

To all parties with an interest in electricity transmission charges

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## **Transmission Network Use of System Charges – a Task Force Update**

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### **TNUoS Task Forces**

This update sets out our current thinking on the future work of the TNUoS task forces (“the Task Forces”), which in February 2022 we said was the most appropriate way to take forward any wide-scale review of electricity transmission charges.

Transmission Network Use of System (“TNUoS”) charges recover the annual cost of the provision, maintenance, and upgrade/expansion of the transmission system (currently c.£3.5bn). TNUoS charges are levied on generators (c.£800m) and demand users (c.£2.7bn). Stakeholders have expressed concerns about these charges, including in relation to their cost-reflectivity, unpredictability and absolute values.

In October 2021, we issued a Call for Evidence<sup>1</sup> seeking views on the extent to which reform of TNUoS charges is needed, the priority areas for reform, the vehicle for reform, and the timescales in which reform might be needed.

In February 2022, following general consensus that a review of TNUoS would be beneficial, we published our next steps<sup>2</sup>. We set out that the Task Forces will look at:

- Root causes of the unpredictability of TNUoS charges and how these might be addressed.
- Examination of the input data into the current model used to calculate the locational element of TNUoS to ensure charges remain cost reflective. This will consider the inherent trade-off between improving predictability and cost reflectivity.

Meanwhile, a longer-term Ofgem programme of work will look at TNUoS in the context of potential broader reform to the electricity markets, the changing energy landscape, and Net Zero requirements.

The Task Forces will look at improvements to today’s methodology whilst keeping its core assumptions and modelling approach unchanged. This does not rule out significant changes to elements of TNUoS, for example, the transport model, changes to the ‘backgrounds’ against which charges are calculated, or the approach to the demand-weighted distributed reference node. The connection boundary (i.e., the point at which assets attract Connection Charges<sup>3</sup> vs. TNUoS Charges) will not be in scope, nor will market-related changes such as Locational Marginal Pricing.

We stated our intention to work with National Grid ESO (NGESO) to:

- Draft the Terms of Reference for the TNUoS Task Force(s);

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<sup>1</sup> <https://www.ofgem.gov.uk/sites/default/files/2021-10/TNUoS%20CfE%20Final%20%28003%29.pdf>

<sup>2</sup> <https://www.ofgem.gov.uk/publications/tnuos-call-evidence-next-steps>

<sup>3</sup> Words which are capitalised are defined in the Connection and Use of System Code unless otherwise specified

- Give consideration to the ongoing engagement with industry during the Task Force process;
- Ensure that the cross-cutting issues of the broader trade-offs between planning, markets and charging are captured and that there are no 'gaps' between the work of the Task Force(s) and that of any longer-term programme of work; and
- Issue further communication over the coming weeks.

This letter sets out the work that has progressed since our February 2022 publication and includes our latest thinking on the Task Forces, engagement planning, and deliverables. As ever, we welcome feedback and will factor it into our thinking prior to formally launching the Task Forces. Any such feedback should be sent to our dedicated mailbox – [tnuosreform@ofgem.gov.uk](mailto:tnuosreform@ofgem.gov.uk) by 5pm on 8 June 2022.

## Scope of Task Forces

Our decision to progress this work through a Task Force reflects our desire to provide a flexible and constructive vehicle for industry, and for us, to consider the issues raised by stakeholders in respect of TNUoS Charges.

Whilst flexibility is at the heart of this work, we think it is appropriate to share our current thinking about what would or would not be in scope, building on the update we provided in February 2022.

## Areas out of scope

To avoid duplication between the Task Forces and the longer-term Ofgem programme as well as keeping the scope of the Task Force manageable, we believe the following should not be considered.

