ESO

Meeting minutes

Connections Reform Steering Group, Meeting 2

Date: 02/03/2023   Location: MS Teams

Participants

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

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Agenda

#	Topics to be discussed	
1.	Welcome	Merlin Hyman (5 minutes)
2.	Actions and Minutes from Meeting 1	Mike Robey (15 minutes)
3.	Updated Terms of Reference for Agreement	James Norman (5 minutes)
4.	*Not covered and carried forward to 16 March - Strategic options for relationship between connections at Transmission and Distribution levels*	James Norman (30 minutes)
5.	Design Sprint 3a Report and discussion	Mike Oxenham (60 minutes)
6.	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

Steering Group members and substitutes joining the Steering Group for the first time were invited to share their views on what success looks like for Connections Reform:

- Keen to deliver a more efficient process, facilitate quicker connections and hit policy targets

- A faster process for customers with better alignment, including with the ENA's Strategic Connections Group activity.

- A faster connections process, not at the expense of customers.

- Agree with the above points. Faster connections. Help industrial sites get better connections.

2. Actions and Minutes from Meeting 1

Action 1.3.5 – Steering Group requested that updates are also provided on the themes and progress of the ENA's Strategic Connections Group and its workstreams.

> **New Action 2.2.1** ENA to share updates from its Strategic Connections Group within subsequent Steering Group packs.

Action 1.4.1 - The relationship between connections at transmission and distribution levels not discussed in meeting 1 or 2 and agreed to discuss at meeting 3 once Distribution Network Operators (DNOs) are fully represented on the Steering Group.

3. Terms of Reference

The Steering Group purpose section had been updated in the circulated version v1.2, to address action 1.2.1 from Meeting 1 and member details and organisations updated to address action 1.2.2

Edits to version v1.2:

- 'Purpose' section': It was noted that the wording "…*to connect projects to the GB electricity transmission system"* suggested that connections to the distribution network were out of scope of connections reform. It was agreed that this was not the Intention and that the wording would be amended to reflect that the scope of the project Is also projects that use or access the GB electricity transmission system.

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Decision: 2.3.1 To approve the Terms of Reference as presented in v1.2 subjects to the edits identified during meeting 2.
Action 2.3.1: ESO to update and circulate the agreed Terms of Reference.

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4. **Strategic options for relationship between connections at Transmission and Distribution levels**

One of the two vacancies for DNO representatives had been filled at the time of the meeting and it was agreed to defer the discussion on the relationship between connections and Transmission and Distribution (T&D) levels to Meeting 3, when it is expected that the second DNO representative will be in place.

Preliminary discussion raised the following:

- Themes across T&D need to consider the merits of issues including aligning processes; a single queue; a devolved approach behind each Grid Supply Point for DNOs to manage and linkages to the ENA's Strategic Connections Group, which has a subgroup focussing on the T&D Interface. Broad discussion is needed at the next meeting to feed into the design sprints.

- Note that Ofgem recently published a consultation on regional network planning; Steering Group encouraged to read this before the discussion next time.

- The general context recognises a need for more whole system coordination, therefore keen to see T&D given important consideration early on in the Connections Reform project. Recognise that there are lots of interdependencies and that DNO input is important in this discussion. Discussion should also consider wider policy developments.

- Issues raised about the generation or demand capacity of sites required to follow the Statement of Works (SoW) process, which was reported to be delaying some quite small projects. Smaller sites considered to have different needs and challenges. 1MW capacity was generally considered to be the threshold below which SoW should not apply, but in some areas and situations SoW is being applied to smaller sites (NGED website currently states "*SoW normally applies where generation of 100kW or greater is to be installed*"). The cumulative impact of multiple smaller sites was raised as a factor. This had led to a much lower threshold (in-scope of G59 requirements) being applied.

- Fairness for smaller generators is important. There may be useful lessons to learn from previous situations (such as the previous surge in small scale solar generation in southern England). That issue historically led to the establishment of a T&D Interface Group to facilitate connections for a couple of years.

