ESO

Meeting 3 minutes

Connections Reform Steering Group

Date: 16/03/2023 Location: MS Teams

Participants

Attendee	Attend/Regrets	Attendee	Attend/Regrets
Merlin Hyman, Regen, CHAIR	Attend	Claire Jones, Scottish Government	Attend
Neil Bennett, SSEN Transmission	Attend	Deborah, MacPherson, ScottishPower Renewables	Attend
Sally Boyd, PeakGen	Attend	Andy Manning, Citizens Advice	Attend
David Boyer, ENA	Attend	Susana Neves e Brooks, ESO	Attend
Catherine Cleary, Roadnight Taylor	Attend	James Norman, ESO	Attend
James Dickson, Transmission Investment	Attend	Mike Oxenham, ESO	Attend
Amy Freund, Ofgem	Attend	Rachel Payne, ESO	Attend
Chris Friedler, ADE	Attend	Jennifer Pride, Welsh Government	Attend
Sotiris Georgiopoulos, UKPN	Attend	Mike Robey, ESO, Technical Secretary	Attend
Arjan Geveke, EIUG	Attend	Patrick Smart, RES Group	Attend
Ben Godfrey, National Grid Electricity Distribution	Attend	Spencer Thompson, INA	Attend
Garth Graham, SSE Generation	Attend	John Twomey, National Grid Electricity Transmission	Attend
Gemma Grimes, Solar Energy UK	Regrets	Andy Wainwright, ESO (for Transmission & Distribution discussion)	Attend
Paul Hawker, Department of Energy Security and Net Zero	Attend	Charles Wood, Energy UK	Regrets
Gareth Hislop, Scottish Power Transmission	Attend	Callum Chalmers, Energy UK (alternate for CW)	Attend

Agenda

#	Topics to be discussed	
1.	Welcome	Merlin Hyman (5 minutes)
2.	Actions and Minutes from Meeting 2	Mike Robey (10 minutes)
3.	Design Sprint 1 report and discussion	Mike Oxenham (50 minutes)
4.	Strategic options for relationship between connections at Transmission and Distribution levels	James Norman (50 minutes)
5.	Any Other Business	Merlin Hyman (5 minutes)

Discussion and details

#	Minutes from meeting, including online meeting group text chat during meeting, where referenced as "[*From online chat*]"

1. Welcome

The Chair welcomed Steering Group members, particularly those joining for the first time or attending as substitutes for colleagues.

2. Actions and Minutes from Meeting 1 and Meeting 2

Note that the Minutes of Meeting 1 have been published, alongside the Steering Group biographies and photos that have been submitted to ESO.

As per Action 1.3.3, the ESO provided a high-level project plan – Steering Group comments:

- Requested that the latest project delivery dates are shared with all stakeholders interested in the Connections Reform project. ESO confirmed that the June consultation timing had been shared in the most recent project newsletter, in the most recent design sprint workshops, Agora and TCMF meeting.
- Is the implementation timescale realistic if regulatory changes are required to implement the reforms? ESO noted that reforms that require regulatory or industry code changes will need that reflected in the implementation timescales whilst other reforms may not need this. The timeline provided in the high-level project plan just reflects when implementation will start (not when it will finish).
- [*From online chat*: Steering Group member noted it could take months to assess and implement some reforms and then more months to transition.]
- Where quarter is used, please replace with the relevant month(s) to avoid potential confusion between calendar and financial year quarters.
- [*From online chat:* the wording on developing implementation plans and starting implementation could be clearer, as currently it could be read as developing and implementing are happening at the same time.]
- Noted interactions between the scope of the Connections Reform project and Ofgem's current consultation on Future of local energy institutions and governance and other areas and early engagement was welcomed to explore the interaction and the timescales.

As per Action 2.3.1, ESO shared version 1.3 of the Terms of Reference.

- A Steering Group member sought clarification that the scope did not preclude Distribution-connected generators. ESO noted the revised wording in the *Purpose* section sought to clarify that the scope includes those projects connected at distribution-level that are considered to impact the electricity transmission system.

