Consultation

Consultation on the onshore electricity transmission Early Competition commercial framework

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We are consulting on the National Energy System Operator's (NESO)[1] proposed commercial framework for onshore electricity transmission projects to be competitively tendered under the Early Competition regime. We would like views from people with an interest in the development of electricity network solutions, technical and commercial innovation, and competing for the design, construction and operation of solutions to solve network problems. We particularly welcome responses from potential bidders into the Early Competition process and network companies. We 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] Designation of the National Energy System Operator (NESO) - GOV.UK (www.gov.uk): NESO was established on October 1st 2024. Prior to that it was known as the National Grid Electricity System Operator (NGESO). We have used NESO throughout this document when referring to its activities undertaken while still referred to as NGESO.

Consultation – Consultation on the onshore electricity transmission Early Competition commercial framework

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10 South Colonnade, Canary Wharf, London, E14 4PU.

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Contents

1. Introduction

Section summary

This section introduces our consultation on the proposed commercial framework in Early Competition for onshore electricity transmission networks. It sets out the background to the consultation, summarises what we are consulting on, outlines next steps and provides links to related documents. It also includes details on how to respond to the consultation and how your data will be treated.

Background

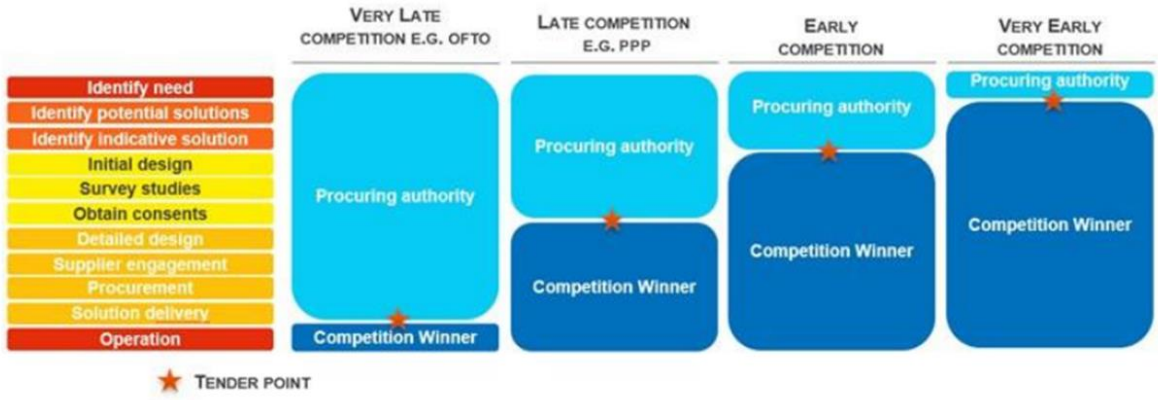
1.1 Competition in the delivery of onshore electricity transmission network reinforcements has an important role to play in driving innovative solutions and cost efficiencies while also providing opportunities for new investment in our onshore networks. It has the potential to play a key role in the efficient delivery of our decarbonisation and Net Zero targets at the lowest cost to consumers. 'Early competition for onshore transmission' is one of the stated objectives in our 2024-25 Forward Work Programme.

1.2 The Early Competition model refers to a competition to determine a solution to a need on the network that is run before detailed design of the preferred solution has been carried out. It encourages cost efficiencies and additional innovation in the design, delivery and operation of transmission infrastructure which consumers will benefit from.

1.3 Development of an Early Competition model for onshore electricity transmission is supported by the government, which has stated that allowing for onshore competition in the Energy Act 2023 could drive consumer savings of up to £1 billion by 2050, as well as improving efficiency in investment, foster innovative solutions to network needs and reduce costs to consumers.[2]

[2] Energy Security Bill factsheet: Competition in onshore electricity networks - GOV.UK (www.gov.uk)

Figure 1: Tender point under various competition models



1.4 The Early Competition commercial framework, developed by the National Energy System Operator (NESO), refers to the commercial arrangements that will apply to a Competitively Appointed Transmission Owner (CATO)[3] to finance, build, operate and maintain assets on the electricity transmission network. The proposed commercial framework, which includes various incentives, re-pricing model, payment mechanism and post-award obligations on a CATO, intends to balance the protection of consumer interests with attractiveness to potential bidders, fostering competition and maintaining competitive pressure post tender award.

