the Data Inputs workstream, the ESO representative shared the proposed approach to this project. Further thinking in relation to part of the TNUoS tariff methodology and issues identified with negative scaling factors was also provided – including the defect and possible options for solutions.

A Task Force member added further questions for consideration:

- Can the scope of the Data Inputs project be clearly defined from the Backgrounds project (as the consultants integrated their analysis of these)?
- What should the scaling factors be?

- What fail-safes should be within the model to adjust for distorted outputs?

It was noted that possible solutions range from simple to more complex. It was suggested that further work could start to consider fundamental changes to the SQSS re: the application of scaling factors and methodology (however given its intricacy this may take years to complete).

Shorter-term mitigating solutions for the negative scaling issue were tabled as:

- Reducing fixed scaling factors (particularly for wind).
- Removing interconnectors from calculations.
- Implementing a generic scaling factor.

A Task Force member suggested a short-term solution where the variably scaled floors at zero with a separate adjustment applied.

A Task Force member asked whether this was a Task Force issue or more of an SQSS issue, with scaling factors due to be reviewed periodically anyway. The ESO representative (MC) reported that while fundamentally a SQSS issue, the factors are being reviewed (with Bath University and more industry parties in the future) but this will be a multi-year project (not providing the shorter-term fix for tariffs).

A Task Force member noted that charging model doesn't need to align with the scaling factors used in the SQSS as network build is determined more by the Network Options Assessment and a cost-benefit analysis against Year Round backgrounds, rather than the SQSS (which is closely linked with Peak Security).

A Task Force member mentioned that the detail of suggested scaling adjustments would need working through to ensure adjustments are sensible and don't create other consequential issues.

Next steps were identified as:

- Drafting a modification proposal to be shared with the Task Force before submission (including considerations raised during Task Force discussions as a handover for the eventual Workgroup members). The aim is for a modification to be raised in Q4 of 2023.
- Elements to be referenced/considered in this proposal are:
  - Review of the defect alongside the ESO's 10-year tariff projections.
  - Further developed option for the possible solution.
  - Consideration of any other SQSS and CUSC modifications required.
  - Alignment of this workstream with the Backgrounds workstream.

**ACTION 9** (JS/MC): Share draft 'negative scaling' modification proposal with the Task Force to review prior to submission.

## Agenda Point 11: Signals Workstream: CMP405 'TNUoS Locational Demand Signals for Storage'

A Task Force member presented slides detailing an overview of current CUSC modification CMP405: TNUoS Locational Demand Signals for Storage. This is due to some analysis output from the Task Force work so far interacting with the CMP405 work including a hypothesis for a positive correlation between charging and constraints in Scotland (for longer duration storage) and demand credit providing a more cost effective locational signal to storage assets. Details of the CMP405 overview presented can be found in the meeting slides.

It was felt by a number of those present that the Task Force should be aware of the interactions and commonalities between the CMP405 Workgroup discussions and upcoming work of the Task Force's Signals

workstream (which will need to consider impacts on investment decisions). The Task Force member presenting welcomed a viewpoint from the Authority on CMP405 due to concerns about uncertainty for investment planning if industry had to wait for the full package of solutions from the Signals workstream. This Task Force member notes that the demand credit design correlation could help define what steps are taken with demand in general.

Reference was made by Task Force members to the following points:

- Whether the Balancing Mechanism recognised value vs TNUoS (thought to not be as relevant due to the ability of storage to deliver energy back at a later time).
- The possibility of using a ‘cap & floor’ approach (up to that point blending the current model with actual data until there’s sufficient data from an asset) – this was supported by the presenting Task Force member.

While happy for the modification to be flagged for the awareness of the Task Force, the Authority representative questioned whether it was appropriate to discuss, or debate the merits of, CMP405 in such detail as that is the remit of the modification’s Workgroup.

The Chair was comfortable with the benefit that awareness of CMP405 would provide for the Signals workstream (to avoid overlap or working at crossed purposes with the modification) but agreed to discuss with the Authority representative separately for similar instances in the future.

This sparked a conversation across the group about Task Force workstreams being aware of current modifications that may influence their projects or be influenced by their projects. The Authority representative suggested that a brief overview of relevant live modifications could become an agenda point for Task Force meetings for workstreams or at least shared regularly for visibility to then take away and consider further with regards to their projects.

**ACTION 10:** (JS, CP, DS, EB): Review the current modification tracker for a version to feature in future Task Force meetings or shared for visibility.