- It was noted that the correct terminology is Chatham House rule (i.e. singular).

Decision: 3.2.1 To approve Terms of Reference v1.3

Decision: 3.2 To publish the minutes of Meeting 2.

3. Design Sprint 1 (The Pre-Application phase) report and discussion

Discussion on the desired outcomes of the pre-application stage, which were presented as:

- Allow applicants to receive the information they need and have a positive experience.
- Ensure applicants' expectations are informed on likely connection costs/timescales/options.
- Improve the quality of applications submitted and reduce speculative applications and queries.
- Ensure the approach is fit for the future and provides ESO/TOs insights into future market changes.

Steering Group comments:

- [*From online chat*: this sounds like how we do it now.]
- [*From online chat*: these desired outcomes cover the baseline as to what should be happening today but isn't. Key is how this is delivered going forward as part of the reform proposals.]
- Fourth bullet point – edit to read "future connection changes"? ESO had intended this statement to be read as "…future market changes in respect to connections".
- The first three bullet points all relate to better communications. How will this be achieved, given that not much progress has been made on this yet. There's lots of misunderstanding. How do we improve on this and ensure everyone has the information they need prior to application? ESO agreed that pre-application is not working as well as wanted and therefore there is a real appetite to look at opportunities for change and focussing on what comes next.
- Bullet 1 needs to consider both the level of detail ESO/TOs can provide to pre-applicants and also needs to include a level of reasonableness before the detailed studies are undertaken.
- DNO heatmaps and surgery sessions were reported to improve the quality of applications and help avoid some incompatible applications. Committing to move from prospective applications to proceedable applications is a good thing.
- Is there a phase before pre-application, when potential applicants are gathering market intelligence? And not everyone gathering this market intelligence wants to connect. A Steering Group member recommended this is considered. Another member built on this, noting that the sector of each connectee will affect their needs from the process and encouraged this to be taken in to account. Whether they are a generator, interconnector, demand or grid services provider, for example. It was also noted that developers may sell on projects or change the scope of applications, which may change the applicants needs from the process.
- From a demand perspective, timeliness is also important.
- [*From online chat*: Consistency is needed otherwise there are speculative applications. Good pre-application calls really do make a difference which means you need the right Power System Engineer on the call, who knows the region and the local queue.]
- *[From online chat*: What is the estimated capacity of speculative applications in the queue? This Steering Group member's view is that speculative applications should be discouraged.]
- *[From online chat*: Agree with this view, however might one person's speculative project be another's actual project?]
- *[From online chat*: There should be a proper business case behind each application. If there's not, the application is almost by definition speculative.]
- [*From online chat*: Presumably the way to cut down on these speculative applications is having good information available to stakeholders on capacity before they apply.]
- [*From online chat*: Apologies if it's been covered but have ESO given a % of applications which result in offers that are not accepted? Feels like a lot of challenging offers are still being accepted - so however good the pre-app info is we may still see very high volumes of applications.]

- Overall, there was consensus that the desired outcomes presented were important, that some re-wording could improve the four bullet points and that there were different perspectives to consider.

A strawman was presented of a potential reformed pre-application process, considering registering interest, access to self-service tools and information, checklists, meetings, online live chat functionality and what information is provided and by who prior to application. Steering Group comments:

