**Theme 1: Data and visualisation**

Question 1a. Do you agree with the issues we have set out under Theme 1 -

Visibility and accuracy of connections data and network capacity? Are there any other issues under this theme that we should consider or be aware of?

Yes, we agree strongly with the issues identified here.

* The lack of visibility of demand connections is a specific issue.
* There is non commercially sensitive data which the DNOs hold and do not publish which can have a material impact on the viability of a connection, i.e. where there are physical restrictions at substation or non-extensible switchgear which will add significant costs to a scheme.
* There is also data generated by the DNOs which is misleading, i.e. network capacity maps indicate significant capacity which is automatically generated and deliberately misleading. This is often the case for complex meshed networks or single transformer primary substations.
* There should be further requirements for the DNOs to publish accurate meaningful data which can support the development of new projects. i.e. for the last decade, most licence entities have not been publishing accurate data relating to reverse power flow capacity of transformers.

Proposals:

Question 1b. Do you agree with proposal 1a (new regulatory requirement on single digital view tools)? Do you have any views on how this should be implemented? This would provide more consistency but likely be of less use than individual DNO/TO sources of data. Due to legacy data arrangements a lot of data will be in different formats and may be unlikely to knit well together. We believe there should be more of a focus on publishing more, better quality data more than it to be in a particular format.

Question 1c. Do you agree with proposal 1b (new regulatory requirement on the creation of guidance / standards for data visualisation tools)? Do you have any views on how this should be implemented?

We agree with the requirement for guidance and standards and for this to be enforced to ensure that poor quality and misleading data is not provided. Where data is missing, there is a specific time period, linked to asset inspection and maintenance periods to ensure that correct information can be collated and published. Where data is collated that is in the interest of customers which can support the development of future projects, that this data is published in a timely manner unless there is a specific confidentiality or security concern.

Question 1d. Do you agree with proposal 1c (new regulatory requirement to provide connections data)? Do you have any views on how this should be implemented?

We disagree that the data should be compiled between DNOs, Tos and NESO. There is a need for additional higher quality data to be published, however believe these should not be combined, a single combined resource would not be in the industries benefit.

Question 1e. What are your views on the completeness and discoverability of connections data that would be useful to you? Are the existing resources clear and transparent?

**Transmission**

The existing resources could provide further information in a clearer format to provide better viability.

* Date of countersigned BCA,
* A register of accepted Demand connections,
* An improved Transmission Works Report (TWR) to show reinforcement works required for each scheme and the anticipated date for the reinforcement works,
* Project stage should be improved to make it clearer where these projects are, included if committed works will be delayed.

**Distribution**

Data varies depending on each of the DNOs, there are key improvements in the data quality and visibility.

* There are improvements needed in the LTDS data, correcting data errors and missing data,
  + i.e. not listing the tap changer reverse power flow capacity,
  + not detailing if an asset is de rated for other reasons, i.e. by protection relays.
  + Upgrading / replacing switchgear but not amending the capability in the LTDS.
* The LTDS details the fault level assessments considering connected generation schemes only, it does not include accepted schemes. Even accounting for accepted generation schemes, there appears to be data issues within some DNOs, where published data indicates there is fault level headroom, but applications trigger significant fault level reinforcements.
* At times, spurious obviously incorrect data is published by the DNOs, it appears there is limited data validation for some DNOs before the LTDS is published.

Question 1f. Is there additional connections data that would be of use but legal barriers prevent it from being published? If so, do you consider that there are solutions that would enable this data to be made available, for example by aggregating it to appropriate levels / anonymising it etc.