### **Agenda Point 12: Next steps & Meeting Close**

The Chair summarised the meeting, highlighting the two defects provisionally agreed to move into draft modification proposals.

The Chair noted that the ESO representative would review the next steps for the workstreams and draft the agenda for the next meeting.

Regarding stakeholder engagement, the Chair encouraged Task Force members to speak to a variety of stakeholders for their views, report them back to ChargingFutures@nationalgrideso.com and prepare to discuss it at the Task Force meetings.

The location of the next in-person Task Force meeting on 15 September is to be confirmed to the group as soon as possible, and start times reviewed to consider travel time.

### **Action Item Log**

#### **Action items: In progress and completed since the last meeting**

<u>ID/ date</u>	<u>Agenda Item</u>	<u>Description</u>	<u>Owner</u>	<u>Notes</u>	<u>Target Date</u>	<u>Status</u>
1 18/08	2	Backgrounds Case for Change to be shared with the Task Force for review and comment	JS		Mtg 8	Open
2 18/08	2	Consider using initial workstream proposals as alternative format	Task Force	Discuss in Next Steps of Mtg 8	Mtg 8-10	Open

		for information to stimulate stakeholder feedback.		based on what's shared		
3 18/08	4	Ownership and timings defined for the OTNR Sub-Group closure report	JS	Closure Report to be shared with TF once complete (NP @ESO)	October	Open
4 18/08	7	For completeness, Task Force members not present at Mtg 7.5 are to provide their view on progressing the Reference Node case into a modification proposal	EB, DS		1 Sept	Open
5 18/08	7	A one-page report for the Charging Futures website to summarise the reference node modification plans and individuals involved.	JS	To also reflect any further views not captured at TF meeting 7.5 and provided as part of action 4 above.	15 Sept	Open
6 18/08	7	Draft modification proposal to be raised.	JT		Mid-Oct (JT to advise)	Open
7 18/08	7	BAU update to TCMF with ESO/Propose to agree who will present the Reference Node proposal to relevant TCMF.	JT, JS/CP	Topic to be added to TCMF Sept agenda for BAU update, Oct agenda to present mod	31 Aug (TCMF 7 Sept for BAU update)	Open
8 18/08	8	Co-ordinate with project leads about deliverables ahead of Mtg 8	JS	Check whether the Backgrounds workstream scope of work includes scaling as a consideration	30 Aug	Open
9 18/08	8	Share draft 'negative scaling' modification proposal with the Task Force to review prior to submission	JS/MC	JT and Backgrounds workstream to link with this project for updates	Q4 2023	Open
10 18/08	9	Review the current modification tracker for a version to feature in future Task Force meetings or shared for visibility.	JS, CP, DS, EB	An overview to alert workstreams of mods to consider	Mtg 8	Open

**Action items: Open actions from previous meetings**

<u>ID/ date</u>	<u>Agenda Item</u>	<u>Description</u>	<u>Owner</u>	<u>Notes</u>	<u>Target Date</u>	<u>Status</u>
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1 27/07	3	Consider whether updating the 'pseudo-CBA approach' to scaling factors is currently feasible with the data available and whether case for change should include the analysis from the consultants	JT	Consider as part of Backgrounds case for change	Mtg 8	Open
2 27/07	3	Provide a viewpoint as to the extent to which scaling factors currently mitigate volatility	Frontier/LCP		Mtg 8	Open
3 27/07	3	Consider whether backgrounds are complicating understanding of how charges work or a necessary element of the cost reflectivity of the model.	Task Force		Mtg 8	Open
4 27/07	3	Share the draft case for change for the reference node for Task Force feedback ahead of Mtg 7.5	JT, EB, DS		1 Aug	Closed
5 27/07	3	Share any academic preference for a demand-/generation-weighted reference node	AMo	Email shared with TF 22 Aug	18 Aug	Closed
6 27/07	5	Review past calculations for sharing to provide a recommendation for what work would be feasible now	Frontier/LCP	Information shared by SL 28 Jul	Mtg 8	Open
7 27/07	5	Consideration of renewables in sharing (wind vs wind, treatment of solar).	Frontier/LCP	JS to assess information needed	Mtg 8	Open
8 27/07	5	Exploration of turning off sharing to see impacts on final charges and volatility	Frontier/LCP		Mtg 8	Open
9 27/07	8	Consider calculating using a 5 year average rather than current 5 year method	Frontier/LCP		Mtg 8	Open
10 27/07	8	Consider whether deemed generation could be used as part of the ALF calculation.	Frontier/LCP	HH flagged that any TF work re: deemed generation would be prior to a DESNZ decision re: CfD. Can be a consideration for ALF discussions but closed as an action.	Mtg 6-10	Closed
11 27/07	8	Consider the information available to share with consultants & TF re: potential	JS		TBC: updates can follow after final	Open



