Consultation

Connections end-to-end review – consultation

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This document is a part consultation / part call for input on proposed changes to the regulatory framework around electricity grid connections, as part of our[1] connections end-to-end review.

We are also consulting on the connections incentives for the RIIO T3 price control (RIIO stands for 'Revenue = Incentives + Innovation + Outputs').

We particularly welcome responses from regulated parties including network companies and the National Energy System Operator (NESO), as well as connecting customers at all voltage levels. We would also welcome responses from other stakeholders and the public.

This document outlines the scope, purpose and questions of the consultation and how you can get involved. Once the consultation is closed, we will consider all responses. We want to be transparent in our consultations. We will publish the non-confidential responses we receive alongside a decision on next steps on our website at ofgem.gov.uk/consultations. If you want your response – in whole or in part – to be considered confidential, please tell us in your response and explain why. Please clearly mark the parts of your response that you consider to be confidential, and if possible, put the confidential material in separate appendices to your response.

[1] The terms "the Authority", "we", "our" and "us" are used interchangeably in this document.

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Executive Summary

The connections queue has reached over 730 GW across transmission and distribution, far more than we are likely to need under future demand scenarios. As a result, it takes too long to connect the generation and demand Great Britain needs to meet net zero, with some projects receiving connections dates into the late 2030s.

The joint Ofgem / Government Connections Action Plan (CAP) in November 2023 identified the actions needed to drive change, ranging from targeted initiatives to enduring reform of the connections process.[2]

Fundamental and enduring change can only be achieved by attacking / addressing all aspects of the connections problem: the connection process; enabling infrastructure delivery; and the enabling regulatory framework. This means we need to go further in both the scope of connections reform and in making sure the connection process is supported by (i) complimentary reforms to the energy system and (ii) a fit for purpose framework that governs how parties to the connections process are expected to act.

Connections Reform and Clean Power 2030

Connections reform is already well underway through the National Energy System Operator (NESO)-led urgent code change process, launched in April 2024. The goal of connections reform is a slimmed down queue of viable, ready projects that are able to progress and connect more quickly, helping to facilitate the objectives around net zero, affordability and security of supply. Meeting this goal requires an overhaul of the process by which projects apply for and are accepted into the connections queue, moving away from the current first come first served process which has led to the hugely oversubscribed queue.

Government and Ofgem have both set out the need for alignment between connections and an enduring set of strategic spatial energy and network plans in future. The Government's Clean Power mission and the recent announcement of the Clean Power 2030 Action Plan has created both a need and an opportunity to significantly accelerate alignment of strategic planning and connections. Accordingly, NESO's connections reform proposals have evolved from ensuring projects in the queue are viable and "ready" towards also including a process for prioritising projects that are identified as "needed" in the Clean Power 2030 Action Plan and future energy system plans. This week we saw

[2] Link here to the CAP - Connections Action Plan: Speeding up connections to the electricity network across Great Britain

NESO's advice to Government on pathways to CP30[3] - we expect Government to respond before the end of the 2024 with publication of the plan.

This week has also seen the publication of NESO's consultation on the process for aligning connections with strategic plans and its connections methodologies which, alongside the codes, set out the rules for how the new connections process will work.[4] This will be accompanied by our publication on required licence changes for connections reform over the coming weeks. We expect to take decisions on the package of connection reforms across the codes, licences and methodologies in Q1 2025, with a view to revised offers being issued within the new process later that year.

Strengthening connections regulations – "the connections end-to-end review"

Reforming the connections process is vital but must work in conjunction with a supportive package of regulatory change. The wider regulatory framework must also drive the behaviours and outcomes we need to see within the new connections process.

We are aware of customer frustrations with the service they receive around connections. This extends beyond the timescale for connection and includes concerns about the standards of service received, connection offer delays, poor-quality connection offers, or a lack of clear communication from regulated parties during the process. Whilst we know that network companies and NESO are dealing with an unprecedented volume of applications and managing complex network plans, their performance does not always meet expectations.

With that in mind, we set out in the CAP that we would undertake an "end-to-end review" of the incentives, obligations and requirements as they relate to connections. The intended outcome of the review was a strengthened regulatory framework for Distribution Network Operators (DNOs), Transmission Owners (TOs) and NESO that ensured both improved quality of service and more timely connection outcomes.

This consultation / call for input document marks the end of the first stage of that review. We have collated the connections issues we are aware of from a variety of sources, including stakeholder engagement, responses received to previous publications etc., and grouped them into seven key themes. For each theme we have identified a goal we are looking to achieve through the review. We then set out the issues which we think

[3] Link here to NESO's Clean Power 2030 advice to Government - Our Clean Power 2030 advice to Government | National Energy System Operator
[4] Link here to NESO's connections phase 3 consultation documents - Connections Reform | National Energy System Operator

are currently preventing that goal, and have proposed solutions to address those issues with a view to achieving it:

Connections end-to-end review – seven themes:

1. **Visibility and accuracy of connections data** - All useful data must made available transparently to connecting customers and other interested parties in order to inform customer's connection applications.
2. **Improved standards of service across the customer journey** – Connecting customers must receive a high standard of service at all stages of the customer journey, from pre-application to energisation.
3. **Network companies being required to meet connection dates in connection agreements** – There should be proportionate requirements on network companies and NESO to meet agreed customer connection dates in connection agreements, commensurate with those on developers to meet project milestones.
4. **Quality of connection offers and associated documentation** – Network companies and NESO should be suitably required to issue high-quality offers and associated documents and information to connecting customers
5. **Ambition of connection offers** - Network companies and NESO should be suitably required to offer connecting customers ambitious connection dates, to ensure they are doing everything possible to expedite connections.
6. **Minor connections** – Minor connections customers, ie those seeking to make connections at low voltages (such as domestic and small business customers installing heat pumps or Electric Vehicle charge points), should receive a prompt and consistent high standard of service from network companies.
7. **Provisions and guidance for determinations** – There should be greater clarity and transparency for all parties on the determinations process, including on Ofgem's role in managing complaints and issuing determinations.

The document presents a number of questions that we want stakeholder feedback on. In particular we are seeking views on two main aspects – 1) on the issues we think are prevalent within the connections process, and 2) on our initial proposals for how to address them.

Whilst many of the behaviours we are targeting here are agnostic of the connections process, we consider that both connections process and regulatory reform are required in tandem in order to achieve the overarching outcomes we need to see from connections - timelier connections for ready and needed projects, and an increase in the standards of service connecting customers receive throughout the process.

Next steps

This document marks the beginning of a process. Our expectation is that this document will build out the evidence base and further inform our assessment of where we think changes to the regulatory framework are required. We expect to respond to this consultation in Spring 2025 with a series of firmer proposals.

As part of this document we are also consulting on new connections incentives for the RIIO-T3 (Transmission 3) price control period. We expect to decide on those incentives through this consultation process in Spring 2025, such that they are agreed before Draft Determinations in June 2025.

1. Introduction

Section summary:

This section sets out the context of how the end-to end-review fits in to the wider connections landscape, including the ongoing connections reform process and the Government's Clean Power 2030 mission.

The section then describes what we are consulting on within this document and sets out next steps.

Context

Current state of connections

1.1 Decarbonisation ambitions and investment in renewable technologies have resulted in high demand for connections to the electricity network. The transition to a net zero energy system and the electrification of heat, transport and industry has driven, and will continue to drive, an unprecedented level of renewable generation, storage, and demand projects seeking to connect to the grid.

1.2 Connection dates vary depending on the location and type of project; on average customers are receiving connection offers that are more than 5 years after the date requested and often well into the 2030s and sometimes into the 2040s. These long wait times are the result of limited network capacity and an oversubscribed queue.

The queue in relation to Great Britain's energy needs

1.3 The connections queue has reached over 730 GW across transmission and distribution, with an average growth of 12GW a month for the last 30 months. NESO's recent advice to Government on pathways to deliver clean power by 2030 estimates the need for 200-225 GW of generation projects connected by 2030.[5] It is clear the queue is currently oversubscribed.

1.4 Neither the rate of growth nor the mix of energy technologies in the current queue align with Great Britain's future energy needs. For example, there is far more storage and solar than is likely to be needed under any scenario by 2050.[6]

[5] Link here to NESO's Clean Power 2030 advice to Government - Our Clean Power 2030 advice to Government | National Energy System Operator

[6] See NESO's provisional impact assessment, released as part of its connections reform Phase 3 consultation documents - NESO Connections Reform Data Impact Assessment v0.02

How did we get here?

1.5 The connections process and the enabling policy and regulatory framework have all contributed to the unsustainable volume of applications and the resultant delays for customers.

1.6 The 'Connect and Manage' transmission access regime was introduced by Government in 2010 to improve access to the electricity transmission network for renewables, by offering generation customers connection dates ahead of the completion of wider transmission system reinforcements. This allowed earlier access to the transmission system and stimulated investment in renewable generation.

1.7 However, network infrastructure investment has not kept pace with the volume of projects seeking to connect. Accordingly, projects have been held up by the volume of projects ahead in the queue, and by wider reinforcements becoming increasingly necessary to enable connection.

1.8 This combination of the unprecedented volume of renewable projects seeking to connect and the growing list of transmission reinforcements required to enable connections is at the core of the connection delays experienced by customers. While this problem is most acute at transmission level, it also impacts timelines to connect at distribution, particularly for embedded generation or large demand projects. The volume of projects at distribution dependent on transmission works is increasing.[7] At present, almost two-thirds of those seeking connection to the distribution network are dependent on, or awaiting assessment for, transmission reinforcement.[8]

1.9 This central connections problem has been further compounded by a first-come first-served approach with low queue entry requirements, limited powers for the ESO (now NESO) to terminate projects, and network companies being obliged to make connection offers within three months of receiving applications irrespective of whether that project is viable or meets system needs.

[7] Typically demand and generation connections at lower voltage (<1MVA) are not reliant on transmission upgrades. Distributed generation projects over 1MW require an assessment of impacts at the transmission level, which can lead to delays to the project as well as imposing additional costs if transmission reinforcement is identified.
[8] See data on reinforcement required here - Connections Data – Energy Networks Association (ENA)

The Connections Action Plan

1.10 Transmission investment and connections reform are both crucial to enable a clean, secure, and low-cost energy system, as well as for wider economic growth and development.

1.11 The Government Transmission Acceleration Plan (**TAAP**)[9] and joint Ofgem / Government Connections Action Plan (**CAP**)[10] were published in November 2023. The TAAP commits to reducing the build time for new transmission infrastructure, which is a critical dependency for reducing connection timescales. The CAP focuses on actions to improve the connections process.

1.12 Connections reform in the CAP incorporates a spectrum of actions from tactical initiatives through to deeper changes to how connections are managed and prioritised to support a strategically planned energy network. The purpose of CAP was to hold NESO and network companies to account against delivery of the various initiatives, as well as set strategic direction to deliver further improvements.

1.13 The aim of the CAP is to reduce connection timescales for viable projects aligned with net zero, so that most projects can connect in line with their realistic project requirements. At transmission level the aim was for the vast majority of connection applications to receive their requested connection date, and to reduce the delay for the rest from an average of over five years to six months.

1.14 In order to achieve this the CAP set out actions across six key action areas:

1 - Raise entry requirements

2 - Remove stalled projects

3 - Better utilise network capacity

4 - Better allocated available network capacity

5 - Improve data and processes, and sharpen incentives and obligations

6 - Develop longer term connections process models aligned with strategic planning and market reform

1.15 Initiatives under the CAP have had an impact. Barriers to entry have been raised, new queue management processes at transmission are now in place, and capacity has been released from the queue. However, the scale of problem

[9] Link here to the TAAP - Electricity networks: transmission acceleration action plan - GOV.UK
[10] Link here to the CAP - Connections Action Plan: Speeding up connections to the electricity network across Great Britain

means that deep and enduring reform of the process and regulatory framework remains crucial to meeting net zero.

TM04+ and the Clean Power Plan

1.16 Target Model Option 4 (**TM04+**) is the name given to NESO's electricity connections process reform proposal.

1.17 The NESO proposal in December 2023 was for a reformed connections process to overhaul the first-come first-served system.[11] The intention was to introduce conditions that would make it harder to enter the connections queue. A central aspect of this proposal was the introduction of "readiness" criteria, so that only projects that were sufficiently viable and mature would be accepted into the queue and offered a queue position. The intention was to produce a streamlined queue of ready projects and to subsequently align the connections process with the first Strategic Spatial Energy Plan (**SSEP**).

1.18 As NESO developed its reform proposals in 2024 there were three important changes of context. Firstly, the proposal evolved from a process that only applied to new applicants, to one that also applies the criteria retrospectively to the existing queue as well. Secondly, the available evidence demonstrated that the introduction of a readiness alone would be unlikely to reduce the queue sufficiently to resolve connection delays or deliver a balanced energy mix needed to meet net zero. Thirdly, the new Government established its mission is to make Great Britain a clean energy superpower, including delivering clean power by 2030 and accelerating to net zero.

1.19 In August, the Secretary of State for Energy Security and Net Zero and Chris Stark, head of Mission Control for Clean Power 2030, jointly commissioned NESO to advise government on credible pathways to achieving clean power by 2030, including consideration of criteria that could support connections reform. Government is now considering that advice and will set out the path to decarbonise the electricity grid in its Clean Power 2030 Action Plan later this year. This creates both a need and an opportunity to significantly accelerate alignment of strategic planning and connections, as we transition towards an enduring set of strategic spatial energy and network plans. Balancing affordability and security of supply alongside net zero aims makes prioritisation of projects that are needed an essential part of connections reform.