- Would one approach apply to all sizes and types of potential applicants? ESO noted the need to consider the different needs of different types and sizes of customers.
- The principles look good, but don't need all of this for all customers. Recognised that repeat applicants won't want to go through a pre-application registration process, but that first time applicants would benefit from this.
- ESO noted that steps were starting to be taken on digitalisation (e.g. with the Connections portal recently going live), although IT projects take time.
- Several Steering Group members raised concerns about the effectiveness of online chatbots and the benefit of a real conversation. Further discussion noted the benefit of clear guidance (such as FAQs) can be effective with trouble-shooting common queries. [From online chat: For example, ScottishPower Transmission's guidance document.]
- [*From online chat:* Technology (portal, self-help tools etc.) is absolutely the right way to go. Good in principle, however, a Steering Group member noted the need to be mindful that ESO does not have a great track record of delivering IT systems on time, on budget or at all (such as electricity balancing in the recent past?)]
- [*From online chat*: A Steering Group member felt developers would be nervous about giving too much information at pre-registration stage and doubted much relevant information would be provided. They felt it was likely developers will hold their cards close to their chest or indeed may not have an informed position because they won't have accessed the self-serve information at that stage.]
- Several improvements identified are no-regret changes addressing pain points. Difficult to disagree with content. One consideration is timescale and whether some improvements can be adopted more quickly, whilst others will take longer. ESO agreed that the reforms to be implemented did not all need to follow the same implementation timeline. ESO also noted how the pre-application phase reform options needed to also consider how effectively they would work with different overall application approaches. For example, some pre-application reforms might work more effectively where application windows are adopted.
- DNO heatmaps were raised as an example of an existing digital tool that has been established for some years and were now being reviewed for opportunities to improve them.
- [*From online chat*: Support the point about learning from experience at distribution e.g. with heatmaps. Also worth considering where interactions / integration / alignment of data and / or systems could be beneficial. Appreciate this is partly looking ahead to the next agenda item.]

Could the high-level process outlined deliver the desired pre-application stage objectives?

What information would be most useful to reduce speculative applications?

To what extent should the pre-application stage be formalised and how?

Steering Group comments:

- At the strategic level, the consideration is what gets most capacity connected most quickly.
- [*From online chat*: Who is the arbitrator in the event of disagreements in the connections process at this level?]
    - [*From online chat:* ESO response: Ultimately connections related disputes between applicants and/or ESO and/or TOs are referable to Ofgem. That is expected to be a last resort after attempts at dispute resolution. Believed to be a relatively rare based on the number of applications.]
- Raw technical data is not very user friendly, so the type of information provided is key.
- It was suggested that developers of transmission-connected applications can often spend significant sums on an application, so a significant undertaking and consistency in information

available from each Transmission Owner is needed. Those applicants may be happier with raw data as they would likely have consultancy support too.

- [*From online chat*: Entering the application process with a final investment decision from the applicant's management, a clear project plan and clear planning applications, these applications should be treated more favourably.]
    - [*From online chat*: But how would an applicant be able to do that? Very difficult to get FID without certainty on cost and timeline. Connection cost and timeline is critical for FID. This can't be achieved from self-service stage.]
    - [*From online chat*: ESO responded that barriers to entry and acceleration of projects will discussed at the next meeting.]
- [*From online chat*: Formalisation of the pre-application stage could help smaller capacity applications with less resources, which would be positive.]

Concluding discussion

- ESO responded to Steering Group views, appreciating the comments to build on what already exists, the core things that can be improved and to consider the balance of effort that is reasonable at each stage of the reformed pre-application process.
- A Steering Group member noted that some of what is being discussed is about provision of consistent, standard information and service (rather than strategic issues), and just doing this properly. Other considerations (not related to the pre-application stage) are more strategic.
- The needs of different applicants vary. Large transmission projects don't need to be spoon fed, whilst smaller distribution-level projects need a different approach.
- [*From online chat*: Volume of applications is important but also the quality of an application.]
- [*From online chat*: Whatever solutions are deployed we have to address the lack of resource to meet demand.]
- ESO summarised that the current process is not working well and requires change. This is being delivered by a combination of the incremental changes that are being made now as well as through the objectives of the Connections Reform project. ESO will take the opportunity as part of implementation planning to reflect what improvements can be progressed as easy wins sooner and which require code modifications or further development through the connections reform project.