- Timelines need to be considered. There is quite good alignment between this project's strategic options and ENA Strategic Connections Group's 90-day action plan. This should be covered as part of the T&D discussion in meeting 3.

- **Ongoing Action 1.4.1** to discuss connections across T&D at the next meeting.

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5. **Design Sprint 3 a report and discussion**

Comments have been grouped together into themes for ease of reference

Discussion on three broad connections reform concepts:
A: An improved version of the current process
B: Addition of one or more stage gates with criteria that must be met to be able to progress to the next stage
C: Centralised planning model, where developers respond to calls for applications.

General Comments

- How have the options been considered against the design criteria?
  - ESO response - the consultation document at the end of this phase will review all of the options against the key design criteria / objectives. This has not been done in any detail at this stage as considering individual option components out of the broader context would not be a good use of time. There is a lot of interaction between the options, add-ons, hybrid solutions and the design objectives. This will be discussed within design sprint 4 and brought to the Steering Group and it will be included within the consultation.
- Perhaps focus on what can be addressed by this group whilst also being conscious of the bigger / long term strategic direction (so probably not for this group to rule things in or out).
- What about the current queue, will they be within scope of these changes and how will we bridge from where we are now to the new connections approach that is developed?

Consideration of hybrid options and elements of option A, B and C

- There may be space for all three options in some circumstances? A & B may not go far enough to deliver the scale of reform needed.
- Hybrids of the options could be the way forward and are multiple approaches possible? Prefer market led approach as the centralised planning approach may lack an innovation driver.
- The ENA Strategic Connections Group is also considering this. Options A, B and C should not be considered exclusively. Option C might be necessary. How should good locational signalling be achieved? Particularly for the storage market. Options A and B focus on speeding up the queue but do not focus on locational signalling.

Option C

- Model C could fit for example in circumstances such as offshore wind where a single landowner is in play.
- Assume that option C is such a radical change that it would require ministerial or legislative approval? ESO couldn't decide this? This would need a REMA-like approach (Reform of Electricity Market Arrangements), and therefore there are limited opportunities for this group to influence. REMA and Future System Operator (FSO) policy may go in a different direction and therefore considering option C in detail creates a lot of complexities. May be better to keep this higher-level to feed into other strategic activities?
- It's not clear who would be the central body for storage projects in option C.
- We're looking for an enduring solution and given this option C should be considered, especially for offshore.
- One member expressed concern about option C, but noted that this could be similar to the approach adopted for the Stability 3 Pathfinder which worked well? Given this, we should keep option C in-scope. Option A and B alone doesn't feel like enough, something might be missing?
- [*From online chat:* The Green Recovery Scheme at Distribution also had elements of option C and they worked well. A previous trial of an option C approach with flexible connections had positive results. Examples referenced in mid-Wales and Norwich.]
- Option C looks promising and could give developers more certainty. In options A and B the developer holds all the risk. Option C needs to consider democratic considerations on land use not just system requirements; and may not be ESO driven.
- Is option C descoped from the design sprints?
  - ESO response: We're looking at flexibility within option A and B to include aspects of C (such as for offshore, pathfinders and so on). We do propose placing much less focus on a pure option C approach within the design sprints, but to still include option C within the consultation. Our current view is to revisit consideration of option C once REMA outcomes are clear.
- If option C is in-scope we must be clear that this is for whole system, not just transmission. We must consider all real-world factors and costs, to ensure the solution is efficient and effective. Really looking for long term whole energy system planning.

- [*From online chat:* Option C, the ESO/TOs could know what works for the networks in the future and this could be used as a fast-track process to alleviate the current queue pressures.]

- Important to take note of the consideration of wider economic and social factors.

- Agree that offshore, where The Crown Estate and Crown Estate Scotland has land rights there is need for a co-ordinated approach. Onshore, land rights are much more complex and there are democratic considerations too.

- [*From online chat:* Another idea could be The Crown Estate or Crown Estate Scotland applying for the connection. Developers would then bid for the package of the offshore land rights and the connection. May not be a good idea, but worth considering. ESO response: This may have come up in a design workshop. If not, it will be added.]