**Distribution**

* Clear access to GIS systems, showing the location of physical assets, including underground cables. This has been made available from some DNOs and significantly helps to de risk the connections area; this should be encouraged by more DNOs.
* Clear details of accepted demand connections and the impact on the demand headroom within networks. Whilst understanding the requirements to anonymise some customers details, it is impossible to design connections without this information.
* Information relating to the reinforcement of tower lines and the suitability of towers to accommodate a larger conductor is information which the DNOs hold, which could be helpful to developers looking to connect to specific circuits but also to understand the potential reinforcement risks across the general circuits within a region.
* To understand the curtailment risk faced by customers, it is important to have good background data and any caveats around this. We have seen BSP level data being redacted due to legal challenges, it makes it almost impossible to undertake a bankable curtailment study unless the power flow data can be provided without redactions. It is understood that certain NDA may be required for the DNOs to publish this information.
* As Active Network Management / DERMS becomes an even more important connection tool, having visibility of the control settings within the ANM schemes and how the specific networks will be operated under normal and abnormal network running becomes even more important as it can have a significant impact on the financial viability of a project. Some DNOs are reluctant to provide any information associated with Abnormal Network Running and the risks developers will face. This is something which should be addressed.
* There are believed to be solutions to all data related issues, one of the barriers appears to be gaining access to the suitable people within the DNOs and them having the confidence to release the data with the appropriate caveats.

Anything else:

Question 1g. Is there anything else regarding Theme 1 – Visibility and accuracy of connections data and network capacity that you consider we have missed?

* It is welcomed that CIM models will be available to assess the headroom within networks.

**Theme 2: Improved standards of service**

Issues:

Question 2a. Do you agree with the issues we have set out under Theme 2 - Improved standards of service across the customer journey (not including “minor connections”)? Are there any other issues under this theme that we should consider or be aware of? Yes we agree.

Proposals:

Question 2b. Do you have any views on proposal 2a (general principles-based licence condition and supporting guidance around standards of service throughout the entire customer journey)? Do you have any views on how this could be implemented? While well intentioned, this alone is unlikely to drive customer service levels up. What could be useful is more guidance from the ENA or Ofgem about how procedures or processes must be carried out. This would ensure more consistency across the DNOs. The patchy application of the recent Technical Limits scheme highlighted how badly this can be done without proper guidance.

Question 2c. Do you have any views on proposal 2b (new prescriptive condition(s) around standards of service)? Do you have any proposals for any specific areas of the connections customer journey that should be subject to such a requirement? There are definitely areas in which this could be implemented. Project progression applications should have a time limit of six months for DNO submission, and 30 days for NESO clock start. Other areas could be:

* Allocation of project team (1 month)
* Communications surveys (3 months)
* Harmonics surveys/other electrical studies (6 months)
* Tower surveys and designs (although often dependent on external contractors)
* Production of requested data for calculating curtailment (1 month)
* Novation agreements or other basic legal agreements. (1 month)
* DNO program provided to customer (2 months)
* Time taken for legal agreements (leases, wayleaves etc.) (challenging to put a time limit on but often a blocker)
* MPAN production (2 months)
* Connection Agreement issuing (DNO) (1 month)

Question 2d. Do you consider that any of the existing standards of service requirements set out in the regulatory framework for provision of specific products / services should be revised or removed? Do you consider that there is any duplication or overlap of regulatory requirements across the regulatory framework that needs addressed? No.

Anything else:

Question 2e. Is there anything else regarding Theme 2 – Improved standards of service across the customer journey (not including “minor connections”) that you consider we have missed? The general communication from DNOs is often a challenge. Having basic requirements like ‘replying to emails within 10 days’, providing organisational charts so that people know who to speak to and having mandantory phone numbers at the end of email signatures would be really useful.

**Theme 3 - Requirement on networks to meet connection dates in connection agreements**

Issues:

Question 3a. Do you agree with the issues we have set out under Theme 3 - Requirement on networks to meet connection dates in connection agreements? Are there any other issues under this theme that we should consider or be aware of? Agree with the issues. The GB market is one of the few without risk sharing provisions relating to network investment and connections delays. With an unprecedented level of investment in GB networks expected over the coming decade, alongside a need to continually increase connection volumes, the likelihood and consequence of delays could be expected to increase under the present approach. However a great many delays will be caused by inadequate resourcing. It is also challenging for DNOs/TOs to know how genuinely committed to a project a developer is, so they will understandably sometimes not undertake work where they are uncertain on progress or motive.