Item out of scope	Why
Moving away from load flow-based modelling	We consider that it is appropriate to retain the DC Load Flow approach to the calculation of TNUoS charges in the near term. Moving away from this fundamental premise of TNUoS charges would likely interact significantly with the work on longer-term arrangements for the electricity system, which is in its early stages. The Task Forces are aimed at delivering improvements in the near term.
Longer term work on the purpose and structure of TNUoS, including trade-off between market signals, network planning and network charging signals	The longer-term question of how TNUoS functions in a less centralised, more flexible energy system to support the UK's Net Zero commitments will be looked at in a separate programme of work. There are interactions with wider market reform which are likely to take longer. The Task Forces are aimed at delivering short term improvements.
Depth of connection charges (i.e., whether assets are 'Local' or 'Connection' or form part of the MITS)	Connection charges are levied entirely distinctly from TNUoS charges. We do not consider that it would be appropriate to make these Task Forces so broad in scope as to include Connection Charges given the fundamental differences

	<p>between them, and the likely longer timescales for reform that doing so would create. Stakeholders have not expressed the same degree of concern with the connection charging regime as they have with TNUoS, and we do not consider it therefore to be a key priority at present.</p>
<p>The methods by which NGESO forecasts inputs to the charging methodology.</p>	<p>We do not believe the Task Forces are the right place to undertake a detailed review of how NGESO forecasts certain input data. We consider that the input data itself should be subject to review, but that detailed discussions of how such data is derived is unlikely to be a productive use of the Task Forces' time. The underlying forecasting capability is under regular review by NGESO teams. For example, the move to probabilistic methods<sup>4</sup> in 2019.</p>
<p>Changes to how non-locational TNUoS charges are recovered</p>	<p>TNUoS is split into locational and residual elements. The Taskforce is tasked with reviewing the locational elements whilst the Targeted Charging Review (TCR) significant code review (and subsequent code modifications) has recently updated the residual elements of the methodology. We recognise the clear interactions between these two aspects of TNUoS charges, but we consider that whilst the values of non-locational TNUoS charges might change, the question of how such charges should be levied has been answered extensively through the TCR process. Equally out of scope shall be the calculation of the total amount due to be collected via TNUoS Charges, which has clear links to Price Controls and licencing arrangements for Transmission Owners (onshore and offshore)</p>

### Areas/Tasks in scope

There are significant areas that we currently believe are appropriate to be considered by the Task Forces and we have listed these below:

1. Reviewing the data inputs into the current locational TNUoS methodology to identify and quantify their effect on the predictability of TNUoS tariffs as a long-run investment signal, suggesting improvements as deemed necessary.
2. The calculation of the wider TNUoS charge components (exclusive of the 'Adjustment Tariff' used to support compliance with the Limiting Regulation), and the approach to zoning.
3. How closely the TNUoS methodology should align with the 'real world' operation of the transmission system (in the context of the intention of TNUoS being to provide a long-run marginal cost signal, not a short-run or operational signal).
4. Identification, consideration, and suggestions/recommendations of new inputs into the TNUoS locational methodology (e.g., signalling excess/insufficient capacity).

<sup>4</sup> <https://www.nationalgrideso.com/document/140781/download>

5. Existing data inputs such as Charging Bases and Error Margin Calculations.
6. Determining which elements of TNUoS charges should be paid by distributed generators with a clear, system-based rationale for any differences in treatment between classes of generators.
7. Appropriate treatment of island connections, and some Offshore developments including (solely in this context) the definition of a MITS Node, with consequential consideration of appropriate zoning methodologies for islands and Offshore (notwithstanding the longer-term position is subject to change in the context of other potential market reforms).
8. Determining any changes which will simplify the methodology and make it more approachable to new market participants.

This is not intended to be a definitive list and we would expect the Task Forces to also consider any relevant topics they identify during discussions that are not listed above, provided these are not considered to be out of scope. Although the Task Forces are not linked to an ongoing significant code review, and we have not directed NGENSO to facilitate the Task Forces, we do believe that it is appropriate for us to determine the extent to which any matters not listed above should be considered within scope, and will use our discretion to do so on a case-by-case basis.

We do not consider that the work of the workgroups reviewing the Expansion Constant methodology through Connection and Use of System Code (CUSC) Modification Proposals 315 or 375 should be taken forward by the Task Forces, and instead believe that it should be concluded through the open governance process. We invite views on any other CUSC Modification Proposals which might be usefully considered by the Task Forces<sup>5</sup>.

## **Structure of Task Forces**

### **Task Force meetings**

Whilst we recognise there may be a need for multiple task forces this update is focussed on Task Force 1. We currently think that Task Force 1 will have c.12 meetings (planning to meet twice a month). This approach balances the need to keep momentum and make progress, with time to undertake actions in between sessions and ensure the resource required from participants is reasonable.