4. Strategic options for the relationship between connections at the Transmission and Distribution (T&D) levels

ESO acknowledged that this is a big topic. The particular focus for T&D in this project is consideration of the interface / boundary and distribution-connections that require access to and impact the transmission system. There are various options and it's important to consider fairness of how different customers are treated through the connections process. The initial discussion in this meeting is not seeking to reach consensus on a particular option, but to use this space as a forum for discussion on the breadth of options. Are the options clearly articulated? And to consider if other options need to be included.

The high-level options considered were:

1) Decentralised, 2) Status quo+, 3) More centralised, 4) Fully centralised

ESO presented initial internal scoring of these options against the Connections Reform design objectives.

Steering Group comments:

Decentralised option

- Does this mean two queues, a distribution queue and a transmission queue?
- Yes, essentially, but d-connected projects that impact the transmission system could be within a nested queue inside the transmission-connected queue.

- Concern expressed that the initial red scoring on one of the areas may mean this option is discarded too soon before fuller investigation.
- There is an argument that this option represents the current status quo.

Status quo+ option

- Would this be a single queue for all connection applications above a de minimis threshold? (Yes)
- Current approach is effectively a transmission queue, a distribution queue and a T&D interactive queue. How could be minimise interactivity? And would this be appropriate? ENA's Strategic Connections Group is considering this too.

More centralised and Fully centralised options

- These options need to consider the volume of applications that would be involved. One member noted 60,000 applications to connect to a given distribution network in a year, with 5,000 of these per annum being 1MW or above.
- This would be a very big leap from where we are now and given this it would be more realistic for this to have more conservative scoring from a deliverability perspective.
- There would be benefit from a more centralised approach when considering third party works on the transmission network for distribution network customers. Also, to note that this applies to transmission network demand connections (e.g. for hydrogen production).
- [*From online chat*: A Steering Group member thought moving to TOs handling connection applications and booking headroom, in the same way DNOs do, made sense. Then this allows ESO to be more strategic, which may be part of the solution.]
- It was suggested that charging was missing from the 3 themes Identified that need to be considered across the T/D boundary.

General comments

- Recognise different views and perspectives of licensees. Sense that some parties are leaning towards DNOs managing distribution connections at each GSP (Grid Supply Point) and others are leaning towards more centralised management of connections.
- ESO presented narrative on the slides does not match the views of some members. There is a spectrum and materiality on where decisions are made. We share an objective to unblock the queue. There is a need for reform, for quicker decisions, whilst keeping the system secure. A Steering Group member advocated more local decisions wherever possible, whilst ensuring that the system remains secure. A key issue to discuss is the capacity threshold between national and local queues.
- [*From online chat*: Under open networks project there was a workstream which led to the creation and implementation of the DNO embedded capacity register. The original scope of that workstream was to develop and publish a single GB system wide register and queue however the ESO did not commit to the Transmission element of that. It would be good to see commitment to that as part of the reform package.]
- Charging regimes are complex. The classification of assets may vary if there isn't a single or standardised approach, and this has a big impact on customer liabilities. CUSC implies this is uniform, but there is variance in practice.
- It would help to understand the cost methodologies. Transmission customers are concerned about this and distribution customers too. Costs are not necessarily applied to the same connection site depending on whether it is connecting to the transmission or distribution network.
- Customers are paying the price for decentralised connections not working. There are a lot of initiatives underway at distribution level to improve the situation for embedded customers.
- The outcome for the end consumer is key. The initial RAG scoring of the options against the objective of better outcomes for consumers presents very black and white results. Should this consumer outcome objective be the overarching theme?
    - ESO acknowledged that the initial RAG scoring of the options needs further consideration as there are different impacts on different stakeholders. At this stage, a red or amber score