1.5 In April 2021, NESO published its Early Competition Plan (ECP),[4] and in March 2022 we published our decision to continue the development of an Early Competition model (March 2022 decision).[5] Our March 2022 decision sets out the roles and responsibilities of the NESO, Ofgem, and the Transmission Owners (TOs), confirming Ofgem as the Approver (responsible for ensuring that the project advancing to Early Competition is, and remains, in the interest of consumers) and Licence Counterparty (awarding and managing any licence awarded to a successful bidder).

[3] A CATO refers to a holder of an onshore electricity transmission licence in respect of a qualifying project that is granted as a result of a tender exercise run under the proposed Electricity (Early-Model Competitive Tenders for Onshore Transmission Licences) Regulations 2024.
[4] NESO's Early Competition Plan (ECP), sets out a plan for introducing Early Competition into the onshore electricity transmission network (April 2021). Further information is available here: NESO final Early Competition Plan, April 2021; https://www.nationalgrideso.com/document/191251/download
[5] March 2022 decision: Ofgem decision on Early Competition, summarises our decisions on various elements of the Early Competition regime in onshore transmission networks March 2022 Decision on early competition in onshore electricity transmission networks | Ofgem

1.6 In February 2024, NESO published its Early Competition Implementation - Update (EC-I Update).[6] In July 2024, we published our decision on NESO's proposed amendments contained within the EC-I Update.[7] This also included our decision on the role of the incumbent TOs within Early Competition and conflict mitigation arrangements, the Cost Benefit Analysis (CBA) methodology to determine whether there could be consumer benefit in competitively tendering a project, Transmission Network Use of System (TNUoS) over / under recovery and options addressing different circumstances of CATO / tender failure.

1.7 In September 2024 we published our consultation on the draft Electricity (Early-Model Competitive Tenders for Onshore Transmission Licences) Regulations 2024 (Tender Regulations)[8] which if made and approved by the Secretary of State, will govern the Early Competition competitive tender exercise for the granting of an onshore electricity transmission licence in respect of certain onshore electricity projects (what would be the CATO licence). Further details of the proposed Early Competition tender process, which is referred to within this consultation, can be found in the Tender Regulations consultation document.[9]

What are we consulting on

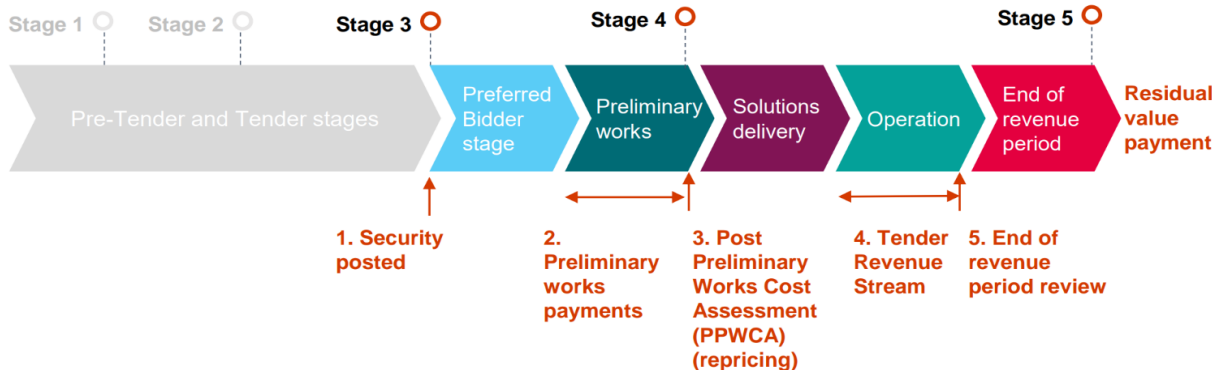
1.8 We are consulting on the Early Competition commercial framework. This consultation summarises NESO's proposals on the commercial model and includes Ofgem's views on these proposals. This consultation should be read alongside NESO's proposals contained in the ECP, as updated in the EC-I update.