To cater for the different members of the Task Force, we expect that meetings will be held in rotation between in person/hybrid meetings and virtual only meetings. Additionally, in-person meetings will, we expect, be held in more than one location (for example, a mixture of Ofgem and NGENSO sites). This is to balance travel between participants more fairly and align with public transport links.

A dial in or MS Teams option should be available for all events. In the case of a conference dial in, any materials such as slides should be shared separately before the start of the meeting.

### **Membership**

NGESO will Chair the meetings as an independent party and will be the secretariat for the Task Force. The Technical Secretary will be provided by the Code Administrator

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<sup>5</sup> Noting that we have not launched a TNUoS significant code review – should there be clear consensus from stakeholders that certain modification proposals should be considered by the Task Forces, we will work with the Code Administrator and relevant Proposer(s) to identify the best course of action.

function within NGESO. We feel that NGESO is best placed to undertake this work given its central role in the functioning of the Transmission System and in network charging.

Reflecting on the size of previous Task Forces, we believe having up to 16 members (excluding Chair, secretariat and Ofgem) is appropriate. This allows for membership to include different interested parties across different roles within the industry, which we consider to be beneficial.

It is important that members do not act for their own employers or businesses. We recognise that among industry there is a range of expertise, and varying depths of knowledge: we do not consider that it would be appropriate or necessary for Task Forces to be comprised solely of TNUoS experts, rather we believe it is essential that membership represents a broad range of business models and network users. A suggested minimum number of required participants from each category are shown below:

<b>Organisation Type</b>	<b>Min No. of Members</b>	<b>Why</b>
Generators: Representatives from the generation community, both conventional and renewable, transmission and distribution connected	4	Reflecting the current and likely future mix of generators in the market
Storage operators	1	To ensure that due consideration is given to storage (of all types)
Suppliers: Representatives from the supplier community, covering industrial and commercial, microbusinesses, small and medium enterprises, and domestic customers, from a mix of larger and smaller suppliers/newer entrants	3	Reflecting the different business models in operation, and being the primary contact for electricity consumers
Non-domestic energy users	1	Non-domestic users for whom TNUoS is a significant cost component.
Consumer representative	1	To represent the interests of consumers, particularly domestic consumers, including the fuel poor or otherwise vulnerable.
Transmission Owners (TOs) (observer)	1	The TNUoS methodology uses input data from the TOs.
Distribution Network Operator (DNO) (observer)	1	The TNUoS methodology uses input data from the DNOs. To consider whole systems considerations and interactions across distribution and transmission.
NGESO (as a full member of the Task Force)	1	To participate in the discussions and represent the NGESO perspective.

Ofgem	1	We feel that it is important that we are party to the discussions as well as to listen to industry feedback.
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This adds up to 12 participants and two observers. The remaining members will, we think, be chosen to balance across these categories and cover types of users who may not otherwise be reflected in the above. Alternates will also be chosen for each category and will represent a category rather than a single organisation. Observers will be expected to actively participate in the Task Forces but may not be required to attend every session.

### **Becoming a member**

We would now ask NGESO to invite applications to join the Task Force over the coming weeks, such that membership has been established by a target of the end of June. From the process and application form, it should be clear who is applying, what wider group(s) they represent, and the skills and knowledge that they would bring to the Task Force. Central to this will be the principle that applications will be to represent a sector or wider interest group, not a business that the individual is connected to. As part of this, applicants will likely be expected to support engagement with sectors they represent.

It will be important that anybody applying can make a time commitment for the work of the Task Force (including the meetings).

Once this process has concluded, NGESO will recommend to Ofgem a list of members to achieve an appropriate balance.

After Task Force members are confirmed, unsuccessful applicants will be informed of the alternative ways in which they can play a role in this work.

### **Ongoing engagement**

We understand that there will be considerable interest in the work of the Task Force. To ensure people can learn about this work and provide feedback, we expect to have a dedicated programme of engagement. We will likely expect members of the Task Force to understand the groups that they are representing by reaching out and engaging on issues as they arise, through other fora (recognising the competitive market in which they operate).

The Charging Futures Forum, meeting quarterly, should have a dedicated focus on the work of the Task Force. We are keen that these meetings provide an opportunity for learning, robust and constructive challenge, and engagement that supports the Task Force's work.