[11] See NESO's Connections Reform Final Recommendations Report - Connections Reform - Final Recommendations Report

1.20 Accordingly, there are now four important aspects to the TMO4+ proposal:

- The introduction of criteria which projects must meet to receive an offer to connect or use the electricity transmission system. It is proposed that there is a minimum readiness criterion, and criteria aligned with strategic energy plans;
- Introduction of two types of offers, one which contains only an indicative connection location and connection date, and one which contains an actual firm connection location, connection date, and a queue position.
- The application of this new criteria to the existing connections queue (in addition to future applicants); and
- The introduction of two application windows each year allowing for a batched application process and more coordinated network design.

1.21 NESO is currently consulting on the design options for TMO4+ and Ofgem expects to publish its consultation on the license changes needed to enable this proposal in the coming weeks. We expect to see reforms come to Ofgem for decision in early 2025, with revised offers needed for 2030 issued under the new process by the end of 2025.

What is the end-to-end review?

1.22 Connections reform through TM04+ is about making enduring changes to the connections process to create a streamlined queue of ready projects that align with strategic plans.

1.23 However, we need to ensure that the regulatory framework surrounding connections keeps pace with process reform, in order to drive the right behaviours and support the right outcomes in the new reformed connections process world.

1.24 Accordingly, we committed to an action in the CAP (section 3.5d - Standards, Obligations and Incentives) to "undertake an end-to-end review of the incentives, obligations and standards relating to transmission and distribution connections".[12]

1.25 The desired outcome of this review was a framework of incentives, obligations and requirements pertaining to network companies and the ESO (now NESO) that ensure improved quality of service and timely connection outcomes.

[12] Link here to the Connections Action Plan. See pages 58 to 61 for details of the end-to-end review - Connections Action Plan: Speeding up connections to the electricity network across Great Britain

1.26 The CAP called out some areas of underperformance that we were aware of, including timescales for connection offers, timeliness of connection dates, data transparency and quality, communication and engagement, design and construction and domestic connections. Those issues have been developed in more detail as part of the review.

Approach to the end-to-end review

1.27 The high-level approach we have taken to the review has been as follows:

- We developed a set of eleven connecting customer archetypes across transmission and distribution, for example "offshore projects connecting at transmission", or "demand connecting at distribution but where transmission upgrades are required". The archetypes were defined such that all connecting customers across generation and demand, at all voltage levels and involving all technologies, would be captured within one of them.
- For each archetype we set out the typical "end-to-end customer journey" from pre-application to energisation. We captured the specific regulatory requirements applicable at each stage and mapped them against what we defined as the reasonable expectations of the customer. The aim was to understand whether the regulations provide for the customer's reasonable expectations to be met – ie, are regulated parties suitably required to deliver the right processes and the right standards of service at each stage of each of the journeys?
- We then catalogued the issues we were aware of within each archetype and at each stage of the journey. This information was derived from a variety of sources, including from previous policy work in this area and from a broad range of stakeholder engagement. Whilst the approach to the project has been through the lens of the connecting customer, we have engaged with a range of stakeholders, including but not limited to network companies and connecting customers, to build up as wide a range of evidence from as many different perspectives as possible.
- We grouped the connections issues we are aware of into seven broad themes, as follows:

  1. Visibility and accuracy of connections data and network capacity
  2. Improved standards of service across the connections customer journey
  3. Requirement on networks to meet connection dates in connection agreements

4. Quality and reliability of the connection offers and associated documentation / contracts
5. Ambition of connection offers
6. Minor connections, and
7. Provisions and guidance for determinations

- For each of the seven themes we then:

a) Identified a broad problem statement

b) Defined a goal which we are seeking to achieve

c) Set out the issues within the theme that we are aware of

d) Discussed our initial views on those issues, and

e) Identified a series of proposals which we think contribute towards addressing the issues and achieving the goal.

1.28 The full details are set out in Chapter 2 – Issues and Recommendations.

What are we consulting on?

1.29 There are two aspects to this consultation – 1) the connections end-to-end review and 2) the RIIO T3 connections incentives

1.30 For the end-to-end review, we are seeking stakeholder views on the issues we have presented, our proposed solutions for how to address those issues, and on anything else stakeholders would like us to consider within scope of the connections regulatory framework. The full list of questions is in appendix 3.

1.31 Within this document we are also taking the opportunity to consult on the RIIO T3 connections incentives as part of the wider RIIO T3 design process. Details are provided in chapter 3 - RIIO T3 Electricity Transmission Network Incentivisation.

Next steps

1.32 **End-to-end review** - We expect to respond to this consultation in Spring 2025 with a series of firmer proposals, building on the evidence base we expect to receive in response to this consultation.

1.33 **RIIO-T3 connections incentives** – We expect to decide on the T3 incentives through this consultation process in Spring 2025, such that they are agreed before Draft Determinations in June 2025.

2. End to End Review - Issues and Recommendations

Section summary:

This section represents the main body of the call for input / consultation on the end-to-end review.

The section sets out the connections issues we are aware of across seven broad themes. We then make proposals for how to address those issues. Finally, we set out the consultation questions under each theme through which we seek stakeholder input.

2.1 For each theme we have 1) identified a broad problem statement, 2) defined a goal which we are seeking to achieve, 3) set out the issues within the theme that we are aware of, 4) discussed our initial views on those issues, and 5) identified a series of proposals which we think contribute towards addressing the issues and achieving the goal.

2.2 We then pose a series of questions within each theme. In particular we want to hear from stakeholders regarding whether they agree with the issues presented, whether they recognise any other issues not covered in the document, and whether they agree with our proposals. We also pose a general question under each theme to test whether there is anything else that we may have missed.

2.3 The issues have been presented as views of stakeholders as we currently understand them. We are not presenting the issues as definitive views of Ofgem at this stage – one of the key purposes of the consultation as discussed is to build the evidence base around where substantive issues exist, such that we can move forward with developing firm proposals to address them as necessary.

2.4 We expect to respond to this consultation with a series of firmer proposals in spring 2025.

2.5 Whilst the themes are generally mutually exclusive, we note the significant inter-relationship between themes 3, 4 and 5 on networks meeting connections dates, improving quality of offers and ensuring offers are suitably ambitious. We recognise a balanced approach is required in addressing these three areas in order to drive the right behaviours and outcomes, for example noting the tension between requiring ambitious connection dates in connection offers, whilst simultaneously tightening requirements for network companies and the NESO to then meet those more ambitious connection dates.

Theme 1 - Visibility and accuracy of connections data and network capacity

Problem statement

2.6 Good quality, standardised, usable network capacity data is not uniformly made readily and transparently available to connecting customers in a manner that is both timely and useful. This prevents customers from identifying optimal grid entry points for their projects.

Goal

2.7 Greater alignment and standardisation of how all useful data is made available transparently to connecting customers and other interested parties, including third parties providing connection services. This will help connecting customers to understand network conditions in different locations to inform their decisions on, and improve the quality of, connection applications, and ensuring that connecting customers receive connection offers more aligned with expectations.

Issues identified

2.8 We have been made aware of the following issues under this theme, either through our own work or through communications from stakeholders. The issues presented below are views of stakeholders, not necessarily those of Ofgem.:

- Pre-application data, including generation and demand-specific data, is not always readily available.
- Customers have limited ability to self-serve. They need visibility of the wider state of the network and the capability of the grid / grid assets when deciding on a connection application submission.
- The lack of sight of local grid conditions can affect the quality of connection applications. This simultaneously creates issues for network companies which are then required to process large volumes of low quality or underdeveloped connection requests.
- Where data is available, it is not always accurate, of sufficient granularity, nor kept up to date in a timely manner.
- There is a need for connections data to be made available in real-time. Systems managed by Distribution Network Operators (**DNOs**) need to communicate and exchange information as frequently as possible with the system operated at transmission by the National Energy System Operator (**NESO**).

- Currently, different tools are being used across transmission and distribution, and individual networks are endeavouring to standardise their online systems as part of the Connections Action Plan (**CAP**) and connections reform objectives. A unified set of open data tools requires standardisation across DNOs and the NESO, to ensure that all network's tools transparently present accurate, up-to-date data in real time.
- Lack of visibility of details of projects that are ahead in the connections queue, and of how individual network companies operate their Active Network Management (**ANM**) schemes, limits developers' ability to assess curtailment risk and model the curtailment that their own proposed projects will be subject to. This is now more important than ever following the Access Significant Code Review and the increasing number of non-firm offers.[13]
- It can be difficult for customers to access technical support from network companies if they have clarification requests or technical queries relating to data.

Discussion

2.9 We think it is critical that connecting customers have access to the data they need in order to be able to undertake early-stage assessments at pre-application, informing on key metrics like potential connection dates, grid capacity available, likely queue position at specified locations, and providing early visibility of any necessary infrastructure reinforcements their project will likely be subject to.

2.10 This is now more important than ever. We know that network companies are dealing with an unprecedented volume of connections applications, some of which can be of poor quality and require significant resource within network companies to resolve. This results in delays for customers when they attempt to access engineering support within network companies to discuss their applications. The greater the ability for customers to self-serve using data, the easier it will be for networks to manage the flow of applications.

2.11 Greater visibility of data early in the process should also result in customers submitting better informed and less speculative applications with more realistic requested connection dates. Some connecting customers will be location-specific

[13] Link here to our decision and direction on the Access SCR - Access and Forward-Looking Charges Significant Code Review: Decision and Direction | Ofgem

and would thus benefit from early sight of data at their location. Others may be agnostic and require data to identify preferred connection locations.

2.12 We provided a summary of the state of connections data in the CAP.[14] That summary set out the data currently available across a number of different network-owned tools, noting the issue that "*it is not currently possible to see the interactivity or dependencies between projects, the specific locational impacts that these might have, and the relationship between these projects and the associated enabling and wider reinforcement works and the capacity that these works create, where and by when.*"

"Single digital view" of connections data

2.13 The CAP identified the following action:

"The ESO and network companies to work together to create a single digital view of connections, the associated enabling and reinforcement works and available capacity across transmission and distribution."

2.14 A lot of progress has already been made. For example, the NESO and all of the DNOs have worked to develop and publish their digital view tools and associated data, with some already in operation and the remainder on course for use by the end of 2024. Much of this work was a continuation of initiatives undertaken by network companies and the NESO pre-CAP.

2.15 Whilst we recognise the commitment that all parties have shown to date, we are conscious that this work has been progressed without any specific regulatory requirement or oversight. We think it is important that there is an ongoing regulatory requirement for networks to continue to operate and improve these tools, such that they become and remain as useful as possible. We also want to ensure that the tools go as far as they can with a view to achieving the outcomes described in the goal statement above.

2.16 We see three key considerations for the regulatory framework for licensees – a) the requirement to publish the tool, b) the standards that the tool should meet, and c) the ambition for a single tool versus the current set of individual DNO / NESO specific tools.

a) Requirement to publish single digital view tools

[14] See chapter 3.5(a) "Providing more transparent and accessible pre-application data" of the CAP, pages 48-51 Connections Action Plan: Speeding up connections to the electricity network across Great Britain

2.17 To ensure that input across the networks is consistent and high-quality, **we propose that a regulatory requirement be introduced to create, maintain and continuously improve connections data visualisation tools.**

2.18 We would like to understand how this could best be achieved at both transmission and distribution. For example, at distribution, Special Condition 9.13 of the Electricity Distribution Licences requires the licence holder to deliver certain activities, summarised in Paragraph 1.11 and collectively referred to as the Smart Optimisation Output (**SOO**).[15] The SOO requires DNOs to produce a Collaboration Plan that sets out their approach to data sharing, and to establish a System Visualisation Interface (**SVI**) that provides access for interested parties to a range of data tools and reports.

2.19 The requirements around what each DNO's SVI must contain are set out in the SOO Guidance, which came into effect on 01 April 2023.[16] Part 2 of the guidance sets out the requirements of the SVI, including the minimum dataset that the DNO must make available on it and how it must be presented, ie via a section of the licensee's website and open data portal.

2.20 We consider that introducing the requirement for the publication of the single digital view at distribution could be achieved either by amending the SOO licence condition or the SOO Guidance for DNOs. This would ensure that the data is hosted alongside other existing related data that stakeholders would find useful.

2.21 We would also like to understand how a regulatory requirement to create, maintain and continuously improve connections data visualisation tools could work in practice at transmission level for the NESO and Transmission Operators (**TOs**).

2.22 There are also interactions with existing tools to consider. For example, in April 2024, we published our direction on reforms to the Long-Term Development Statement (**LTDS**), which provides key data to potential connections applicants.[17] We consider that these reforms will help to improve visibility of the LV networks and provide a standardised modelling approach to electricity networks. However, the LTDS has limits, and additional datasets may be needed

[15] See Decision on the proposed modifications to the RIIO-2 Electricity Distribution licences | Ofgem. The SPCs can be found in the "RIIO-ED2 Standard and Special Licence Conditions" folder
[16] See Decision on the proposed modifications to the RIIO-2 Electricity Distribution licences | Ofgem. The SOO guidance can be found in the "RIIO-ED2 Licence Instruments and Associated Documents" folder
[17] Link here to the LTDS direction - Long Term Development Statement direction | Ofgem

by stakeholders in the connections process. We welcome stakeholders' views on the extent to which the LTDS and the Single Digital View tools help address the needs of connecting customers. Example questions might include: is there anything missing? Is there unhelpful duplication of data across tools?

b) Standards

2.23 **We also propose that a requirement to create and maintain a common set of standards for connections data and connections tools** be introduced into the regulatory framework, to ensure ongoing consistency and accuracy of information presented across the different tools. DNOs, TOs and the NESO should work together, with support from Ofgem, to decide what data and tools are within scope, taking into account the needs of the parties that will consume the data. We think it is very important that the types, format and granularity of data available to users within the different tools is standardised across DNO regions and across transmission and distribution boundaries to ensure maximum usability.