1.9 Figure 2 below sets out the commercial framework and the associated process timings. The main elements of the Early Competition commercial framework that we are consulting on are:

[6] EC-I Update: Early Competition Implementation Update by NESO setting out further developments in its Early Competition Plan (ECP) published in February 2024 https://www.nationalgrideso.com/document/301786/download
[7] Decision on Early Competition in onshore electricity transmission networks: policy update | Ofgem
[8] Draft Electricity (Early-Model Competitive Tenders for Onshore Transmission Licences) Regulations 2024 for consultation | Ofgem, and a copy of the draft Tender Regulations can be found here: SI/SR Template (ofgem.gov.uk).
[9] Draft Electricity (Early-Model Competitive Tenders for Onshore Transmission Licences) Regulations 2024 for consultation (ofgem.gov.uk): See fn 9

- **Post-award security obligation**: Chapter 2 deals with proposals regarding the payment of security by the CATO during the preliminary works and construction stages.
- **Preliminary works payments**: Chapter 3 summarises proposals regarding payments to a CATO during the preliminary works stage.
- **Post Preliminary Works Cost Assessment (PPWCA)**: Chapter 4 details proposals to adjust costs between bid submission and the completion of the preliminary works stage.
- **Payment mechanism and performance incentives**: Chapter 5 describes proposals regarding payment to the CATO and performance incentives during the operational stage post commissioning.
- **Additional works obligations:** Chapter 6 contains proposals for CATOs to undertake additional works on their assets beyond the scope of work originally tendered.
- **Revenue period**: Chapter 7 includes proposals dealing with the revenue period and the next steps following the end of the revenue period.

Figure 2: Elements of the commercial framework



Next steps

1.10 Following careful consideration of all responses to this consultation we will publish our decision on the Early Competition commercial framework. This will then represent the commercial arrangements that a CATO will be subject to following licence grant. These commercial arrangements will be reflected in the CATO licence – we intend to consult on the proposed supporting CATO licence in early 2025.

Context and related publications

1.11 Other publications related to this consultation include:

- Ofgem, Decision on early competition in onshore electricity transmission networks, March 2022
- Ofgem, Decision on Early Competition in onshore electricity transmission networks: policy update, July 2024
- Ofgem, Consultation on Draft Electricity (Early-Model Competitive Tenders for Onshore Transmission Licences) Regulations 2024, September 2024
- Department for Energy Security and Net Zero, Transmission Acceleration Action Plan, November 2023
- Energy Act 2023, October 2023
- Electricity Act 1989, July 1989
- The Electricity (Criteria for Relevant Electricity Projects) (Transmission) Regulations 2024, March 2024
- National Energy System Operator, Early Competition Plan, April 2021
- National Energy System Operator, Early Competition - Implementation (EC-I Update), February 2024

How to respond

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

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

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

Your response, your data and confidentiality

1.15 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.

1.16 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.

1.17 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.

1.18 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

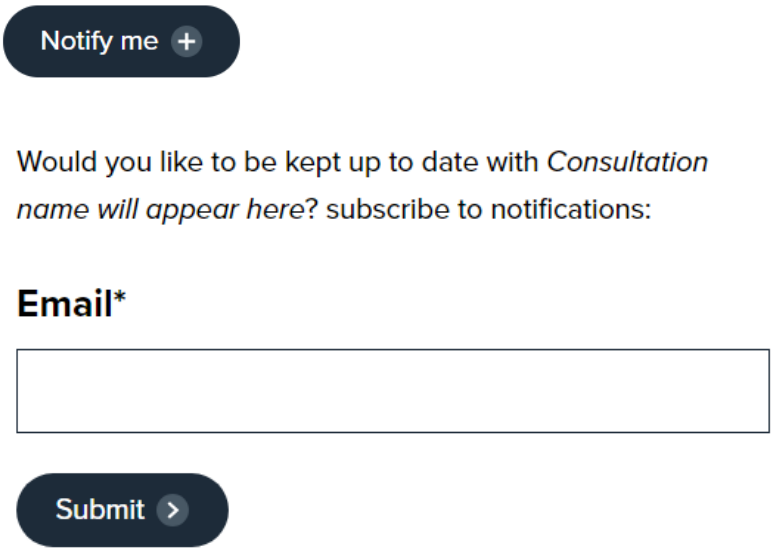
1.19 We believe that consultation is at the heart of good policy development. We welcome any comments about how we've run this consultation. We'd also like to get your answers to these questions:

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

2. Post-award security obligation

Section summary

This section sets out the National Energy System Operator's (NESO) proposals regarding the posting of security by a the Competitively Appointed Transmission Owner (CATO), including how security is posted and recovered. It also sets out Ofgem's view on NESO's proposals.