In addition to these Charging Future Forums, there may be opportunities for engagement through:

- **Potential Webinars –**

- A half-way point webinar setting out the progress of the Task Force to date and next steps.
- An end of Task Force webinar setting out the final report conclusions and recommendations.
- A consultation webinar setting out the draft report and consultation questions.

- **Potential Podcasts –**
  - Short podcasts summarising progress throughout the duration of the Task Force.
- **Publications –**
  - A draft report and consultation.
  - Analysis, notes, and minutes following meetings of the Task Force.
- **Meetings –**
  - The Transmission Charging Methodology Forum– particularly where there are CUSC Modification Proposal interactions.
  - Stakeholder meetings - we expect that a Task Force member representing a specific group (for instance, Distributed Generators) would have ongoing conversations with other members of that group to ensure that their views are heard in the Task Force and to facilitate industry being kept apprised of developments.
- **Other –**
  - Feedback mechanisms to gather feedback from stakeholders throughout the Task Force processes.
  - A dedicated email address for the work of the Task Force managed by the secretariat.

We particularly welcome your ideas about how you would hope to engage with the work of the Task Force if you were not a member. If you think an alternative approach would help provide an opportunity to engage, please let us know.

### **Conclusion**

This update represents our latest thinking on the structure, purpose, and outputs of a Task Force. We welcome feedback on what we have published. The feedback - which should be sent to our dedicated mailbox, [tnuosreform@ofgem.gov.uk](mailto:tnuosreform@ofgem.gov.uk) by 5pm on 8 June 2022 - will be reflected in the next publication, which we intend to release around July 2022.

Yours sincerely,

**Harriet Harmon**

**Head of Transmission Charging Policy**

## **Draft terms of reference**

### **Initial working draft Terms of Reference for the TNUoS Task Force**

#### **1. Introduction**

The National Grid Electricity System Operator (NGESO) recovers the cost of provision, maintenance, upgrade, and expansion of the transmission system through Transmission Network Use of System (TNUoS) charges. Approximately £3.5bn of charges a year is levied on generators (c.£800m) and demand users (c.£2.7bn).

The current methodology is designed to send cost-reflective relative price signals to network users about the incremental effect their location choice has on the transmission system.

Stakeholders have told us that unpredictability of TNUoS undermines its ability to deliver a stable long-term investment signal to either generation or large demand users. The aim of the Task Force or Task Forces is to produce a report providing recommendations on improvements to today's methodology to provide a stable foundation for charging over the next c.5-7 years. The full criteria are covered in the Scope section.

In addition, a longer-term programme of work will look at how TNUoS should function in a less centralised, more flexible energy system, to support UK's Net Zero commitments. For example, Locational Marginal Pricing (LMP) and depth of connection charges would sit outside the scope of improvements to today's approach but may be considered in the longer-term review.

#### **2. Scope**

- a) Through the leadership of the Task Force Chair the TNUoS Task Force will complete the following deliverables:
  - i. Progress report detailing the Task Force's latest thinking and discussions.
  - ii. Interim report detailing the Task Force's progress on considering potential solutions.
  - iii. Consultation on potential solutions.
  - iv. Final report setting out recommendations for potential modification proposals if such proposals have not already been raised.

#### **3. Chair**

The Task Force will be chaired by NGESO, acting in an independent capacity to facilitate discussion. The Task Force Chair may nominate a deputy to chair the meeting in their absence.

The Chair will provide leadership to the Task Force and will be responsible for ensuring that each meeting is conducted in accordance with the Terms of Reference and in an orderly and efficient manner. The Chair will ensure that all Task Force Members are able to contribute their views. The Chair will coordinate with the Secretariat to ensure that appropriate policies and procedures are in place for the effective management of the Task Force.

The Chair will ensure that regular updates are provided to Ofgem on the Task Force, including its current thinking and/or emerging conclusions.



## 4. Membership

Membership (including any alternate members agreed by the Secretariat) will be drawn from applicants. NGESO will send an email inviting at a minimum those on the Charging Futures distribution list to indicate whether they wish to be considered for membership of the Task Force. NGESO will recommend to Ofgem, membership from those volunteers considering the need for a representative range of industry views.

Depending on the level of interest, NGESO, in agreement with Ofgem, may limit the number of Task Force members from each representative group to facilitate productive meetings and in-depth discussion.