Option B

- For option B, the gates would need clear rules and once projects pass through a gate, they must stick to the rules passed in that stage gate. It's also not clear what constitutes a material change that could send a project to the back of the queue. Therefore, a gated process would require material change definitions to be clear from the outset for developers.

- Option B with stage gates has links to the recently announced queue management, so is this already starting to happen?

- [*From online chat:* with option B, where we are adding gates, where is the fast-track process to support the market?]

- For Option B, we need to consider its bankability. When in the process will applicants get a connection date from the initial gate, even if a backstop date? Option A provides a connection date within three months. A slower provision of a connection date could cause big problems for developers, undermining investability.

- There's a need to clarify the stage gates for option B to consider the impact on investor confidence.

- [*From online chat:* Consider learning from Ireland and the Netherlands. ESO response: Yes, we are including this. Learning from the USA too.]

- Planning delays need to be considered and could frustrate the gated approach.

- ESO response: Sprint 1 and 2 will cover many of these more detailed issues, including queue management, queue allocation, etc. ESO recognises the risk with the gated process and careful consideration is needed of what is needed/provided at each stage gate to mitigate risk by design. For example, a backstop date could be provided, with the opportunity to move the date earlier once a certain gate has been passed. This needs more discussion. Some market signals could be added to options A and B and this has already been raised in the design sprint workshops.

- **Decision: 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 to consider whether elements of Option C could be incorporated into Options A and B.

- **Action: 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 option C.

Add-on 1: Developer rights to design and construct local connection works

- This is being covered by code modification CMP330/374.

- [*From online chat:* Quality / specification requirements and wider O&M economic and efficient delivery and impact to consumer costs would need to be considered via cost benefit analysis and impact assessment.]

- Members were generally of the view that the approach in this area is not critical to the overall design of the reformed connections process and that we should therefore wait for the outcome of CMP330/374 and incorporate that approach within connections reform.

- **Decision: 2.5.2** - Add-on 1 should not be a focus for Connections Reform.

Add-on 2: Embedded connections

- It was noted that this add-on would be better considered as part of the discussion in steering group meeting 3 on strategic options for relationship between connections at Transmission and Distribution levels.

Add-on 3: Application windows

- The ESO noted that discussions in the sprint sessions highlighted that application windows could give more certainty in terms of network design. This could link to the Holistic Network Design approach which was utilised for offshore wind i.e., a more co-ordinated design for all applications This could also avoid issues with interactivity between connection projects.
- It was noted that there's a need to consider the size or type of a connection project, i.e., would the applications windows apply to all sizes or types of connections applications or only for connections above a certain size or of a certain technology. It was suggested that very large connections would potentially be more comfortable with a separate pace.
- Are nationwide or regional windows being considered?
  - o ESO response: This has not been specified national or regional at this stage. It is a concept that we intend to explore further in later sprints.

Support for application windows:

- Windows are worth considering. There are potential advantages at national and regional levels.
- [*From online chat*: Windows provide more customer certainty and help manage workload at TOs and help align with some other processes such as Modification Applications, pathfinders, offshore leasing, etc.]
- [*From online chat:* This feels like a clear process and sounds sensible.]

Issues raised concerning application windows:

- [*From online chat*: Windows would create a rush of applications and need resource to filter them.]
- [*From online chat*: Must consider impact of Transmission windows on Distribution connections. Will D connections be paused whilst aligning with the Transmission window to get certainty on their connection date?]
- [*From online chat:* There may be a need to also align windows with other processes.]
- Visibility of future windows could be provided with tight rules to help manage process.
- [*From* online chat: Have recommendations already been made to improve customer experience and process efficiency within the existing framework based on the feedback received? ESO response: these are likely to come out of ongoing and later design sprints.]
- **Decision 2.5.3**: 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.