Questions

Q1. Do you agree with NESO's proposed approach to a CATO's post-award security obligation?

Background

2.1 Introducing Early Competition as a new delivery model for onshore transmission projects, as well as facilitating new market entrants alongside the established Transmission Owners (TOs), represents a change to the way projects are currently delivered. Given the importance of timely upgrades to the transmission network it is critically important that the regime is able to provide assurance that it will identify a suitable CATO that can deliver the required network solutions in a timely manner and that the assets installed will be operable and maintained to a high standard. Alongside this, it is crucial that the commercial framework includes sufficient consumer protection measures that further minimise the risk of tender failure or of a CATO not delivering network solutions to an acceptable standard. One such measure is provision of financial securities by the CATO.

2.2 Securities,[10] under the proposed model, would equate to posting a specified amount of money ahead of constructing and commissioning a competitively tendered project that the CATO would forfeit if it failed to deliver the project.

2.3 Posting securities in respect of Early Competition intends to protect consumers by disincentivising the CATO walking away following what may be an extended preliminary works period, ultimately ensuring there is a cost to the CATO of non-delivery which in turn reduces the cost of non-delivery to consumers.

[10] SI/SR Template (ofgem.gov.uk): page 3 (Security includes a charge over a bank account or any other asset, a deposit of money, a performance bond or bank guarantee, an insurance policy or a letter of credit.)

NESO proposals

2.4 The Early Competition Plan (ECP) set out that the CATO should provide security to cover the preliminary works period.[11] Preliminary works are the works required to secure all necessary planning consents ahead of project construction. Based on its market research, NESO proposes the level of security to be 10% of the forecast construction costs submitted by the CATO, which it considers in line with the security typically posted by a contractor during construction.

2.5 NESO also recognises that the cost of providing security is likely to be included within a bidder's tender submission, so setting too high an amount of security could put upward pressure on submitted bid costs which would not be in the interest of consumers. These factors lead NESO to consider a security of 10% of forecast construction costs to be an amount that appropriately balances CATO financeability and attractiveness of the commercial framework to bidders with sufficient consumer protection against non-delivery.

2.6 NESO proposes that the CATO must post an acceptable form of security which would remain in place up until Financial Close. NESO proposes that the cost of providing the specified security needs to be included in the bidder's financial model submitted during the invitation to tender (ITT) stage of the tender exercise.

2.7 Following stakeholder feedback to its proposal, NESO considers that the risk of non-delivery decreases as the project moves closer to commissioning and is at its highest through the preliminary works stage, especially in relation to the outcome of the Post Preliminary Works Cost Assessment (PPWCA). This is because there is a strong natural financial incentive to the CATO to deliver and commission its assets in order to obtain the Tender Revenue Stream (TRS), with the cost of non-delivery increasing as the project moves closer to its commissioning date due to increasing non-recoverable sunk costs.

2.8 NESO further proposes a tapering off of the security as the CATO makes capital investments in the project. This tapering could potentially be linked to time or project spend as is the case for Contracts for Difference, that is a low spend milestone shortly after Financial Close and a larger spend milestone mid-

[11] ECP: download (nationalgrideso.com): Section 4.2.3, page 49

delivery, to protect against abandonment risks. Security requirement of 10% would be tapered down to 0% once the CATO has invested a specified amount in the project. Upon investing 10% of the forecast construction costs into the project, the CATO has the same financial risk exposure if it were to walk away at the outset of the preliminary works period when security is posted. NESO's view is that without the tapering down of the posted security the commercial frameowrk becomes less attractive to potential bidders and may not attract as much commercial interest, potentially creating consumer detriment.