Proposals:

Question 3b. Do you have any views on proposal 3a (strengthened principlesbased licence condition around meeting connections dates)? Do you have any views on specific wording that would achieve the intended outcome?

Question 3c. Do you have any views on proposal 3b (minimum standards / SLAs around meeting connections dates)? Do you have any views on specific standards that could be introduced and how they would work in practice? Often connection dates given in offers are entirely unrealistic. Most offers will state 2 years for EHV connections at DNO level, where in reality it takes more like 3-5 for 33 kV connections or 5-7 for 132 kV connections to go all the way through the development, design, procurement and then construction phases. Transmission projects take normally between 10-15 years. There therefore needs to be realistic conversations between the developers and the DNOs regarding what is achievable at each stage and what dependencies there are for each next ‘stage’ to be triggered. Specific activities could have time limits associated with them, to keep projects on track.

Question 3d. Do you have any views on proposal 3c (a financial instrument designed to offer recourse to connecting customers who face detriment due to delays)? Do you have any views on how this should be implemented? The financial instrument does seem to work for the 90 day application process. However, the ethics of overworking scantly resourced primary system planning departments must be considered. There must be adequate resource to do the job in he first place.

Anything else:

Question 3e. Is there anything else regarding Theme 3 - Requirement on networks to meet connection dates in connection agreements that you consider we have missed? ICE was a good scheme to incentivise constant improvements. This should be reinstated.

**Theme 4 - Quality of connection offers and associated documentation**

Issues:

Question 4a. Do you agree with the issues we have set out under Theme 4 -

Quality of connection offers and associated documentation? Are there any other issues under this theme that we should consider or be aware of? Yes we agree. There is a wider point regarding the DNOs/NESO re-evaluating customer offers if others drop out. This is generally viewed to be unviable, and is not done, other than in exceptional circumstances. This is an issue across industry, that areas such as P18 regulations and fault levels and thermal driven reinforcement needs are rarely looked at to check if they are still required.

Proposals:

Question 4b. Do you have any views on proposal 4a (principles-based licence condition on the completeness / quality of the offer and supporting documentation)? Do you have any views on specific wording that would achieve the intended outcome?

Question 4c. Do you have any views on proposal 4b (minimum standards / SLAs on the completeness / quality of the offer and supporting documentation)? Do you have any views on specific standards that could be

introduced and how they would work in practice? I think there should be minimum standards for DNO and NESO offers. There is a considerable list of items that will need to be included here so this may require further consultation or an ideas session with stakeholders.

Question 4d. What do you consider would constitute a ‘high quality offer’? A high quality offer details not only the technical specifications of the connection but also outlines clearly what is uncertain or may change. Any wider dependencies need to be clearly illustrated. For example connection C is dependent on connection A and B also funding reinforcement. Or connection A is dependent on DNO project A and B being completed.

Question 4e. Is there anything else regarding Theme 4 - Quality of connection offers and associated documentation that you consider we have missed? There could be a mandatory peer review process within the DNOs/NESO.

**Theme 5 – Ambition of connection offers**

Issues:

Question 5a. Do you agree with the issues we have set out under Theme 5 -

Ambition of connection offers? Are there any other issues under this theme that we should consider or be aware of? DNOs (and newly TOs) have milestone dates in offers for customers to achieve. Normally these are entirely unrealistic for customers due to the length of the development process, so this does not seem to be a significant issue.

Proposals:

Question 5b. Do you have any views on proposal 5a (strengthened principles based licence condition around offering earliest achievable connection dates)? Do you have any views on specific wording that would achieve the intended outcome?

Anything else:

Question 5c. Is there anything else regarding Theme 5 – Ambition of connection offers that you consider we have missed?