If a Task Force member is unable to attend a meeting, an alternate will be selected from the list of those who applied to the Task Force and this will be agreed through the Secretariat. Ofgem and NGESO (in addition to the Chair) will each provide at least one member to the Task Force. Ofgem will attend and participate in discussions but will not fetter its discretion in respect of any change to codes, licences or other regulation.

In addition, the Chair may invite guest contributors to certain sessions to bring in expertise from specific areas, such as finance or academia to support development. The Chair may also invite observers to these meetings. These will not be full Task Force members.

Task Force Members will:

- a) ideally have relevant expertise and experience in the current TNUoS charging methodologies as well as the principles underpinning those methodologies;
- b) be committed to making improvements and delivering benefits to consumers through more efficient charging arrangements;
- c) be available to attend all meetings and engage more widely with industry, representing the views of other similar network users rather than their own businesses;
- d) be able to work collaboratively with other industry participants that may have different views and seek to find consensus, where possible;
- e) actively contribute towards the work of the Task Force outside of the meetings. This will include being responsible for completing tasks (e.g., undertaking analysis) that have been allocated to a member by the Task Force and reporting back on this; and
- f) be expected to contribute towards the milestones of the Task Force. For example, collectively Task Force members will be expected to support NGESO in the drafting of the interim and final reports outlining the conclusions of the Task Force.

The Task Force overall will have due regard to previous relevant binding decisions of – inter alia – the Authority.

## 5. Secretariat

The Secretariat role will be undertaken by NGESO, acting in an independent capacity to facilitate Task Force progress.

The Secretariat will:

- a) Provide secretariat services to the Task Force and the Chair:

- i. Organise meetings, including booking venues, in consultation with the Chair.
  - ii. Send out meeting invitations.
  - iii. Prepare agendas, minutes and collate other papers.
  - iv. Aim to circulate meeting agendas and supporting documents/papers five working days prior to each meeting.
  - v. Circulate minutes to Task Force Members after each meeting.
  - vi. Add agreed meeting documents to the Task Force section of the Charging Futures website.
  - vii. Maintain membership lists of Task Force meetings and handle membership applications.
  - viii. Maintain a list of Task Force actions and send reminders to Task Force members to complete actions.
  - ix. Produce and update a project plan (including stakeholder engagement) to allow the Task Force to deliver its outputs in a timely manner.
- b) Manage stakeholder engagement for the Task Force arrangements:
- i. Act as first point of contact for stakeholders who wish to contact the Task Force.
  - ii. Create and maintain a distribution list of Task Force members.
- c) Maintain the Task Force section of the Charging Futures website. The Task Force section of the Charging Futures website will provide stakeholders with information including:
- i. Upcoming meeting dates of the Task Force.
  - ii. Membership of the Task Force.
  - iii. Papers and other documents for Task Force meetings.
  - iv. Contact routes for stakeholders wishing to communicate with the Task Force.
- d) Own a high-quality report on behalf of the Task Force and collate and publish the interim and final reports on behalf of the Task Force. This will include working with the Task Force to develop a plan and structure for the interim and final reports, considering the content required for the interim and final reports, developing the interim and final reports working collaboratively with the Task Force, developing a plan in respect of engaging and consulting on the interim report, etc.

## **6. Reporting and output**

The Task Force will provide regular reports and updates via Charging Futures (including the Charging Futures Forum) on its work and progress. As the Charging Futures Forum is currently quarterly, the Task Force may also provide additional updates via dedicated virtual events or webinars. A podcast will be available at the end of each Task Force summarising the outputs and next steps. The Task Force will also be required to keep wider industry updated on its work through the regular publication of all agreed Task Force documentation (documents that a party asks not to be circulated or documents that are only available in draft form do not need to be published).

The Task Force will be required to provide a report to Charging Futures and Ofgem with recommendations.

The Task Force will need to remain mindful throughout of other work which may interact with the reporting and output of the Task Force, as well as applicable code objectives and any wider statutory obligations.

## **7. Meetings**

The Task Force meetings will be either face to face or hybrid face to face and via Teams, to allow flexibility, including with respect to the Covid-19 pandemic.

Meetings of this Task Force will be held on a regular basis, twice monthly in the first instance. Meeting frequency will be reviewed on a regular basis, as decided by the Chair, in consultation with the Task Force members, as appropriate.