2.9 NESO considers that an acceptable form of security could include a (potentially conditional) letter of credit or a performance bond (related to payment instead of performance) from an institution with an acceptable credit rating, or alternatively cash in escrow with each being claimable in the event of contract termination or electricity transmission licence revocation. This would still apply where the CATO itself had an acceptable credit rating or could obtain a parent company guarantee to ensure any claim is fully accessible in a timely manner and with reasonable certainty. This arrangement provides a more level playing field for all potential bidders in respect of a post-award security obligation.

2.10 The detailed forms of the security would need to be developed in detail and agreed with within the pre-tender stages, that is between Stage Gate 1 and Stage Gate 2 of the tender process.[12]

Ofgem view

2.11 Ensuring that the risk of tender failure and subsequent late or non-delivery of a required network solution is mitigated as much as possible is of critical importance to the development of a successful CATO regime. As such, we view the requirement of posting the post-award security as being part of a package of measures under the commercial framework that can potentially drive consumer benefit, since a CATO walking away with the potential need to retender or appoint a CATO of Last Resort, will cause delays that are likely to drive material additional cost to consumers. Making a financial investment in the form of a security at the preliminary works stage can incentivise the CATO for timely delivery and transfer some risk of non-delivery away from consumers.

[12] As illustrated in figure 2 (chapter 1, page 8)

2.12 We are committed to developing and implementing an Early Competition regime that is able to drive consumer benefits in onshore transmission infrastructure delivery. Part of achieving this aim is ensuring that the regime also appeals to a wide market and maximises the potential bidder pool. Our current view is that setting security at 10% of the submitted capital costs appears to strike an appropriate balance of risk between the CATO and consumers, and we welcome views from stakeholders on this amount.

2.13 Our current view is that NESO's proposal to taper off security to 0% once the CATO has invested an amount equivalent to the proposed security level in the project provides reasonable relief to potential bidders while also protecting consumers against the risk of a bidder walking away from the project.

2.14 The diversity in acceptable forms of security (performance bond, letter of credit, parent company guarantee) proposed by NESO also seems reasonable from a level playing field perspective.

2.15 We welcome views from stakeholders to this consultation on how the posting of security should work from a practical perspective, including who should be responsible for managing the posted security.

2.16 We welcome stakeholders' feedback on the above proposals by NESO, including the level of security to be posted, the acceptable forms of security and the tapering of security to 0% once capital starts being invested into the project.

3. Preliminary works payments

Section summary

This section summarises the National Energy System Operator's (NESO) proposal of payments to a Competitively Appointed Transmission Owner (CATO) during the preliminary works phase ahead of commencement of the Tender Revenue Stream (TRS).

Questions

Q2. Do you agree with NESO's proposed approach to preliminary works payments?

Background

3.1 Preliminary works refer to the activities that are required ahead of construction in order to secure all necessary planning consents for an onshore transmission project. This includes, but is not limited to, activities such as site, ground, animal and environmental surveys, project design, engineering development, stakeholder engagement and consultations, planning applications and associated legal costs. These activities are critical to the development of an optimised and economically efficient design.

3.2 These activities are defined in Special Condition 1.1 of the incumbent Transmission Owner's (TO's) licences[13] as Pre-Construction Works and the TOs are typically provided with explicit Pre-Construction Funding (PCF) allowances, with the ability to make adjustments later, in certain circumstances, once planning consents have been secured and there is a much higher degree of cost confidence. This is in contrast to the Early Competition approach where bidders have to submit their bids prior to undertaking preliminary works and, unless funding is provided for through the commercial model arrangements, incur costs 'at risk' until the commencement of the TRS.

NESO proposals

Preliminary revenue cap

3.3 Under the commercial framework proposed by NESO, the TRS does not commence until project commissioning to incentivise the CATO to complete the project by the required delivery date. NESO notes that during the preliminary works period, the CATO may have limited access to funding and proposes that

[13] National Grid Electricity Transmission Consolidated Special Conditions - Current.pdf (ofgem.gov.uk)

there should be some provision for payments to the CATO. NESO considers that payments during this period would help remove barriers to entry, more appropriately share risk between the CATO and consumers and enhance the overall competitive process.