may be highlighting a risk of costs increasing, and that this issue needs effective management, but there hasn't been any analysis yet as to the magnitude of that risk.
    - ESO noted many RAG scores are currently amber, in part reflecting the different impacts for different stakeholders of each option and design objective.
- A Steering Group member noted the initial RAG scores are perceived risk and if the appropriate data and information is shared these concerns may go away. It is important that the detail is worked through of all the options before confirming the RAG scores.
- Another member noted the RAG scoring as a good starting point, with more work to be done. It is helpful to have an initial view on the breadth of options. There's a need to map the broad themes onto the design objectives and then get more specific on how each option addresses each theme. Recommend refining the scoring to get more clarity.
- How will the weighting between the different scores and criteria work?
    - ESO acknowledged this is important and would need to consider qualitative and quantitative aspects.
- The RAG scoring is complex and more data behind each option, score and decision is needed.
- [*From online chat*: The scoring feels a little subjective, do we not need to measure or count the positive impact it could have on our objectives to unclog the queue? We could all score this differently on different day as it stands.]
- Terminology needs careful thought. Important to consider systemically and not too narrowly.
- Consideration of the options needs to be future proof. There is a lot to consider and this discussion will need follow-up.
- Devolution, Regional System Planners and Spatial Planning all need consideration in this (local, regional and national spatial planning).
- [*From online chat*: Have we considered EU and elsewhere in developing the options?]
    - [*From online chat*: ESO responded that some research has been undertaken and conversations with other TSOs to inform thinking on some elements (but less so for the pre-application stage.]
- When transparency is considered, are we thinking transparency to the customer or to all?
- ESO noted the need to consider all customers. Principles of standardisation and treating customers fairly are important factors. Increasing speed of connections on distribution networks, for example, could impact transmission connection applications, so this fairness across T&D needs consideration. ESO has concerns about decentralised approach such as the need for consistency and the need for better data and controls.
- A Steering Group member noted that there is currently variation between T&D customers, with distribution customers having to go through an extra distribution network process before joining the transmission queue. Timescale is an important issue to be addressed for fairness. Other Steering Group members supported this view.
- [*From online chat*: Giving best service to all customers - where is the good/best practice across the industry? Which parts of the T&D process deliver the best customer experience / outcome?]
- ESO noted the different points of view and emphasised the consensus on wanting a better connections process for all and for this to be quicker. ESO is not set on one view and it is looking for the best outcome. ESO is not saying that ESO should do everything, but there may be benefit for customers, stakeholders and government in having visibility of a single queue and of better exchange of data.
- A Steering Group member questioned whether a single queue approach would have a de minimis threshold. Universal fairness does not make sense if very small generators and very large generators are tied to the same connection process. Where to position this threshold capacity is key (as opposed to considering whether to have a threshold capacity or not).
    - ESO agreed that establishing where to set the capacity threshold is key.
- ESO reflected that it was easy to make assumptions, but that the details need to be teased out, to understand customer needs and timescales. The project needs to consider short term and longer-term considerations for connections reform.

- ESO noted that a fully centralised approach is far from where the connections process is now but given that this project provides an opportunity to consider reform, the project should look at all options.
- ESO summarised next steps as fleshing out more details of the application and connection process and then to look at strategic long term reform options for T/D Interface as well as medium term progress-able options in that context.

Action 3.4.1: ESO to reconsider RAG rating for high level options and provide more information on scoring in any future version.

Action 3.4.2: ESO to return to steering group with further views on the T/D interface at a later meeting

5. Any Other Business

- Steering Group members noted there was a lot to take in and reflect upon. Several requested more time to consider and respond to the questions raised.
- **Action 3.6.1** Steering Group members can respond to circulated slides with comments via email before the next meeting

- A Steering Group member proposed a longer meeting after the end of the design sprints, which could be face-to-face and some other Steering Group members supported this proposal.