2.24 We would like to understand how this could best be achieved at both transmission and distribution. For example, at distribution the standards could be introduced into the SOO guidance alongside the requirement to create and maintain the tool as per part a) above, creating a regulatory requirement on parties to maintain their tools in line with these standards. Alternatively, the standards could be referred to from the licence or SOO guidance and instead be hosted and maintained by a separate body, for example by the Energy Networks Association (**ENA**).

c) Single view vs multiple tools

2.25 We note that, whilst the stated ambition in the CAP was for a "single digital view" covering all network areas within one single tool, this has been found to be difficult for networks to achieve given issues with data and system interoperability. We have also heard from developers that a single portal is not necessarily required, as long as the individual portals themselves are fit for purpose and appropriately serve customer's needs.

2.26 Whilst we agree that ensuring improved data quality and availability is prioritised first, **we propose that the long-term direction of travel should continue to be towards a single portal covering all network areas across both transmission and distribution**. We think the benefits of this would include (but would not be limited to) ease of use of the tool for users, consistency of data quality and availability across regions, and transparency and

clarity of data at the transmission / distribution interface. We would like to understand from stakeholders if they agree that a single digital view should remain the long-term ambition, and if they do not, we would like to understand why. We would also like to understand when this could be achieved by.

2.27 We consider that the proposed Data Sharing Infrastructure (**DSI**) will help to address some of the challenges around data access and could allow for the production of a single digital view. In our consultation on the governance of the DSI we proposed that the ESO (now NESO) should set out, by the end of 2025, how the DSI can be used to facilitate connections reform.[18] This consultation has now closed and we will publish our decision, including an update on this connections use-case, in early 2025.

2.28 In summary, improved access to relevant data for connection customers should help to ensure that applications are of higher quality, are informed by all available data, and are targeted (to the extent possible) in areas where capacity is available and / or where enabling works have shorter timescales. This is what we expect to achieve through the ongoing development of the single digital view tool(s).

Visibility of / ease of access to / completeness of data tools

2.29 The ENA has created a 'one stop shop' list on its website that includes all of the data and visualisation tools across transmission and distribution that networks and NESO make available for connecting customers and other interested parties to access.[19] We welcome the creation of this list as an aid to parties looking to access data.

2.30 We think it is critical that data is sufficiently visible and discoverable by all interested parties. We would therefore like to understand whether stakeholders are sufficiently aware of the data and tools available, whether it is easy to navigate to and use the data they require given it is spread across a number of tools and portals, and whether the tools are exhaustive in terms of offering all data reasonably required by developers and other interested parties.

System data – monthly data books

2.31 Since late-2023, DNOs, TOs and the NESO have collated and submitted connections data to the ENA, Ofgem and wider Government on a monthly basis.

[18] Link here to our consultation on the DSI - Governance of the Data Sharing Infrastructure | Ofgem
[19] Link to the Connections Data page on the ENA website - Connections Data – Energy Networks Association (ENA)

This includes (but is not limited to) data on the number and capacity of applications received, offers issued to connecting customers, offers accepted and connections made and whether the project is dependent on network reinforcement, all split by technology type.

2.32 The data is provided in an agreed data book template created collaboratively by all parties. The ENA compile all the individual submissions from the various networks to create the monthly joint transmission and distribution data book, which they publish monthly on its website.[20]

2.33 This data has proven extremely useful, including as an aide to tracking the scale of the connections queue problem and monitoring the impact / effectiveness of individual tactical solutions and CAP actions.

2.34 The monthly submission of this data is currently on a best-endeavours, non-regulated basis. We recognise and appreciate the effort and progress made on this by networks and the NESO.

2.35 However, the lack of regulatory requirement to provide this data carries risk around compliance and data quality on an ongoing basis. **We therefore consider that a regulatory requirement should be introduced** for networks to provide connections data on a regular, granular, and standardised basis for these purposes, including for external publication.

2.36 Again, we would like to understand how this could be best achieved at both transmission and distribution. For example, at distribution, Part C of Standard Condition 46 of the Electricity Distribution Licence requires the licence holder to provide certain data to allow us to monitor performance and hold this performance to account against RIIO objectives. The data that licensees are required to submit, as well as the conditions under which they must do so, is set out in the Regulatory Instructions and Guidance (**RIGs**). We consider that one way of introducing the requirement at distribution to provide monthly connections data books for reporting purposes could be via introduction into RIGs as an additional requirement. We would like to hear stakeholders' views on whether this is an appropriate solution.

[20] Link here to the Joint Transmission and Distribution Databook page on the ENA website - Connections Data – Energy Networks Association (ENA)

Legal barriers preventing sharing of further data

2.37 The CAP noted that "*The ESO and network companies are all working to embed the values of 'presumed open', as required under Data Best Practice principle 11, that is, making data publicly shareable as much as possible, while protecting commercially or personally sensitive data*".[21]

2.38 We would therefore take the opportunity to remind network companies of the licence obligation to follow Data Best Practice (**DBP**) Guidance. The guidance requires all Energy System Data to be treated as 'presumed open', subject to the triage process outlined in the DBP Supporting Information.[22]

2.39 We would like to understand whether stakeholders consider the values of presumed open are being appropriately adhered to in this way. In particular, we would like to understand whether there is any connections data that networks hold that may have undergone triage processes and have been deemed not suitable to publish openly but might still be very useful for developers to access in some form. We consider that details of projects ahead in the connections queue, or curtailment schemes impacting customer-specific projects connected at a particular location, may be examples of such data. **We would like to understand whether any solutions can be found to enable the data to be made available in a form that would be both useful and legally compliant.**

Proposals

Proposal 1a. A new regulatory requirement on DNOs, TOs and NESO to create, maintain and continuously improve single digital view tools to provide accurate, usable connections data to interested parties.

Proposal 1b. A new regulatory requirement on DNOs, TOs and NESO to create and maintain guidance / minimum set of standards for connections data visualisation tools.

Proposal 1c. A new regulatory requirement on DNOs, TOs and NESO to provide compiled system-level connections data on a regular basis for external publication

[21] See here - Data Best Practice Guidance (ofgem.gov.uk)
[22] See here - Data Best Practice Supporting Information (ofgem.gov.uk)

Consultation questions

Issues:

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?

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?

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?

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?

Other:

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?

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.

***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?

Theme 2 - Improved standards of service across the customer journey (not including "minor connections")

Problem statement

2.40 Limited standards of service requirements apply to the DNOs, TOs and the NESO during certain phases of the connecting customer journey. Standard of service requirements are generally focussed within the application and offer creation stages.

2.41 For the stages of the customer journey where standards do apply, such as at the offer creation stage, alignment and duplication checks across the regulatory framework are required to ensure it works efficiently and harmoniously.

Goal

2.42 To ensure standards of service requirements across all stages of the connections customer journey are fit for purpose in driving the right behaviours and outcomes, and that the different levels of the regulatory framework work in harmony. This should apply to all connecting customers to ensure that those at all voltage levels receive good and consistent service.

Issues identified

2.43 We have been made aware of the following issues under this theme, either through our own work or through communications from stakeholders. The issues presented below are views of stakeholders, not necessarily those of Ofgem. We have set them out under three broad sub-themes – inconsistency of standards of service, suggestions for new timeliness requirements, and issues noted specifically at the transmission / distribution interface.

2.44 Note, the focus in this theme is on larger connections across distribution and transmission, ie not including minor connections at distribution. Minor connections, ie those at lower voltages on the distribution network, typically at the domestic and small, non-domestic level, where the customer journey is markedly different to those of larger connecting customers and approaches to regulating standards of service are necessarily different, are covered in Theme 6.

Inconsistency of standards of service along the customer journey

- There are no clear expectations on the required level of customer engagement from regulated parties across the entirety of the end-to-end journey.
- Whilst there are a number of obligations centered around the provision of a quote / offer stage, such as Time To Quote in the distribution licence, there are limited standards defined / required elsewhere along the customer journey.
- Customers can lack clarity on what they can / should expect from the NESO, TO or DNO at each stage.
- Consider that more focus should be required on the steps post-offer acceptance, as this is where a number of issues can materialise. This can be classified into two main phases:
    - *Pre-delivery* – eg variation of offers to reflect updated cost, scope and timing.
    - *Delivery* – eg conducting necessary surveys, ordering required equipment, construction work, and final energisation of projects.

Suggestions for new timeliness requirements along the customer journey

- Additional prescription should be considered to define required standards of service / timeframes at different stages of the customer journey; for example, during pre-application and the stages that follow provision of the offer. We have been made aware of the following suggestions for potential new prescribed / required timeframes:
    - Timeframe within which network companies must respond to pre-application requests
    - Timeframe within which network companies must hold a first formal 'kick-off' meeting after offer acceptance to discuss the plan of work
    - Timeframe within which, following a connection agreement, certain personnel should be assigned to a project, for example a project manager and a project designer
    - Timeframe within which DNOs should submit information as required to the NESO after receipt of evidence from the connecting customer, eg provision of evidence from the DNO to the NESO that the connecting customer has met certain required criteria (eg "readiness criteria" -

assumes implementation of new gated connections process as proposed under current code modifications).

Transmission / distribution interface

- DNOs do not always submit Project Progressions[23] to NESO in a timely manner, sometimes taking one to two years rather than a few weeks. This has led to DNO-contracted projects securing a much later transmission queue position than if the DNO had submitted the Project Progression earlier, leading to later connection dates. We are also aware that different DNOs take different approaches to batching Project Progressions, creating confusion due to lack of consistency.
- There are issues around how 'clock start'[24] is determined in the Transmission Impact Assessment (**TIA**) process. The clock only starts for NESO at the point at which it begins to review the application and determine competency, whereafter it has three months to provide an assessment. This can lead to distribution connecting customers being queued up behind transmission customers, even though they had their application accepted earlier (ie by the DNO).
- TIA thresholds[25] should be reviewed for both generation and demand, and should be increased where possible to ensure distribution connections are not unnecessarily held up.
- There should be clearer obligations for the TOs and DNOs to actively coordinate to resolve circumstances where new Transmission connections impact on DNO networks through the Third Party Works process.[26]

Discussion

2.45 It is important that there are clear, proportionate standard of service requirements for regulated parties throughout the customer connection journey

[23] Project Progression is the process through which a DNO submits necessary information to NESO regarding new customers seeking to connect onto their distribution network
[24] 'Clock start' is the point in time at which the three months that NESO have to respond to a Project Progression commences
[25] TIA thresholds are the capacity levels defined to determine when a project seeking to connect at distribution must go through the TIA process. If the capacity of the project is above the threshold, a TIA is required. The thresholds vary across the three TO regions.
[26] Third Party Works are the works required at distribution level to facilitate a new connection being made at transmission which has triggered those works to be required.

to ensure that the regulatory framework drives the right behaviours and outcomes.

2.46 The connections customer satisfaction surveys in the price control frameworks are in part intended to incentivise high standards of customer service, but we want to understand if strengthened requirements are required, and where.

2.47 We recognise the tension between timeliness of delivery and quality. Tightening requirements around the timeliness with which certain products or services must be delivered can risk impacting on the quality of that product / service. We must ensure we get the balance right.

2.48 We agree that the transmission / distribution interface **(T/D interface**) represents a particular area of uncertainty and risk for connecting customers. We think it is important that DNOs and NESO/TOs have defined and consistent requirements around the standards of service, including around timeframes for delivery of certain services, within which the T/D interface is managed, and that these should be clear and transparent to aid the customer in managing expectations.

2.49 We appreciate the issues that network companies and the NESO are facing in managing larger than ever volumes of connection applications and navigating complex network planning requirements. Given the resourcing constraints that networks are experiencing, as well as potential competition for connections at distribution from Independent DNOs (**IDNOs**), it is critical that requirements on standards of service remain fair, reasonable and proportionate.

2.50 There are two areas we would like to focus on in this theme:

1) Ensuring consistency of standards of service across the different stages of the customer journey, including at the T/D interface, from pre-application right through to energisation

2) Ensuring existing standards of service requirements remain fit for purpose, including where duplication or overlap exists

Ensuring consistent high standards of service along the customer journey

2.51 We recognise that current regulatory requirements for larger connections at distribution and transmission are focussed on specific, relatively short-term processes including around provision of a quote or offer. These stages may

represent only a fraction of the complete end-to-end journey of a connecting customer.[27]

2.52 Based on the information we have seen, we consider that there may be gaps in the customer journey where standards of service are not suitably regulated, including at the T/D interface. We would like to hear further from stakeholders through this consultation on whether this is the case, where the specific issues exist, and what solutions may be progressed to address them.

2.53 One approach to improve consistency of standards of service at a broad level could be **to implement a new principles-based licence obligation on networks to maintain a quality standard of service throughout the connecting customer journey**. This could be supported by guidance designed to elaborate on the principles and set expectations in more detail.