3.4 NESO proposes that preliminary works payments should not be mandatory but only made available where, ahead of launching a tender and based on evidence from the market, it determines that payments to the CATO during the preliminary works period are required to help remove barriers to entry. This could be where the preliminary works period is expected to be a significant period of time or where there are complexities in consenting that may require significant expenditure to address.

3.5 NESO further proposes that if in its role as the Early Competition Delivery Body,[14] it determines that payments should be made during preliminary works, then the maximum amount of any payment is capped (same for each bidder) ahead of each tender. This cap, based on the forecast cost of the indicative solution marked out in the Centralised Strategic Network Plan (CSNP),[15] would allow the CATO to assess the financing requirement during the preliminary works stage and plan accordingly.

3.6 As part of the pre-tender phase, an estimate of the associated preliminary works costs would be made. Initially, this would likely be based on experience in the development of the onshore transmission network by the incumbent TOs, with the TOs providing estimates for the costs of the preliminary works. As the Early Competition market develops, and several tenders have been completed, data from the preliminary works period is expected to be used to further refine these cost estimates.

3.7 The intention of this proposed approach to preliminary works payments is to both incentivise the CATO to control costs during the preliminary works phase and also achieve financial close and start construction in a timely manner. For these reasons, NESO does not consider it appropriate to pay 100% of the estimated preliminary works cost as doing so could dampen these incentives.

[14] The draft Tender Regulations set out the proposed competitive tender process for the granting of an onshore electricity transmission licence to a relevant electricity project, including how the tender process will be administered by Ofgem as 'the Authority' and NESO as 'the delivery body'.
[15] Decision on the framework for the Future System Operator's Centralised Strategic Network Plan | Ofgem

3.8 Therefore, NESO's proposal is to (i) determine whether preliminary works payments are proposed or not for a particular project, and (ii) to determine what proportion of estimated costs it considers appropriate to set the maximum cap.

3.9 As an initial position for the first tender, if the preliminary works payment proposal is progressed and if NESO proposes preliminary works payments for the tendered project, NESO proposes capping payments at up to 50% of the NESO's estimated preliminary works costs. It considers a 50% cap appropriate in achieving a suitable balance between cost control and ensuring the overall commercial framework remains attractive to potential bidders. This proposal would be subject to further evidence gathered during pre-tender activities to ensure that no perverse incentives are created.

Preliminary works milestones

3.10 NESO proposes that payments for achieving specific milestones would form the preliminary works revenue for the CATO.

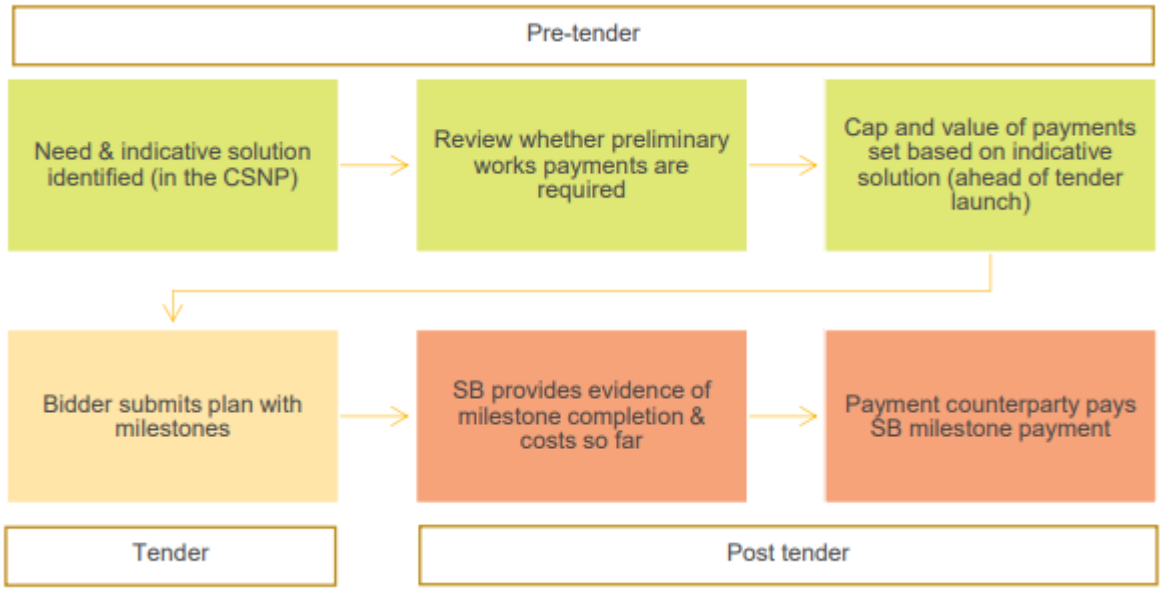
3.11 Acknowledging that different solutions may bring with them different sets of milestones, NESO proposes that bidders be required to suggest milestones in the project delivery plan that they will need to submit as part of their Invitation to Tender (ITT) submission documentation by allocating the provided cap for the milestone payments to particular events. These milestones would need to be refined and agreed during the tender process prior to licence award and the funding arrangements included in the CATO's licence. NESO intends to provide guidance around potential stages of project development suitable for making milestone payments in due course.