Next meeting:

- Design sprint 2 report

Decision Log

Decisions: Made since last meeting

ID	Description	Owner	Date
3.2.1	To approve Terms of Reference v1.3	Merlin Hyman	16/03/2023
3.2	To publish the minutes of Meeting 2	Mike Robey	16/03/2023

Decisions: Previously made

ID	Description	Owner	Date
1.01	Agreed to apply Chatham House rule – All participants not to attribute comments to individuals or their affiliations	ALL	16/02/2023
1.02	Steering Group agendas and minutes will be published. Minutes to be published following confirmation at the next meeting that they are a fair record. Additional documentation may be published (e.g., slide packs/papers taken to the Steering Group), but subject to confirmation by the Steering Group.	Mike Robey	02/03/2023
2.3.1	Approved the Terms of Reference v1.2 subject to the inclusion of the edits identified in Meeting 2 (creating v1.3)	Merlin Hyman	02/03/2023
2.5.1	General agreement with the position to not continue to develop Option C as a stand-alone option within the remaining sprints, but	Merlin Hyman	02/03/2023

	to consider whether elements of option C could be incorporated into options A and B.		
2.5.2	Add-on 1 should not be a focus for Connections Reform	Merlin Hyman	02/03/2023
2.5.3	Add-on 3: Stakeholders identified some concerns to be further considered but there was a general overall view that this add-on is worthy of further consideration in later design sprints	James Norman	02/03/2023
2.5.4	Proposed that Add-on 4 is not given focus in later design sprints, although REMA developments will be monitored.	James Norman	02/03/2023

Action Item Log

Action items: In progress and completed since last meeting

ID	Description	Owner	Due	Status	Date
0.1.1	Steering Group members to provide photograph and biography for Steering Group web page	ALL	09/03/2023	Ongoing	tbc
2.5.1	ESO to track progress with REMA, FSO and other strategic policies and to consider how the evolution of these affects consideration of the centralised planning process design option	James Norman	09/03/2023	Ongoing	tbc
3.4.1	ESO to reconsider RAG rating for high-level options and provide more information on scoring in any future version	James Norman	30/03/2023	Provide verbal update on progress	tbc
3.4.2	ESO to return to Steering Group with further views on the T&D interface at a later meeting	James Norman	tbc	Agree which meeting to return to this	tbc
3.6.1	Steering Group members can respond to circulated slides with comments via email before the next meeting.	All	30/03/2023	Open invitation for Steering Group members.	tbc

Action items: Previously completed

ID	Description	Owner	Due	Status	Date
1.2.1	ESO to update and circulate the Terms of Reference, updating the narrative on purpose and membership details (members, Welsh Government, Scottish Government, DNO representative(s)).	James Norman	23/02/2023	Complete	23/02/2023

1.2.2	To seek Steering Group agreement of updated Terms of Reference at meeting 2.	James Norman	02/03/2023	Agreed	02/02/2023
1.3.1	ESO to share details of who is contributing to the design sprint workshops, including which Steering Group members are participating.	Mike Oxenham	23/02/2023	Complete	23/02/2023
1.3.2	ESO to clarify how its evaluation of options within each design sprint will work at meeting 2.	Mike Oxenham	02/03/2023	Complete	02/03/2023
1.3.3	ESO to clarify the process following the consultation at the end of this phase of the connections reform project	James Norman	16/03/2023	Complete	17/03/2023
1.3.4	Strategic policy goals (particularly net zero and energy security) to be elevated and given more prominence within the design objectives	James Norman	02/03/2023	Adopted	02/03/2023
1.3.5	ESO to add a summary status of relevant code modifications and a summary of tactical initiatives to improve connections to the Steering Group pack	Ruth Matthews & Laura Henry	23/02/2023	Complete	23/03/2023
1.4.1	Relationship between connections at Transmission and Distribution levels to be discussed at meeting 2	James Norman	02/02/2023	Complete	16/03/2023
2.2.1	ENA to share updates from its Strategic Connections Group within subsequent Steering Group packs	David Boyer	16/02/2023	Included for 16/03 and ongoing	16/03/2023
2.3.1	ESO to update and circulate the agreed Terms of Reference (v1.3)	James Norman	09/02/2023	Circulated	16/03/2023
2.6.1	ESO to share project timeline	Mike Robey	09/02/2023	Circulated	10/03/2023