2.54 The purpose pf this approach would be to drive outcomes such as provision of quality information in a timely manner, ensure customers have access to support as needed, and ensuring networks deliver products and services in a timely manner. The principles-based nature of the obligation would allow the regulated party to meet the obligation as they see fit. We would like to hear views from stakeholders on whether they think this new obligation would be effective in driving up standards of service.

2.55 A second more prescriptive approach could be to **introduce minimum standards or Service Level Agreements (SLAs) targeting delivery of specific products or services**. This could be done as well as, or in place of, introducing a new broad "catch all" principles-based requirement as discussed above. An example of this could include the introduction of a new requirement on DNOs to submit Project Progressions to the NESO within a defined period of time or in accordance with a certain set of standards.

2.56 Taking a more prescriptive approach targeted at individual project level has the advantage of more directly incentivising or requiring a certain behaviour, for example around timeliness. However, this requires careful design consideration to ensure the standards are fair, proportionate, achievable, and drive the right outcomes. We would like to understand where minimum standards could /

[27] For Minor Connections at distribution, the Time to Connect (**TTC**) metric measures the time taken from the customer accepting the quotation to the connection being completed. However there is no such end-to-end metric for larger connections at distribution, or for transmission connections.

should be introduced, ie within the licences, or elsewhere such as within the codes.

2.57 The RIIO-ED3 (**ED3**) price control setting process may provide an appropriate implementation route for the initiatives described above for distribution. However, timescales will need to be considered - with the ED3 licence period not starting until 1 April 2028, interim implementation steps may also be appropriate.

2.58 In any event the ED3 design process will consider whether the scope and strength of connection outputs and incentives within the price control are appropriate, including those parts of the licence that relate to network data sharing, and make changes to existing mechanisms or introduce new controls, where these are in the interest of consumers, given the changing context for small connections in particular. As discussed above in the document, more detail is provided in our ED3 framework consultation document published this week.[28]

Ensuring existing standards of service requirements remain fit for purpose, including where duplication or overlap exists

2.59 A range of obligations exist in different parts of the regulatory framework, setting out permitted timescales for the provision of certain connection products / services.

2.60 Today's connections landscape for major connections at transmission and distribution differs greatly from that which existed when many of the regulatory requirements were defined. For example, the rate of customers seeking to connect generation projects at distribution has increased significantly, meaning DNOs are managing an unprecedented and ever-increasing volume of applications.

2.61 It is also important to recognise that different parts of the regulatory framework around connections have evolved under different governance processes at different times, for example industry codes vs the licence framework.

2.62 This review presents an opportunity to holistically consider whether these requirements remain appropriate. The existing standards of service must be carefully considered to ensure they are still driving the right behaviours and outcomes. For example, are any of the requirements too onerous on the

[28] Link here to the ED3 framework consultation - Framework consultation: electricity distribution price control (ED3) | Ofgem

regulated party to meet, and are therefore driving the wrong behaviours, ie a compromise on quality? Similarly, are any of the requirements too light, meaning the regulated party is taking too long to perform a certain action that should be done more quickly? It is important that the time values defined are carefully considered, and structured in such a way that they can be monitored and performance can be assessed.

2.63 In some cases there is duplication / overlap within the regulatory framework whereby the same process or service is subject to different timescale requirements in different places. This duplication may be appropriate if it drives the right behaviours, for example, the licence could set out a backstop timeframe within which a service must be delivered, whilst the price control framework may offer an incentive if that same service can be delivered more quickly. However, it could also be unhelpful and lead to confusion if not designed appropriately.

2.64 **We would like to understand if stakeholders consider that any of the current standards of service requirements require amending to drive better outcomes.**

2.65 **We would also like to understand if stakeholders consider there are any instances where different parts of the regulatory framework are not interacting in an efficient way, leading to poor outcomes.**

2.66 In both cases we would like to hear views on all aspects of the regulatory framework, so within the GSoPs, licences, and codes.

Proposals

Proposal 2a. Principles-based licence condition, and supporting guidance, on DNOs, TOs and the NESO around standard of service required throughout the customer journey, AND / OR,

Proposal 2b. New minimum standards licence conditions and/or SLAs on DNOs, TOs and the NESO around standards of service required throughout the customer journey. Minimum standards could be accompanied by incentive or penalty mechanisms to further drive compliance.

Consultation questions

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?

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?

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?

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?

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?

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

Problem statement

2.67 There is limited scope for network companies to be held to account against timeframes for delivery of individual connections, and the products and services required to facilitate them, once a connection agreement is in place. This could include connection-specific network build as well as wider reinforcement works. This can result in connecting customers experiencing connection dates later than agreed in their connection contract, and in some case, can render their project(s) unviable.

Goal

2.68 A regulatory framework that ensures there are proportionate requirements on network companies to meet agreed customer connection dates in connection agreements, and commensurate with those on developers to meet development milestones.

Issues identified

2.69 We have been made aware of the following issues under this theme, either through our own work or through communications from stakeholders. The issues are presented below as views of stakeholders, not as views of Ofgem:

- There is an asymmetry between the project milestones that developers are required to meet, and the lack of milestones that the regulated parties (ie network companies and the NESO) are required to meet, to preserve the connection date in the agreement.
- Requirements for DNOs and TOs to meet agreed connection dates should be strengthened. In particular, Ofgem should consider introducing incentives / penalties around network build / upgrades required to facilitate customer connections, in order to mitigate delays.
- Network companies whose activities impact project costs or viability and connection delays should be subject to repercussions. Networks should face commercial penalties if delays / changes of design impact on project costs or viability. There is currently limited commercial exposure for network companies within the connection agreement.
- There should be strengthened requirements on DNOs to meet agreed dates for the required pre-connection works, including detailed design, surveys, handover to delivery, procurement of materials and construction. Delays at any of these stages can push connections dates for developers back. DNOs

have on occasion been slow to complete these works when they have all the information required, and communication from the DNO can then be slow or lacking. As a customer there is little available by way of recourse.

- There can be a period of delay once an offer is accepted. Customers would ideally want to have a formal meeting with the DNO to commence the design & delivery phase, but sometimes this does not occur. An example given was a project in which the DNO did not appoint a Project Manager for four months, meaning there was no progress in the interim
- The regulatory framework must protect against situations such as where a developer has developed their site, to then discover that the DNO hasn't completed dependent works nearby / have failed to inform the customer along the way, ultimately delaying the connection date.
- Some projects may experience connection delays in the winter months, even if the project is ready, as the DNO cannot implement the necessary outages. The DNO should be required to deliver clearer communications around outage processes.

Current Regulations

2.70 For clarity, we set out below the licence requirements as they currently exist on NESO, TOs and DNOs around meeting connection dates in connection agreements. There are differences across the different licences.

Transmission – NESO

2.71 The NESO, under Condition C11.5 of the NESO Licence,[29] "*must use its best endeavours to facilitate the Enabling Works identified as required in relation to a Connect and Manage Application in a timescale which allows for a Connect and Manage Connection consistent with the Connect and Manage Applicant's reasonable expectations as to the Connection Date*."

2.72 Similarly, The NESO, under Condition C11.6, "*must use its best endeavours to facilitate the Wider Works identified as required in relation to a Connect and Manage Application as soon as reasonably practicable*".

Transmission – TOs

2.73 TOs meanwhile are required under Condition D16 (3) of the Electricity Transmission SLCs to "*use all reasonable endeavours" to complete the enabling works "in a timescale which allows for a connect and manage connection*

[29] Link here to the NESO licence - Electricity System Operator: Direction and Licence Terms and Conditions

consistent with the connect and manage applicant's reasonable expectations as to connection date".[30]

2.74 TOs are also required under Condition D16 (4) to "use all reasonable endeavours to complete the wider works identified as required in relation to a connect and manage application as soon as reasonably practicable".

Distribution – DNOs

2.75 DNOs are required under Conditions 4(6) to 4(11) of the Distributed Generation Standards Direction, provided for under Standard Licence Condition 15A – "Connection Policy and Connection Performance", to 1) complete the works (or a phase of the works), and 2) energise the connection (or connections), "*provided for in the accepted quotation by the agreed date*".[31] These standards apply only to generation connections.

2.76 For demand connections, DNOs are instead subject to the requirements of The Electricity (Connection Standards of Performance) Regulations.[32] Under Regulation 9, DNOs must pay compensation to the connecting customer if the DNO "*fails to complete the works (or a phase of the works) provided for in the accepted quotation by the agreed date*". The prescribed sum of compensation payable varies dependent on the category of voltage level of the connection.

2.77 In all cases (other than for demand connections at distribution where GSoPs apply), failure to comply with these requirements represents a breach of the licence, however no recourse is available through the regulatory framework to the connecting customer in each case (as there is for distribution demand connections through the GSoPs).

Discussion

2.78 We recognise the detriment to developers and consumers that can occur if and when network companies do not deliver to their end of the connection agreement, particularly where this results in a project being delayed or even terminated.

[30] Link here to the Electricity Transmission Standard Conditions Electricity Transmission Standard Licence Conditions
[31] Link here to the DG Standards Direction Distributed Generation Standards Direction
[32] Links here to the Electricity Connection Standards of Performance (Connection Regulations) 2015 - The Electricity (Connection Standards of Performance) Regulations 2015 and 2023 amendments The Electricity (Standards of Performance) (Amendment) Regulations 2023

2.79 We also recognise that developers themselves are subject to very clear and enforceable project milestones, which they are required to meet to retain their queue position and connection date, and acknowledge the argument that it would be fair and reasonable for commensurate requirements to exist on the networks.

2.80 Where issues do occur that may cause issues and delays to the developer, including changes to their offer, we consider that clear, open and transparent communication from the network company to the customer, in a timely manner, is critical.

2.81 As set out above, with the exception of demand connections at distribution level, DNOs, TOs and NESO are subject to licence requirements around the timeliness of delivery of connections. The wording used in the licences however does vary slightly:

- NESO is required to "use best endeavours"
- TO's are required to "use all reasonable endeavours"
- DNOs (for generation projects only) have the requirement "must complete the works…..by the agreed date".

2.82 We would like to understand from stakeholders if these requirements are sufficient to ensure regulated parties are suitably required to do all they can to meet connection dates in connection agreements.

2.83 For example, **we consider that the wording of the existing principles-based conditions in the licences could be strengthened in all cases** to "*take all reasonable steps to…*" or even "*must complete all necessary works and activities by…*". We also consider that an additional related requirement could be introduced around the need to provide timely, accurate information to the connecting customer on all matters relating to their connection date as the project progresses.

2.84 Alternatively, a second more prescriptive approach could be to **introduce minimum standards for regulated parties around meeting connection dates**. This could involve the creation of new timeliness metrics for meeting of connection dates, for meeting of key milestones along the customer journey, and / or for providing information to customers to keep them informed of changes to their offers. Regulated parties required to meet them or face penalty. We would like to understand how this could work in practice.

2.85 Finally, we would also like to understand whether there could be scope for **some form of financial instrument designed to compensate connecting customers who experience delays to their connection dates** due to poor practice on the part of the regulated party. We would like to understand from stakeholders how such an instrument could work in practice, and how it would interact with any existing provisions of this nature in connection agreements.

2.86 We note the precedent for such an arrangement provided by the Connection Guaranteed Standards of Performance in relation to demand connections at distribution (see above). We do however recognise that setting an appropriate level of compensation is much more difficult for larger projects than for smaller demand projects, where detriment can be more easily quantified and where a lower magnitude of costs are involved. We must ensure the level of any such financial instrument is proportionate and does not risk exposing the regulated party to disproportionate financial detriment.

2.87 We do accept that there may be occasions where products or services required for a customer's connection are delivered late by networks as a result of circumstances entirely out of their control. It is important that any new or strengthened requirements on networks in this area take this into account. For example, a planning delay due to a slow response from a local authority is beyond a network company's control, however an unnecessarily late submission of an application for planning consent by a network company, or other administrative related errors, would be within its control.

Proposals

Proposal 3a. A strengthened principles-based licence requirement for DNOs, TOs and the NESO to ensure that they meet connection dates in connection agreements, and to provide timely and accurate information to developers in relation to issues that may impact their connection date or project viability, AND / OR,

Proposal 3b. Minimum standards licence condition or SLAs for DNOs, TOs and the NESO to ensure they meet connection dates in connection agreements and key timelines through the customer journey. Minimum standards could be accompanied by incentive or penalty mechanisms to further drive compliance.

Proposal 3c. A financial instrument that offers recourse to connecting customers who suffer detriment, such as a delayed connection date, due to poor practice on the part of the network company.

Consultation questions

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?

Proposals:

Question 3b. Do you have any views on proposal 3a (strengthened principles-based 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?

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?

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?

Theme 4 - Quality of connection offers and associated documentation

Problem statement

2.88 The regulatory framework generally focusses on the timeliness within which offers must be provided by network companies and NESO, but does not set out clear requirements on the quality[33] of the offer and the information provided.

Goal

2.89 A regulatory framework that drives the creation of high-quality offers and associated documents/information provided, which are clear, transparent and detailed enough to provide certainty to the customers and investors.