Add-on 4: Separating the allocation of connections from allocation of capacity

- Gas connections split the connection from allocation of capacity.
- [*From online chat*: Does the process already cater for this approach? Are pathfinders an example where you can get a physical connection without TEC?
  - o ESO response: no, on pathfinders the solution has zero TEC, but that is by design, i.e., there has not been a decision to grant TEC separately or at a later stage]
- Another member noted that provisions already exist to enable capacity trading in CUSC. We should look at what has been done before and consider whether the potential benefits of auctions could be realised in other ways. Bankability of this approach is key.
- A member noted that conceptually this might be worth investigating, so we shouldn't drop this yet. The benefit could be for generation and storage sites trading access between each other. It's complicated, but interesting and it could help with queue management.
- [*From online chat*: too much uncertainty in this approach.]
- A member noted few advantages with this approach and recommended not to pursue this option.
- Overall, many Steering Group members identified concerns with this approach

- o ESO response: This could be an option to consider further after the conclusion of REMA. Recommend that we don't spend too much time on this concept.
- **Decision 2.5.4**: Proposed that this approach is not given focus in later design sprints, although REMA developments will need to be monitored.

Variation 1: Roles for ESO and TOs

- How about TOs booking headroom and having the design/asset decision, allowing ESO to be more strategic?
- ESO interaction can be quite clunky for customers, so moving customer interaction to TO-led could improve it?
- [*From online chat*: This considers the physical connection requirements but would still require separate consideration of system access requirements which would require engagement with ESO.]
- There is something here that might be worth exploring but worth considering whether the suggested change is a process issue or something else? A previous initiative did consider ESO and TO roles and responsibilities and concluded that the ESO should have the role it has today in the connections process.
- If the process moves to the 3 TOs and also the OFTOs (and in future CATOs) this could add administrative effort to developers. Much simpler if just ESO is the gatekeeper.
- Agree. Standardised contracts across Great Britain would be essential, otherwise costs will be higher. Harmonised approach is important to achieve best value for consumers.
- We should try and clarify the issue we are trying to solve with this. Transparency, co-ordination and standardisation are all important. Transmission and Distribution factors are also a consideration; as, if ESO does not continue to have this role, it would also be necessary for DNO variants of this process too. We should reflect on this.
    - o ESO response: From what we have heard from stakeholders during the sprint sessions, there are mainly process frustrations. We've shared broad concepts so far. In future, as the design sprint progress, much more specific issues and ideas will be addressed through the workshops and then we'll bring details of these themes to Steering Group.
- Steering Group members presented a range of views. There was some support for the proposed approach to both variations presented, and consideration will also be given to the alternative variation suggested by a member.

6. **Any Other Business**
    - **Action: 2.6.1** ESO to share overall project timeline for information.

    Next meeting:
    - Design sprint 1 report
    - Strategic options for relationship between connections at Transmission & Distribution levels
    - To note the following:
        - o Project plan (for information)
        - o Finalised Terms of Reference (for information)
        - o Updated design objectives and design criteria (for information)
        - o Summary status of relevant code modifications and tactical connections policy and process changes (for information)
        - o Summary of ENA Strategic Connections Group themes and progress (for information)

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Decision Log

Decisions: Made since last meeting

ID	Description	Owner	Date
2.3.1	Approved the Terms of Reference v1.2 subject to the inclusion of the edits identified in Meeting 2.	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 to consider whether elements of Option C could be incorporated into Options A and B.	Merlin Hyman	02/03/2023
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

Decisions: Previously made

ID	Description	Owner	Date
1.01	Agreed to apply Chatham House rules – 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

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
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	High-level plan in meeting 3 pack	tbc
1.4.1	Relationship between connections at transmission and distribution levels not discussed in meeting 1 and agreed to discuss at meeting 2	James Norman	02/03/2023	Carry forward to 16 March	tbc

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2.2.1	ENA to share updates from its Strategic Connections Group within subsequent Steering Group packs.	David Boyer	16/03/2023	Check status,16 March	tbc
2.3.1	ESO to update and circulate the agreed Terms of Reference	James Norman	09/03/2023	Circulate with 16 March papers	Click or tap to enter a date.
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	Click or tap to enter a date.
2.6.1	ESO to share project timeline	Mike Robey	09/03/2023	High-level plan in meeting 3 pack	Click or tap to enter a date.

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
1.3.4	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