		new ESO products and impacts on FPN, and possible new data input modification			internal reviews of proposed products	
12 27/07	8	Absolute values to be shared for the impact of using FPN only on Year Round components of the tariff.	Frontier/LCP	Material impacts possible for different scales of plant	Mtg 8	Open
13 27/07	8	Contact DNOs for information on key assumptions used in their Wk 24 forecasting.	JS, NW		Mtg 8	Open
14 27/07	8	Consider aligning Week 24 data with the SQSS change and move to gross demand.	JZ		Mtg 8	Open
15 27/07	8	Contact TOs for a view on what data inputs could be more regularly updated (re: locational tariff calculations) with a material impact and their view on revenue being deferred for a year	JS, NW	Will form part of wider Data Inputs workstream and discussion	Ongoing	Open
16 27/07	11	Respond to the email requesting workstream assignments.	Task Force		02 Aug	Closed
4 26/06	3-7	Explore possibility of identifying similar backgrounds with different interconnector flows.  Information to be shared with the consultants from the ESO in relation to the BSUoS (Balancing Services Use of System charge) Task Force work relating to this.	Frontier/LCP and JS	NW and JS to provide BSUoS IC work but possibility another FES scenario to be run might meet the request	Mtg 7.5/8	Closed
5 26/06	3-7	Can indicative monetary values be provided for the impacts of the different backgrounds on differently-sized projects.	Frontier/LCP		Mtg 6-10	Open
7 26/06	3-7	Additional analysis shared on metrics used to compare volatility between actual and estimated charges.	Frontier/LCP		TBC – Frontier need a steer on what is required	Open
10 26/06	3-7	Bring together the Task Force representatives and the ESO SQSS Review team (when in a position to do so) to discuss	JS, SS to explore with BD	To feed into case for change if required	TBC	Open

		potentially parallel/overlapping interests.				
11 26/06	8-10	Consultants are to explore the questions raised on zoning	Frontier/LCP	Considering what adding more zones would do to the existing Ref. Node work? Clarity needed around the definition for zones & differing from sharing factors. Frontier to provide additional note for pack?	Mtg 8	Open
12 26/06	8-10	Revisit ESO work on embedded generation in relation to the transport model and share with the Task Force if relevant.	JS & NW	To consider as part of distributed generation element work package	Ongoing	Open
14 26/06	12	Task Force members are to engage industry colleagues and stakeholders and feed back at the next virtual meeting (incl. substantive effects on other work)	Task Force	TF decision on format and whether workstream proposals will serve this purpose	Ongoing	Open
15 26/06	12	Draft the defect for backgrounds ahead of the next virtual meeting	JS, JT, LJ	Case for change with defect identified (with JS, NW)	Mtg 7.5	Closed
16 26/06	12	Draft the case for change on the Reference Node ahead of the next meeting	BD, JT, colleague of AM	Note from JT to be shared with the TF	Note shared w.c. 31/07 Discussed Mtg 7.5	Closed
17 26/06		Update from OTNR sub-group	JT		Mtg 7.5/8	Closed
6 17/05	7	ESO to proceed with the wider-remit zoning modification	JS	Drafted but further review needed - Updated to be provided at Aug TCMF	August	Closed
1 26/04	1	Provide update on recruiting Non-Domestic user reps to Task Force	JS & NW	Discussions ongoing for a named rep. Non-Domestic Supplier	Ongoing	Open

					forums updated by JS		
8 26/04	7	Further work on design vs cost reflectivity to be presented at Mtg 6	JS & NW		Feedback from legal and SQSS to be shared by JS via feed into case for change relating to Backgrounds	Mtg 8	Open
10 26/04	7	Investigate more granular data sources for DNO embedded distribution to support the methodology & analytics	JS		Need TF to identify the data needs before exploring sources (part of Distributed Generation work)	TBC	Open
11 26/04	8	Actions allocated across the TF group for topics progressing for further development or into draft modifications	JS		Packages to be agreed and volunteers sought via email post Mtg 7	Post Mtg 7	Closed