Issues identified

2.90 We have been made aware of the following issues under this theme, either through our own work or through communications from stakeholders. The issues presented below are views of stakeholders, not necessarily those of Ofgem. We have separated them out into two broad themes - timeliness of quote / offer creation, and provision of quality information:

Over-focus on timeliness of quote / offer creation

- The extent of focus in the regulatory framework on the timeliness of quote / offer provision can sometimes result in networks sometimes providing sub-standard quotes and offers just to ensure they meet required timeframes. This may result in a trade-off with quality – the faster the quote / offer is prepared, the lower quality it is likely to be.
- The accuracy of quotes / offers provided by networks can sometimes be lacking. On occasions they may later be revised or re-issued with significant changes, which should have been reflected in the original quote / offer.
- Meeting strict timeframes around timeliness of quotes offers may also result in wider poor quality of service from DNOs, as they divert resources away

[33] By quality we mean offers that are clear, transparent and understandable to the customer, and are as accurate and reflective of reality as possible at the time of provision in terms of dates offered, details of works required, reasons given for possible changes to the date that may occur post-agreement etc.

from key project delivery activities. DNOs may be able to more efficiently use their resources and achieve overall net standards of service benefits to customers if timeliness requirements were less stringent.

- The problem is exacerbated by volume – networks are being required to deal with more applications, many of which are becoming more complex to work through given the need for greater levels of network planning. These timeliness requirements around quotes and offers may no longer be appropriate in their current form.

Provision of quality information

- Connecting customers need more insight from networks around what the determining factors are that underpin a connection date in an offer. Sometimes there is a lack of clarity for the developer on why certain decisions have been made regarding the formulation of the offer.
- Detail provided in the offer is sometimes not reflective of reality, particularly around potential delays due to transmission impacts, levels of network reinforcement required, or around likely curtailment levels that the project will be subject to.
- There are sometimes miscommunications regarding expected connection dates for customers connecting at the distribution level that require transmission reinforcement. DNOs will inform the customer of when the distribution works can be completed, occasionally without giving a clear indication of the timescales for the required associated transmission works. This risks giving the customer unrealistic expectations, as the transmission works can often cause significant delays. The customer experience here could be improved through clearer, more complete communication of what underpins the initial offer, i.e. that it is subject to further assessment and is therefore not bankable.
- There may be a lack of communication or explanation from networks regarding certain material concepts, such as how curtailment levels and non-firm connection offers work for the customer. In some cases, DNOs have provided the customer with an offer below the requested capacity, with no timeline for providing full capacity (in cases where only distribution network reinforcement was required).
- There is a lack of quality in communications later in the process when networks update customers on changes to their offers, eg due to projects falling out ahead in the queue, change of project scope, or due to cost

increases. We are aware of one case in which a transmission connection customer was notified only 48 hours ahead of the agreed connection date of a lengthy delay.

Discussion

2.91 We recognise the need for customers to be provided with high quality offers in a timely manner.

2.92 As part of the offer process, customers should be presented with all the information they require in a form that is easy to understand. This should include (but not be limited to) relevant costs and timeframes, what factors underpin the offered connection date, possible circumstances under which the offer may be revised in future, explanation of any relevant or possible curtailment schemes etc. A high quality offer could also include alternative connection solutions should the customer's full requested capacity not be achievable within a viable timeframe.

2.93 We recognise the trade-off between quality of offer and timeliness of provision. We must ensure the balance is right.

2.94 We think timeliness of offer provision is important, however this should not be at the expense of quality, as this may then lead to delays later in the process and customer frustration.

2.95 Tightening the requirements around the quality of the connection offers would create better outcomes for customers and networks but may impact on the timescales required to create that higher-quality offer. Whilst DNOs should be doing everything reasonably required to get offers / quotes right first time, their ability to do so may be compromised by the need for timeliness.

2.96 We also consider that the quality of communication and information provision around offer update events is critical. There may be occasions when offers do reasonably need to be reissued / amended in light of new information becoming available. In these circumstances, customers should be fully informed in a timely manner regarding any updates to their connection offers.

2.97 We recognise that, at distribution, customer satisfaction around connection offers is measured through the Major Connections Incentive (**MCI**).

2.98 With that in mind, **we think there could be benefit in regulating the standards that underpin the quality of an offer and supporting documentation**. As with Theme 2, at a broad level this could involve either a

new principles-based licence condition, or a series of minimum standards that network companies and the NESO are required to meet.

2.99 We would like to understand from stakeholders what they consider would constitute a 'high quality offer'. For example, what information should the offer contain, how should the offer and supporting documentation be conveyed, what post-acceptance support should customers reasonably expect around changes to their offers etc.

Proposals

Proposal 4a - Principles-based licence condition on DNOs, TOs and the NESO on the completeness / quality of the offer and supporting documentation provided to customers in a timely manner, both at the initial offer stage and at subsequent offer update events.

Proposal 4b - Minimum standards licence condition and/or SLAs on DNOs, TOs and the NESO on the completeness / quality of the offer and supporting documentation. Minimum standards could be accompanied by incentive or penalty mechanisms to further drive compliance.

Consultation questions

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?

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?

Other:

Question 4d. What do you consider would constitute a 'high quality offer'?

Anything else:

Question 4e. Is there anything else regarding Theme 4 - Quality of connection offers and associated documentation that you consider we have missed?

Theme 5 – Ambition of connection offers

Problem statement

2.100 We see a risk that, should requirements on DNOs, TOs and NESO to meet connection dates in connection agreements be strengthened (see Theme 3), network companies may be naturally incentivised to self-preserve by offering conservative connection dates.

Goal

2.101 A regulatory framework that suitably incentivises / requires network companies to offer customers ambitious but achievable connection dates, and, where possible, innovative connection offers should a viable connection date be unachievable.

Issues identified

2.102 Proposals discussed under Theme 3 – *"Requirement on networks to meet customer connection dates"* will potentially result in strengthened obligations on network companies to meet connection dates in connection agreements. Under the proposals, networks may be penalised if, through their own actions or behaviours, customers experience delayed or terminated connections.

2.103 We are conscious that this may risk creating a mindset shift amongst network companies to offering conservative, later connection dates which will be easier to meet.

Current regulations

2.104 The NESO, TOs and DNOs are required under their licences to provide a connection date to the customer as part of their connection offer as follows:

Transmission - NESO[34]

Condition E12: Requirement to offer terms

[34] Link here to the NESO licence - Electricity System Operator: Direction and Licence Terms and Conditions

Part A: Connection application requirements

"E12.4. *On application made by any person the licensee must (subject to paragraph E12.8) offer to enter into a Bilateral Agreement and/or a Construction Agreement relating to connection or modification to an existing connection and such offer must reflect any Associated TO Offer which relates to that offer, and must make detailed provision regarding:*

……

e) *the date by which any works required to permit access to the National Electricity Transmission System (including for this purpose any works to reinforce or extend the National Electricity Transmission System) must be completed (**time being of the essence** unless otherwise agreed by the person seeking connection);"*

Transmission - TOs[35]

SECTON D: TRANSMISSION OWNER STANDARD CONDITIONS

Condition D4A: Obligations in relation to offers for connection etc

"1. On notification by the system operator of receipt on or after the BETTA go-live date of an application for connection or for modification to an existing connection in accordance with paragraph 2 of standard condition C8 (Requirement to offer terms), the licensee shall (subject to paragraph 2 and paragraph 4) offer to enter into an agreement with the system operator and such offer shall make detailed provision regarding:

……

*d) the date by which any works required on the licensee's transmission system to facilitate access to the national electricity transmission system (including for this purpose any works on the licensee's transmission system to reinforce or extend the licensee's transmission system) shall be completed **(time being of the essence** unless otherwise agreed by the system operator);"*

Distribution – DNOs[36]

Part D: Charges and other terms for Use of System and connection

Condition 12. Requirement to offer terms for Use of System and connection

[35] Link here to the Electricity Transmission Standard Conditions - Electricity Transmission Standard Licence Conditions

[36] Link here to the Electricity Distribution Standard Conditions - Electricity Distribution Consolidated Standard Licence Conditions

"12.4 *Where the licensee makes an offer to enter into an agreement for Use of System under paragraph 12.1 or to make a connection under section 16(1) of the Act, it must in that offer set out:*

……

(c) *in the case only of an offer to make a connection, the date by which any works required for connection to the licensee's Distribution System, including any works to extend or reinforce that system, will be completed (**time being of the essence** unless otherwise agreed with the person who requires the connection to be made*)."

Discussion

2.105 We consider it critical that network companies offer and deliver connections as quickly as is practicable to do so.

2.106 We recognise the intent of the wording "*time being of the essence*" in the relevant licence conditions is to require speed of connection to be a contributory factor, however we are concerned that it may not be sufficient if regulations around meeting connection dates were strengthened.

2.107 **We would therefore like to understand from stakeholders whether they consider the regulatory framework needs to be strengthened around the ambition of connection offers made to connecting customers**. This could take the form of a strengthened principles-based licence condition that requires network companies and the NESO to offer the earliest achievable connection date to the customer, based on the information available to the network company at that point in time. We would like to understand how this could work in practice, ie is "earliest achievable connection date" a reasonable target for network companies and the NESO to define and strive for?

2.108 This could also include the requirement to make revised offers to customers post-agreement in a timely manner, if it subsequently became possible to connect that customer more quickly, ie if capacity became available earlier at the point of connection at which the customer is looking to connect.

2.109 We would also like to understand if doing so should be contingent on the regulations around meeting connections dates also being strengthened, or whether stakeholders feel this is required regardless.

2.110 Additionally, it would be beneficial if network companies are required to provide alternative connection offers if a customer's requested connection date is

unachievable. For example, this could include proposing "flexible" or "non-firm" options.

2.111 We recognise that not all customers will be open to alternative solutions, and that offering these would require additional resources. This could be mitigated by having the option for customers to "opt-in" to this during the application process.

Proposals

Proposal 5a. A strengthened principles-based licence condition that requires DNOs, TOs and the NESO to offer the earliest achievable connection date to the customer, and to provide revised offers in a timely manner if it later became possible to connect the customer more quickly.

Consultation questions

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?

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?

Theme 6 – Minor connections

Problem statement

2.112 Connection requests at the lower voltages ('minor connections')[37] are increasing rapidly, with consumers adopting low-carbon technology as part of a Net Zero transition and to reduce their energy costs. These levels will continue to grow at pace as electrification demand increases.[38,39].

Connection customers and other network users must be able to connect promptly, without waiting for this capacity to come online, and with consistent and seamless processes across DNOs. However, technical and service standard issues are sometimes preventing minor connections customers from receiving their required connections in a timely manner.

Goal

2.113 Requirements on regulated parties that are uniform, clear and unambiguous, that ensure minor connections customers receive a prompt and consistent high standard of service, and that ensure minor connections are proactively made and facilitated to a high standard in a timely manner.

Issues identified

2.114 We have been made aware of the following issues under this theme, either through our own work or through communications from stakeholders. The issues presented below are views of stakeholders, not necessarily those of Ofgem. This section also builds on the issues discussed in Theme 2 (related to standards of service) and Theme 3 (related to networks to meeting connection dates in connection agreements) across the connections' customer journey, as well as Theme 4 (related to quality and reliability of connection offers).

[37] Minor connections are those at lower voltages on the distribution network, typically including connections at the domestic level to small, non-domestic level connections. This includes upgrades to existing connections, eg a domestic fuse upgrade, as well as new connections.
[38] For example, the number of electric vehicles on the road (which include cars, vans, BEV and hybrid vehicles) is expected to increase to c.7-9m in the early 2030s and 31-34m by 2050 (for both domestic and non-domestic). See Future Energy Scenarios (FES) | National Energy System Operator
[39] Similarly, demand for heat pumps is expected to grow, as evidenced by the Boiler Upgrade Scheme (BUS) funding claims rising to 60% in 2023 from 32% in 2022, with similar trends expected in 2024.

Avoidable delays to connections:

- Delays to connection of low-carbon technologies (**LCTs**) such as heat pumps, electric vehicle chargepoints or rooftop solar, could have a substantial negative impact on the decarbonisation timeline, as well as public perception of the ease of taking individual action to decarbonise.
- DNOs do not have a direct role in installing LCTs such as heat pumps and EV chargers in homes. However, in some cases DNOs need to carry out processes such as load checks (where the available capacity of a property is determined prior to an LCT connection), unlooping (a looped property or looped connection being two or more properties sharing a single service cable), fuse upgrades, and upgrading a supply to three-phase. All of these processes can be prone to delays due to various factors.
- Once a connection offer has been accepted and agreed by both parties, or the customer otherwise informed of required work, there are also often delays in the DNO engaging the customer to proceed with the connection, delaying the overall connection process. The unprecedented level of applications to connect LCTs is a factor, however this level is only likely to rise further - it is therefore important that the DNOs prepare for a large increase in the volume of smaller connection works, in order to prevent delays to LCT connections in future. Delays and complications in the process threaten our ability to meet targets for the rollout of LCTs as well as wider decarbonisation.

Lack of transparency and consistency between DNO's processes:

- Minor connections customers cite inconsistencies between DNOs such as the process, costs (where relevant) and timelines for unlooping, performing three-phase fuse upgrades, or the provision of solutions such as load-limiting devices (**LLD**s)[40]. For example, some DNOs specify that fuse upgrades cannot be carried out by third-parties, whilst others allow it. Similarly, some allow LCTs to connect to looped connections whilst others do not. Language in connection offers may also differ across DNOs, causing customer confusion.
- A lack of transparency and consistency around the 'auto-approvals' process means some connection requests which could be auto-approved are not.

[40] LLDs can be installed alongside an LCT connection to limit the demand of the LCT while the DNO undertakes required works (e.g. fuse/supply upgrade, unlooping)

- Inconsistencies can create a 'postcode lottery' for customers, particularly those who are operating across different DNO regions.

Export limits:

- There is a guideline-level threshold when installing generation equipment, typically solar or batteries including Vehicle to Grid, of 3.68kW per phase, known as the G98 limit. Below this level the customer installation can be made and the DNO notified after the event through the G98 process. Above this level the customer must instead follow the G99 process, which requires DNO approval before the equipment can be installed. G99 is a longer process and lengthens connection timescales relative to G98 - there should therefore be consideration as to whether the 3.68kW per phase limit is appropriate.

Notification of Connecting Assets:

- Despite requirements for connection customers and installers to notify DNOs of connections and installations of LCTs, we are aware anecdotally that notification rates have been very low, with potentially less than 40% of all energy assets being registered with the DNO. This presents issues for DNOs being unaware of a large proportion of LCTs on their networks, and the impact of this extra demand on the networks.

Lack of network capacity:

- We are aware of examples where customers are informed that a connection cannot go ahead due to a lack of network capacity, for example even a self-consumption LCT project with no export needed might impact on voltage levels in the local network and require work to be undertaken by the DNO. Where this is the case initially, DNOs should provide a connection date when the full requirement can be fulfilled and, where possible, offer interim solutions. This is acting to slow down the connection of LCTs such as rooftop solar, and could act as a barrier to harnessing flexibility and export from small scale storage and Vehicle to Grid.

Discussion

Avoidable delays to connections / Lack of transparency and consistency between DNO's processes:

2.115 We consider that avoidable delays and poor communication are increasingly becoming blockers to the roll out of LCTs. Connecting customers should be confident they will be able to connect in a timely manner with most requests automatically approved where possible (and where not, delays minimised).

2.116 We acknowledge that in some circumstances delays cannot be avoided, for example due to the need for physical works or resource constraints within DNOs. However, in these cases we considers customers should promptly be provided with specific, reasonable and practicable timelines for each activity that will be undertaken, and kept up to date through the process.

2.117 We recognise that there can be regional variations in connection costs and have previously reviewed this.[41] There can be many reasons for this, for example variation in labour costs in different parts of the country. However, we are not aware of the issue of network companies adopting different approaches to the connection costs to be recovered from minor connection customers. We agree that the approach should be standardised, but not necessarily the amount charged. We also note that alternative connection providers might provide cheaper and faster connections. We would be interested in receiving any evidence of different approaches being taken by DNOs as to what elements of a connection are charged to the minor connections customer.

2.118 One approach to reducing avoidable connection delays, ensuring timely connection provision, maintaining consistency of high standards of service, and maintaining reasonable, low costs for connections could be **introducing principles-based licence obligations for DNOs**. This could be supported by guidance designed to set expectations in detail, providing a clear obligation to DNOs and expectations to customers of what they should expect in terms of timelines and service provision. For example, as a minimum where appropriate, connection offers should utilise 'automatic approvals' or where necessary universal provision of alternatives such as LLDs, which provide temporary solutions prior to completion of works, accelerating the rollout of LCTs. The

See here - Review of regional electricity distribution connection costs and the information provided to prospective connection customers

principles-based nature of the obligation would allow the regulated party to meet the obligation as they see fit.

2.119 A second more prescriptive approach could be **introducing minimum standards and/or establishing SLAs** requiring that connecting customers are provided with a reasonable and practicable timescale for the connection process, as well as a reasonable estimate of any cost of connection, based on high-quality, standardised processes and consistent language across all DNOs.

2.120 Alongside introduction of minimum standards and/or establishing SLAs, consequences could be introduced for DNOs in order to incentivise pace and reliability. For example, we propose considering a) establishing a monitoring framework for all DNOs to track against SLAs, b) reporting of the data publicly i.e. through league tables and/or c) introducing a route for financial recourse for connection customers where SLAs are not met. The design of this would need to be carefully considered to ensure proportionality.

2.121 We seek views from stakeholders as to whether setting SLAs/minimum standards would be effective to drive up standards of service for minor scale connections and provide better outcomes, as described in our 'goal' for minor connections. We would like to hear views on the pros and cons of this approach in comparison to the more principles-based approach also set out above. We also seek views on how new SLAs / minimum standards might sit alongside, or instead of, incentives and penalties within the price control which is designed to address standards in the round.

2.122 **We believe a route to financial recourse for connection customers is important to ensure minor connections are facilitated to a high standard and in a timely manner.** We believe this is particularly important to ensure minor connections customers are protected and supported sufficiently when connection timelines and standards are not upheld and/or they are not treated fairly. This could be enforced through a consumer body (new or existing i.e. the Energy Ombudsman and making their role more aware to consumers) or by introducing/extending a GSOP for minor connection customers.

2.123 We propose to consider whether the current arrangements for recourse are sufficient, or whether they need strengthened. We seek views on this, and on whether this would require a) a new body or process, or b) a more effective use of existing mechanisms, for example through the existing Energy Ombudsman, or via an extension of the existing GSOPs.

Export limits:

2.124 We recognise there are legitimate reasons for the G98 limit. However, we believe that flexibility around the 3.68kW per phase limit is essential to ensuring a streamlined process and enabling customers to install and connect solar panels and battery technology (including Vehicle to Grid). We think that DNOs should exercise their discretion, as some DNOs have already done, to raise that threshold (for example to 5kW per phase) and allow more projects through the G98 process.

2.125 **We therefore propose to set an obligation on DNOs to review their G98 limit**. We consider that this should result in an increase of the current limit, unless there is sufficient justification as to why this is not in the consumer interest or could have unintended consequences for the network. We seek views on this proposal.

2.126 We acknowledge that the 3.68kW (16 amp) per phase approach derives from the Electricity Service and Quality Regulations 2002.[42] However, this requires customers to "agree specific requirements" with DNOs above this limit - it does not require DNOs to *impose* such requirements.

Notification of Connecting Assets:

2.127 Notifying DNOs of LCT connections is imperative so they have a complete understanding of their networks and associated demand levels. [43] Without this visibility DNOs cannot effectively and accurately plan and reinforce their network, as well as hindering their ability to undertake anticipatory investment.

2.128 Lack of asset visibility also presents the potential for voltage level changes that could damage assets on the network and customer appliances, and could impact on the safety of the network.

2.129 The current obligation is on connecting customers/installers to notify DNOs of assets connecting. However, connecting customers / installers may not be appropriately knowledgeable of networks and the associated implications of poor asset visibility, leading to the issues described. There is also the issue of recourse – DNOs can disconnect assets if the notification has not been made, however this impacts only on the connecting customer and not the installer.

[42] See here - The Electricity Safety, Quality and Continuity Regulations 2002 (section 22(2)(a))
[43] We note that LCT assets may still be visible to the DNO irrespective of the notification process if the customer has a smart meter

2.130 We therefore consider there to be a gap in the regulations around the notification process. For example, stronger enforceable obligations against installers to notify DNOs of connecting assets would lead to better outcomes for both the DNO and the connecting customer. We seek views on how this could be introduced in practice, and more generally on how we can further improve notification rates.

2.131 We note that ENA's ConnectDirect solution has been developed to reduce the administrative burden on installers for pre-installation applications. We welcome the benefits and improvements this has already delivered. In introducing any new requirements we would be looking to ensure installers continue to comply to this notification process rather than a new one. We would also expect any new requirements to only to be forward looking – for example we would not expect retrospective notifications to be made.

2.132 Finally, the government's Automatic Asset Registration (**AAR**) innovation programme is developing an asset registration and central asset register solution. Government is monitoring the impact of both programmes. We encourage DNOs to continue to engage with these technical solutions.

Proposals

Proposal 6a – Delays / Timelines – we propose as a minimum to set principles-based licence obligations for DNOs and/or guidance to define clear objectives and expectations for timelines and delays,

AND / OR,

set Service Level Agreements **(SLAs**) and/or minimum standards that DNOs are obliged to meet for minor connection requests, including but not limited to increased transparency, standardising of approaches to the highest standard achievable and defining criteria for auto-approvals.

Proposal 6b - Inconsistencies – we propose as a minimum to set obligations on DNOs to determine how best to align their processes to ensure high standards are set and consistent across the processes discussed in this theme, and where appropriate, meet the SLAs/minimum standards.

Proposal 6c – Monitoring – we propose to consider

a) monitoring SLAs and/or minimum standards with compulsory reporting from the DNOs, and/or

b) publishing the resulting data as aligned to SLAs and/or minimum standards if set.

Proposal 6d - Enforcement– we propose to consider whether the current arrangements for financial recourse are sufficient for minor connection customers, and if not, whether there is a need for a consumer body, or an improvement of what already exists for connection customers, to ensure minor connections are facilitated to a high standard and in a timely manner. This includes consideration of whether expanding / extending the GSOPs for minor connection customers would deliver better outcomes.

Proposal 6e - G98 Limit - We propose to set an obligation on DNOs to review their policy towards the G98 limit, including increasing the current limit unless there is a justification of why uplift is not in the consumer interest, or could have unintended consequences for the network. This would allow more connections to proceed as 'Connect and Notify'.

Proposal 6f - Notifications - We propose to investigate how to strengthen the notification obligation on LCT installers, ie where they must notify the DNOs of all new LCT connections.

Consultation questions

Issues:

Question 6a – Do you agree with the issues we have identified? Are there any other issues under this theme that we should consider? Please provide data and evidence to support your views if possible.

Proposals:

Question 6b – What are your views on our proposals designed to address these issues? Are there other proposals you consider would achieve the intended outcomes?

Anything else:

Question 6c – Do you have views on how poor performance could be addressed under these proposals to ensure the smallest scale customers are protected and LCT roll out is supported?

Theme 7 - Provisions and guidance for determinations

Problem statement

2.133 The connections determination process, which is designed to resolve disputes arising within the connections process, can be confusing, lengthy, and requires significant engagement and resource commitment from all parties involved.

Goal

2.134 Greater clarity and transparency for all parties on the determinations process, the available redress to parties involved (noting this can only be indicative), and on Ofgem's role in managing complaints and issuing determinations.

Current Regulations

2.135 Our role in determining disputes between licensees and connecting customers, as provided for in The Act, is set out in "SLC 7: Determinations by the Authority" of the Electricity Distribution SLCs with respect to DNOs, in "Condition C9: Functions of the Authority" of the Electricity Transmission SLCs with respect to TOs, and in Condition E13 Functions of the Authority of the NESO licence with respect to NESO.

2.136 In each case the licence permits The Authority, having received an application to do so, to settle any terms of an agreement in such a manner as it considers reasonable, having regard to a number of considerations as set out in each of the licences.

2.137 We have set out in guidance the procedure that we will generally follow when determining disputes. The latest iteration of the guidance was published in April 2017.[44] The document sets out the procedure that all parties should follow when referring a dispute to us for determination, the procedure that we will generally follow when determining each dispute, and the alternative dispute resolution processes that are available to affected parties.

[44] Link here to the Ofgem's 2017 guidance on the determination of disputes for use of system or connection to energy networks - Ofgem guidance on the determination of disputes for use of system or connection to energy networks | Ofgem

Issues identified

2.138 We are aware of the following issues under this theme, either through our own work or through communications from stakeholders. The issues presented below are views of stakeholders, not necessarily those of Ofgem.:

- The threat of raising a determination can be used as a bargaining / leveraging tool by an impacted party, even when it's clear Ofgem may not have the vires to determine. This can waste time and resources in network companies.
- Parties occasionally approach the Authority prematurely, with the expectation of assistance before going through the respective parties' complaints procedures and/or the Energy Ombudsman. This consumes time and resource within Ofgem.
- Complainants expect forms of redress or restitution that the Authority cannot legally provide.
- The determinations process can be lengthy, protracted and inefficient.
- There is a suggestion that Ofgem should revisit the publicly available guidance for determinations in the context that the latest version has become out of date as the connections process has evolved.

Discussion

2.139 As noted, we last reviewed our guidance on the determination of disputes in 2017. We agree that, since that point, the connections landscape has changed greatly, resulting in an ever increasing number and complexity of projects seeking to connect to an increasingly congested network across both transmission and distribution. That has in turn led to more projects experiencing unsatisfactory results from the connections process, including long, potentially uneconomic connection dates, increasing the number and complexity of potential disputes arising.

2.140 We recognise it is critical that we have a functioning process in place that allows aggrieved parties to escalate issues to the Authority for a binding determination where they cannot be resolved bilaterally such as through a contractual dispute.

2.141 We also think it is important that our determination powers are clear and unambiguous, and that all potentially impacted partes are aware of exactly what circumstances we can determine under and the redress available.

2.142 Finally, given the recent and ongoing reforms within the connections process, we think it is key that the determinations process remains relevant and fit for purpose.

2.143 The typical case is at distribution. The main themes include connection timeframes and related costs, charges and designs associated with new connections and, generally, terms and conditions contained within connection offers.

2.144 With all of that in mind, we consider there is a need to review the current iteration of the guidance. Therefore, **we would like to understand from stakeholders whether they consider our role in the determinations process, as set out in the current iteration of the guidance, appropriate for the current connections landscape**. We would like to understand what parts of the guidance are clear and fit for purpose, and where stakeholders consider changes should be made.

2.145 Whilst an expansion to our role in the determinations process may, where disputes cannot be resolved bilaterally, result in benefits to individual parties in some cases, we must consider the trade-offs of increasing costs and specialist resource requirements.

Proposals

Proposal 7a - Ofgem to review the guidance for connection determinations with a view to updating it if changes are considered appropriate / necessary for the current connections process and landscape.

Consultation questions

Issues:

Question 7a. Do you agree with the issues we have set out under Theme 7 - Provisions and guidance for determinations? Are there any other issues under this theme that we should consider or be aware of?

Proposals:

Question 7b. Do you have any views on proposal 7a (Ofgem to review the guidance for connection determinations)?

Anything else:

Question 7c. Is there anything else regarding Theme 7 - Provisions and guidance for determinations?

3. RIIO T3 – Electricity Transmission Network Incentivisation

Background and context

3.1 In RIIO-ET2, which is currently running from 2021 through until 2026, there are two incentives which were created with the intention of aiding the timeliness of new connections and the quality of a TO connections process:

- Timely Connections ODI-F
- Quality of Connections Survey (**QoCS**) ODI-F

3.2 Timely Connections is a penalty-only financial incentive. It exists to encourage TOs to deliver prompt connection offers to customers. The TO is required to give a connection offer within 3 months (minus 13-15 working days, as per requirements under the licences) from application. There is a target of 100% of offers to be delivered within that timeframe.

3.3 QoCS is both a penalty and reward financial incentive. It is a satisfaction survey completed by customers at agreed milestones, with a target average score of 7.7/10 across the milestones.

3.4 As part of our Sector Specific Methodology Decision (**SSMD**)[45] published in July 2024, we stated our intention to remove these two connections incentives for RIIO-ET3, which will run from 2026 through to 3031.

3.5 We are concerned that the existing RIIO-ET2 incentives have enabled the TOs to earn rewards at a time when the transmission connections queue is at historically high levels with instances of customer dissatisfaction not uncommon.

3.6 We therefore decided to develop a new incentive structure to drive faster connections times and a more effective overall connections process, which would replace the two existing connections ODI-Fs.

3.7 Whilst the Timely Connections ODI-F has succeeded in driving timely connection offers to customers, it does not show the complete picture of the connections process. We are concerned that it is just incentivising the speed of processing rather than the overall speed of connecting.

3.8 We do not believe the QoCS ODI-F is achieving its intended purpose. The low numbers of responses at the later milestones do not allow for reliable evidence of customer satisfaction to be gathered and therefore we do not believe should form the basis of a financial reward or penalty. This could be indicative of the

[45] See paragraph 4.87: RIIO-3 Sector Specific Methodology Decision – ET Annex (ofgem.gov.uk)

wider connections issue, as companies are being rewarded despite general dissatisfaction and a historically long queue.

Future Considerations

3.9 As we look to create this new incentive for RIIO-ET3, we believe that it is important to prioritise the following:

- It should be a financial incentive, to ensure that TO behaviour is being driven most effectively.
- Any incentive would be both penalty and reward, to emphasise the importance of the behaviours we are trying to drive and the consumer value that they would deliver. We believe that the ability for TOs to gain financial rewards will best drive them to outperform baseline targets, although we would retain the ability to penalise TOs if necessary as underperformance will put national decarbonisation targets at risk.
- We will look to reward behaviours that have a positive wider impact on the network, and by extension will enable faster connections, and penalise actions that inhibit timely connections.
- Given that an efficient and effective connections process relies on the actions of numerous stakeholders we would aim to ensure that the new incentive would be rewarding or penalising TOs on behaviours they can control.

Incentive ideas

3.10 Acknowledging the magnitude of the challenge in this area, the consumer value in meeting that challenge and the variety of factors that drive it, we have considered a wide range of potential solutions.

3.11 We have narrowed those solutions down to three options, which are set out below. Our working assumption is that these options would be mutually exclusive. In response to this consultation we welcome any views on the options presented, as well as any additional proposals stakeholders believe we should consider not presented here.

1. A Post Price Control Performance Review
2. Connection Timeframes
3. Supergrid Transformer Capacity

1) A Post Price Control Performance Review

Description:

3.12 In 2031, at the end of RIIO-ET3, we would conduct a retrospective (ex post) review of TO performance on connections and network reinforcement.

Metric:

3.13 The review would take into account views from Ofgem, government, NESO, network companies and industry, including connection customers and engineering companies.

3.14 TOs would be judged on various metrics, including but not limited to the timeliness of connections, volumes of connections made, and the delivery of network upgrades (including enabling works). This assessment would lead to rewards for perceived positive performance, and penalties for perceived poor performance.

3.15 Perceived positive performance may include, although not be limited to, displaying behaviours which help to reduce the size of the connections queue or expand the capacity of the electricity network in a way that meets strategic need and helps Great Britain's long term energy ambitions.

3.16 Perceived poor performance may include, although not be limited to, displaying behaviours which continue to prioritise the speed of administrative tasks over conducting the appropriate wider and enabling works to connect customers. We would also discourage activity which prioritised short term ease over long term strategic build.

3.17 Another possible way to gather data could be via a survey of industry and connections customers, which could feature questions asking for ratings out of 10 for areas such as "How well would you rate [TO] on its work to redress the size of the connections queue?", "How well would you rate [TO] on its stakeholder engagement?", or "How well would you rate [TO] on its speed of individual connections?"

3.18 We appreciate that this may leave the TOs open to instances of unfair criticism, so we would establish a fair way of triaging the scores. We are open to other suggestions on how this assessment could be informed.

Risks:

3.19 There is a major risk around the perceived subjectivity of the decisions that would be made. For example, Ofgem, government and industry stakeholders

could establish a score or rating for a TO's performance that the TO considers is the result of factors beyond their control.

3.20 To mitigate this, we would build on the metrics suggested above and consult on methods of measuring performance objectively.

3.21 We note that using a customer survey score as the basis of financial incentives is an established way of measuring performance in price controls across the energy and water sectors, albeit as flagged above, we have some concerns with how surveys are used in the case of the QoCS ODI-F in RIIO-ET2.

Opportunities:

3.22 Given the interconnectedness of the overall connections process, this approach would allow for all aspects of TO performance to be assessed and considered in the round.

3.23 Large-scale connections projects take a number of years to complete, with years of planning preceding potentially vast enabling works. Therefore, assessment taking place at the end of the price control period would allow wider context regarding TO behaviour to be taken into account. For example, if a TO was able to connect a small amount of large scale, strategically placed generation projects over the five year period, this may not be acknowledged by an incentive which measures the number or speed of connections, but could be of great value to the network.

2) Connection Timeframes

Description:

3.24 This incentive would assess the length of time individual connections projects take, from initial application through to an actual connection going live.

3.25 This could be seen as an evolution of the existing Timely Connections ODI-F, which only judged the TOs on the time taken between a customer applying for a connection and receiving a connection offer.

Metric:

3.26 Connections will be categorised and each will be given an allowed timeframe for all work to be completed, based on benchmarks of existing performance.

3.27 TOs would be financially rewarded for completing a connection within the allowed timeframe, but would be financially penalised if the connection is not completed within the allowed timeframe. A deadband could be applied to allow for a degree of flexibility around the allowed timeframe.

Risks:

3.28 The categories of connections will be difficult to create and robustly benchmark. Similarly sized projects (measured in GW or MW) may realistically take very different times to connect, due to complexities around location, or issues outside of TO control such as delays to receiving planning permission.

3.29 One possible solution would be to categorise 'typical' and 'atypical' connections. 'Typical' connections would follow a set, benchmarked timeframe, but 'atypical' connections, which are denoted as such due to their complexity or other factors, could be given a bespoke timeframe via a separate assessment. However, even this wouldn't address variability due to location.

3.30 Benchmarking and establishing allowed timeframes would require extensive analysis and engagement with stakeholders such as the NESO and TOs to ensure they are ambitious yet reasonable.

3.31 If all projects were valued and judged against their allowed timeframes equally, this could risk disincentivising TOs to prioritise projects which hold greater long term strategic value. There is also the risk that TOs would withdraw from more difficult projects where they are less likely to meet the deadline, regardless of the strategic importance of the project.

3.32 Similarly, it risks incentivising TOs to target interventions which may be easier and faster to deliver but which do not hold strategic importance, in order to gain financial reward.

Opportunities:

3.33 Measuring and judging the entire end-to-end connection process of a project would have the most direct impact in driving down connection times.

3.34 Connection customers prioritise a fast connection process - we consider that publicly assessing TOs against clearly set timeframes will improve customer clarity and satisfaction within the connections process in RIIO-ET3.

3) Supergrid Transformer Capacity

Description:

3.35 This option would incentivise each TO to increase their Supergrid Transformer (**SGT**) capacity across the 5-year price control period.

3.36 SGTs are used at connection points on the transmission system to increase or decrease voltage, and are a major enabler of connection processes.

3.37 We consider there to be a clear link between installed SGT capacity and rate of customer connections. The majority of customers will seek to connect at lower voltages as opposed to directly at transmission voltages, meaning that in most cases an increase in installed SGT capacity will reflect an increase in connection activity at lower voltages by TOs.

3.38 Additionally, we recognise different connection patterns emerging where the relationship of single assets to single customers may not be consistent in the future. This means an incentive designed on customer numbers may not be representative of the network build which is required. As such using the SGT capacity will serve as a customer-agnostic proxy for connection works, this is applicable as very few connections are direct at transmission voltages.

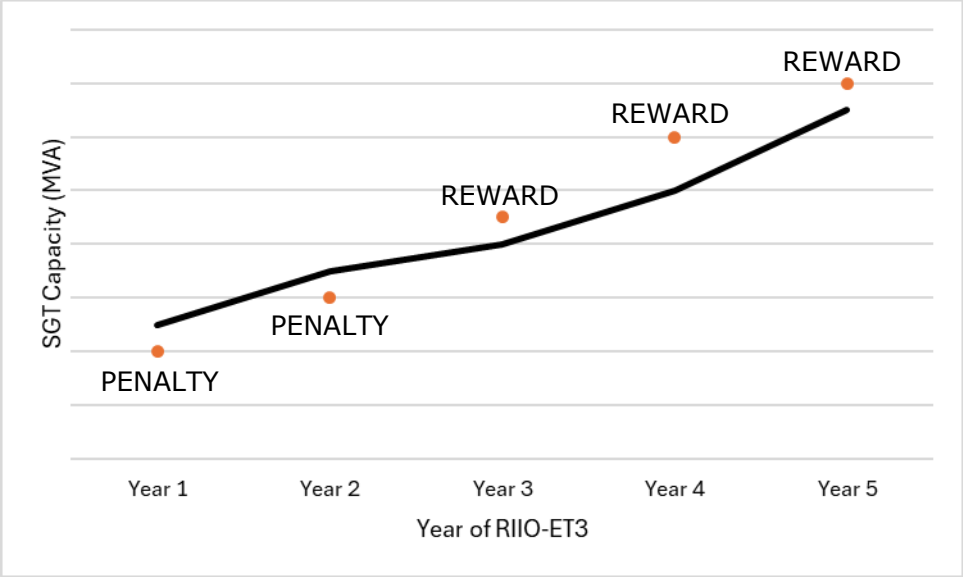
Metric:

3.39 We would ask TOs to establish their projected capacity (in MVA or GVA) across their network for each year of RIIO-ET3, as well providing as a regional breakdown. This would be based on RIIO-ET3 business plans, and with future adjustments resulting from RIIO uncertainty mechanism projects to be factored in during the period.

3.40 We would then use this to inform the targets for RIIO-ET3. Performing below that projected capacity would result in a penalty, whilst performing above that projection would result in a reward.

3.41 To help illustrate this concept, please see Figure 1, below. The 'actual' capacity of each year is measured against the 'projected' base level. Where it is above the projection, there is a reward. Where it is below the projection, there is a penalty.

Figure 1 – SGT capacity projections within RIIO-ET3



Risks:

3.42 As the relationship between connections activity and SGT capacity has not been incentivised before we are concerned there would minimal historic data for us to use to fully understand the relationship that we see.

3.43 We recognise the gaming risk of the TOs underplaying their projections in order to set low targets that they can then more easily exceed. Therefore, we could look to set the incentive in such a way that outperformed unambitious plans are rewarded less generously than ambitious plans.

3.44 We are also wary of the impact on target capacity of additions that arise via re-openers. The precise target-setting methodology would be established ahead of RIIO-3 Draft Determinations in 2025.

3.45 We recognise there is also a material procurement lead-time for SGTs. This could mean that TOs may not be able to react quickly enough for their behaviours to be driven by this incentive. On the other hand, TOs have the ability to bulk-buy SGTs in advance (potentially using the Advanced Procurement Mechanism[46]) if they knew they were being incentivised to do so. A further potential mitigant is to have a grace period at the beginning of RIIO-ET3, where we would understand a lag in installing additional SGT capacity.

[46] See paragraph 2.51-2.59: RIIO-3 Sector Specific Methodology Decision – ET Annex

Opportunities:

3.46 This metric builds on the clear relationship between network reinforcement and improvements to the connections queue / speed of connections.

3.47 Looking beyond RIIO-ET3, we would use the trajectory of the year-by-year 'actual' capacity (as opposed to the projection) to set the baseline for RIIO-ET4. This will ensure both continuous improvement in TO performance and sustainable growth of the network in the long term. If a licensee chooses to utilise future limiting designs, the trend will be unsustainable in future price control periods - we believe this will act as a deterrent to short term thinking.

3.48 We appreciate that strategic growth plans will see decisions being made about where connections will need to site. To gain a better understanding of regional differences, we could gather information on SGT capacity by boundary.

3.49 Of the three ideas presented, this is currently our favoured option. It would incentivise network build and deliver behaviours that would help to drive an improvement in the connections process. Further analysis on historic performance of TOs and the relationship between SGT capacity and connections delivered will be undertaken before Draft Determinations to better understand this option and the precise behaviours we would be looking to drive.

Consultation questions

Question 8a. What are your thoughts on each of the three ideas we have presented? In your response, please identify positives and negatives you see in each of the proposals, and if you have a favoured option and why that is.

Question 8b. With reference to our Future Considerations, do you have any further ideas on how TOs could be incentivised through a financial penalty and reward model, to deliver faster connections times, a more effective overall connections process in RIIO-ET3 and drive behaviours that have a positive long-term impact on the network?

4. Your response, data and confidentiality

Consultation stages

Stage 1

Consultation opens 08/11/2025.

Stage 2

Consultation closes end of Monday 13/01/2025. Deadline for responses.

Stage 3

Responses reviewed and published in Spring 2025.

Stage 4

Consultation decision/policy statement.

How to respond

4.1 We want to hear from anyone interested in this consultation. Please send your response to connections@ofgem.gov.uk

4.2 We've asked for your feedback in each of the questions throughout. Please respond to each one as fully as you can.

4.3 We will publish non-confidential responses on our website at www.ofgem.gov.uk/consultations.

Your response, your data and confidentiality

4.4 You can ask us to keep your response, or parts of your response, confidential. We'll respect this, subject to obligations to disclose information, for example, under the Freedom of Information Act 2000, the Environmental Information Regulations 2004, statutory directions, court orders, government regulations or where you give us explicit permission to disclose. If you do want us to keep your response confidential, please clearly mark this on your response and explain why.

4.5 If you wish us to keep part of your response confidential, please clearly mark those parts of your response that you *do* wish to be kept confidential and those that you *do not* wish to be kept confidential. Please put the confidential material in a separate appendix to your response. If necessary, we'll get in touch with you to discuss which parts of the information in your response should be kept confidential, and which can be published. We might ask for reasons why.

4.6 If the information you give in your response contains personal data under the General Data Protection Regulation (Regulation (EU) 2016/679) as retained in domestic law following the UK's withdrawal from the European Union ("UK GDPR"), the Gas and Electricity Markets Authority will be the data controller for the purposes of GDPR. Ofgem uses the information in responses in performing its statutory functions and in accordance with section 105 of the Utilities Act 2000. Please refer to our Privacy Notice on consultations, see Appendix 4.

4.7 If you wish to respond confidentially, we'll keep your response itself confidential, but we will publish the number (but not the names) of confidential responses we receive. We won't link responses to respondents if we publish a summary of responses, and we will evaluate each response on its own merits without undermining your right to confidentiality.

General feedback

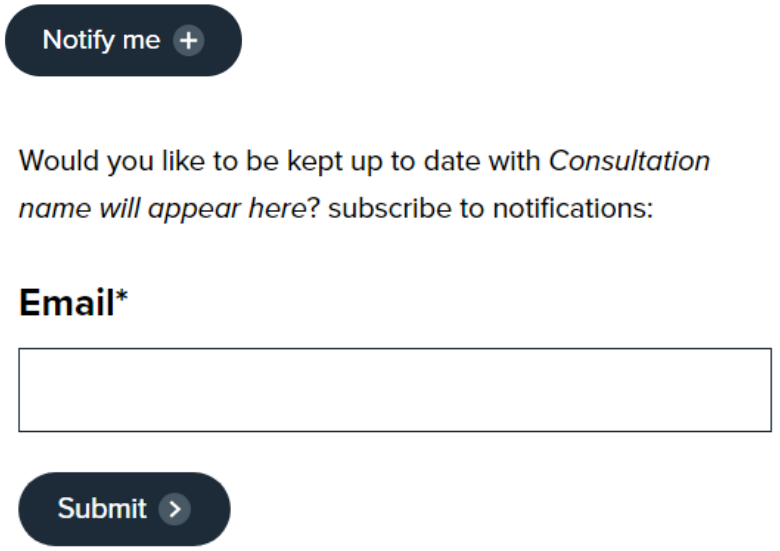
4.8 We believe that consultation is at the heart of good policy development. We welcome any comments about how we've run this consultation. We'd also like to get your answers to these questions:

1. Do you have any comments about the overall process of this consultation?
2. Do you have any comments about its tone and content?
3. Was it easy to read and understand? Or could it have been better written?
4. Were its conclusions balanced?
5. Did it make reasoned recommendations for improvement?
6. Any further comments?

Please send any general feedback comments to stakeholders@ofgem.gov.uk

How to track the progress of the consultation

You can track the progress of a consultation from upcoming to decision status using the 'notify me' function on a consultation page when published on our website. Choose the notify me button and enter your email address into the pop-up window and submit. ofgem.gov.uk/consultations



Once subscribed to the notifications for a particular consultation, you will receive an email to notify you when it has changed status. Our consultation stages are:

Upcoming > **Open** > **Closed** (awaiting decision) > **Closed** (with decision)

Appendices

Index

Appendix 1 – Privacy notice on consultations

Personal data

The following explains your rights and gives you the information you are entitled to under the General Data Protection Regulation (GDPR).

Note that this section only refers to your personal data (your name address and anything that could be used to identify you personally) not the content of your response to the consultation.

1. The identity of the controller and contact details of our Data Protection Officer

The Gas and Electricity Markets Authority is the controller, (for ease of reference, "Ofgem"). The Data Protection Officer can be contacted at dpo@ofgem.gov.uk

2. Why we are collecting your personal data

Your personal data is being collected as an essential part of the consultation process, so that we can contact you regarding your response and for statistical purposes. We may also use it to contact you about related matters.

3. Our legal basis for processing your personal data

As a public authority, the GDPR makes provision for Ofgem to process personal data as necessary for the effective performance of a task carried out in the public interest. i.e. a consultation.

4. With whom we will be sharing your personal data

(Include here all organisations outside Ofgem who will be given all or some of the data. There is no need to include organisations that will only receive anonymised data. If different organisations see different set of data then make this clear. Be a specific as possible.)

5. For how long we will keep your personal data, or criteria used to determine the retention period.

Your personal data will be held for (be as clear as possible but allow room for changes to programmes or policy. It is acceptable to give a relative time e.g. 'six months after the project is closed')

6. Your rights

The data we are collecting is your personal data, and you have considerable say over what happens to it. You have the right to:

- know how we use your personal data
- access your personal data
- have personal data corrected if it is inaccurate or incomplete
- ask us to delete personal data when we no longer need it
- ask us to restrict how we process your data
- get your data from us and re-use it across other services
- object to certain ways we use your data
- be safeguarded against risks where decisions based on your data are taken entirely automatically
- tell us if we can share your information with 3rd parties
- tell us your preferred frequency, content and format of our communications with you
- to lodge a complaint with the independent Information Commissioner (ICO) if you think we are not handling your data fairly or in accordance with the law. You can contact the ICO at https://ico.org.uk/, or telephone 0303 123 1113.

7. Your personal data will not be sent overseas (Note that this cannot be claimed if using Survey Monkey for the consultation as their servers are in the US. In that case use "the Data you provide directly will be stored by Survey Monkey on their servers in the United States. We have taken all necessary precautions to ensure that your rights in term of data protection will not be compromised by this".

8. Your personal data will not be used for any automated decision making.

9. Your personal data will be stored in a secure government IT system. (If using a third party system such as Survey Monkey to gather the data, you will need to state clearly at which point the data will be moved from there to our internal systems.)

10. More information For more information on how Ofgem processes your data, click on the link to our "Ofgem".

Appendix 2 – Compiled list of proposals

Theme 1 - Visibility and accuracy of connections data and network capacity

Proposal 1a. A new regulatory requirement on DNOs, TOs and NESO to create, maintain and continuously improve single digital view tools to provide accurate, usable connections data to interested parties.

Proposal 1b. A new regulatory requirement on DNOs, TOs and NESO to create and maintain guidance / minimum set of standards for connections data visualisation tools.

Proposal 1c. A new regulatory requirement on DNOs, TOs and NESO to provide compiled system-level connections data on a regular basis for external publication

Theme 2 - Improved standards of service across the customer journey (not including "minor connections")

Proposal 2a. Principles-based licence condition, and supporting guidance, on DNOs, TOs and the NESO around standard of service required throughout the customer journey, AND / OR,

Proposal 2b. New minimum standards licence conditions and/or SLAs on DNOs, TOs and the NESO around standards of service required throughout the customer journey. Minimum standards could be accompanied by incentive or penalty mechanisms to further drive compliance.

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

Proposal 3a. A strengthened principles-based licence requirement for DNOs, TOs and the NESO to ensure that they meet connection dates in connection agreements, and to provide timely and accurate information to developers in relation to issues that may impact their connection date or project viability.

Proposal 3b. Minimum standards licence condition or SLAs for DNOs, TOs and NESO to ensure they meet connection dates in connection agreements and key timelines through the customer journey. Minimum standards could be accompanied by incentive or penalty mechanisms to further drive compliance.

Proposal 3c. A financial instrument that offers recourse to connecting customers who suffer detriment, such as a delayed connection date, due to poor practice on the part of the network company.

Theme 4 - Quality of connection offers and associated documentation

Proposal 4a - Principles-based licence condition on DNOs, TOs and the NESO on the completeness / quality of the offer and supporting documentation provided to customers in a timely manner, both at the initial offer stage and at subsequent offer update events.

Proposal 4b - Minimum standards licence condition and/or SLAs on DNOs, TOs and the NESO on the completeness / quality of the offer and supporting documentation. Minimum standards could be accompanied by incentive or penalty mechanisms to further drive compliance.

Theme 5 – Ambition of connection offers

Proposal 5a. A strengthened principles-based licence condition on DNOs, TOs and the NESO to offer the earliest achievable connection date to the customer, and to provide revised offers in a timely manner if it later became possible to connect the customer more quickly.

Theme 6 – Minor connections

Proposal 6a – Delays / Timelines – we propose as a minimum to set principles-based licence obligations for DNOs and/or guidance to define clear objectives and expectations for timelines and delays,

AND / OR**,**

set Service Level Agreements (SLAs) and/or minimum standards that DNOs are obliged to meet for minor connection requests, including but not limited to increased transparency, standardising of approaches to the highest standard achievable and defining criteria for auto-approvals.

Proposal 6b - Inconsistencies – we propose as a minimum to set obligations on DNOs to determine how best to align their processes to ensure high standards are set and consistent across the processes discussed in this theme, and where appropriate, meet the SLAs/minimum standards.

Proposal 6c – Monitoring – we propose to consider

monitoring SLAs and/or minimum standards with compulsory reporting from the DNOs, and/or

publishing the resulting data as aligned to SLAs and/or minimum standards if set.

Proposal 6d - Enforcement– we propose to consider whether the current arrangements for financial recourse are sufficient for minor connection customers, and if not, whether there is a need for a consumer body, or an improvement of what already exists for connection customers, to ensure minor connections are facilitated to a high standard and in a timely manner. This includes consideration of whether expanding / extending the GSOPs for minor connection customers would deliver better outcomes.

Proposal 6e - G98 Limit - We propose to set an obligation on DNOs to review their policy towards the G98 limit, including increasing the current limit unless there is a justification of why uplift is not in the consumer interest, or could have unintended consequences for the network. This would allow more connections to proceed as 'Connect and Notify'.

Proposal 6f - Notifications - We propose to investigate how to strengthen the notification obligation on LCT installers, ie where they must notify the DNOs of all new LCT connections.

Theme 7 - Provisions and guidance for determinations

Proposal 7a - Ofgem to review the guidance for connection determinations with a view to updating it if changes are considered appropriate / necessary for the current connections process and landscape.

Appendix 3 – Compiled list of consultation questions

Theme 1 - Visibility and accuracy of connections data and network capacity

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?

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?

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?

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?

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?

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.

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

Theme 2 - Improved standards of service across the customer journey (not including "minor connections")

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?

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?

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?

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?

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?

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

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?

Question 3b. Do you have any views on proposal 3a (strengthened principles-based 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?

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?

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?

Theme 4 - Quality of connection offers and associated documentation

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?

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?

Question 4d. What do you consider would constitute a 'high quality offer'?

Question 4e. Is there anything else regarding Theme 4 - Quality of connection offers and associated documentation that you consider we have missed?

Theme 5 – Ambition of connection offers

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?

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?

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

Theme 6 – Minor connections

Question 6a – Do you agree with the issues we have identified? Are there any other issues under this theme that we should consider? Please provide data and evidence to support your views if possible.

Question 6b – What are your views on our proposals designed to address these issues? Are there other proposals you consider would achieve the intended outcomes?

Question 6c – Do you have views on how poor performance could be addressed under these proposals to ensure the smallest scale customers are protected and LCT roll out is supported?

Theme 7 - Provisions and guidance for determinations

Question 7a. Do you agree with the issues we have set out under Theme 7 - Provisions and guidance for determinations? Are there any other issues under this theme that we should consider or be aware of?

Question 7b. Do you have any views on proposal 7a (Ofgem to review the guidance for connection determinations)?

Question 7c. Is there anything else regarding Theme 7 - Provisions and guidance for determinations?

RIIO T3 – Electricity Transmission Network Incentivisation

Question 8a - What are your thoughts on each of the three ideas we have presented? In your response, please identify positives and negatives you see in each of the proposals, and if you have a favoured option and why that is.

Question 8b - With reference to our Future Considerations, do you have any further ideas on how TOs could be incentivised through a financial penalty and reward model, to deliver faster connections times, a more effective overall connections process in RIIO-ET3 and drive behaviours that have a positive long-term impact on the network?