3.12 The milestone payment framework would, among other things, require the CATO to provide suitable evidence in support of a milestone payment, including evidence that a milestone has been met and evidence of their expenditure to date, such as invoices and timesheets. The relevant decision-making on a preliminary works payment for a CATO is proposed to be undertaken by Ofgem.

3.13 Preliminary works payments are proposed to be deducted from the TRS during the recalculation of the TRS following the Financial Close under the post preliminary works cost assessment (PPWCA) principles set out in the next section. This means that the net position for consumers remains the same; preliminary works payments are intended only as a mechanism to manage cash

flows and not create any unnecessary financial risk exposure which could dissuade potential bidders from entering the tender.

Figure 3: preliminary works payments



Ofgem view

3.14 We are committed to creating a level playing field for the Early Competition regime and ensuring that the incumbent TOs, due to their experience and financing capabilities, do not have an unfair advantage over other bidders. Since NESO proposes that the TRS payments to the CATO would only begin at the project commissioning stage, revenue in the form of payments for achieving specific milestones during the preliminary works phase could reduce its equity risk exposure. Therefore, NESO's proposal of incorporating preliminary works payments into the commercial framework could act as a means to incentivise tender participation by new entrants, should they otherwise have been put off by the lack of revenue and cashflow risk during this phase.

3.15 NESO's proposed preliminary works payment mechanism would be included in the CATO licence. We consider there are still areas of the proposal that require further deliberation and which we specifically seek stakeholders' views on. These are the stage at which the decision of allowing a preliminary works payment for a specific project would be made and what would be suitable milestones for the payment mechanism. We seek stakeholder views on these specific points and the preliminary works payment proposal more broadly.

3.16 Our current view is that the concept of a cap on milestone payments seems reasonable as well as providing an incentive to the CATO to keep costs under control, achieve Financial Close and begin project construction.

3.17 We currently agree with NESO's proposed approach to cap the maximum amount of preliminary works payments ahead of each tender (or to actual costs, if lower).

3.18 The Early Competition regime is in its nascent stage with reliance on an evolving transitional Centralised Strategic Network Plan (tCSNP) framework dealing with projects less developed than we anticipate under the enduring CSNP. NESO must ensure that the proposed approach works for the first tender with projects identified in the tCSNP2.[16] In the future as the CSNP process evolves by embedding minimum design requirements, an indication of likely preliminary works and the subsequent milestones, this should increase cost certainty and allow for robust financial risk management for bidders.

3.19 Our current view is that, if a preliminary works payment mechanism were part of the commercial framework, it would be appropriate for NESO as the Delivery Body to communicate with potential bidders on whether or not a preliminary works payment mechanism is proposed in respect of a project for tender and provide clear justification.

3.20 We welcome stakeholders' responses to the proposal of milestone-based preliminary works payments.

[16] Beyond 2030 | National Energy System Operator (neso.energy)

4. Post Preliminary Works Cost Assessment (PPWCA)

Section summary

We summarise the proposed PPWCA framework and the proposed amendments therein by the National Energy System Operator (NESO) as well as our views on the amended framework.

Questions

Q3. Do you agree with NESO's proposed approach to the PPWCA process?

Q4. Do you agree with Ofgem's proposed adjustments to NESO's approach?

Background

4.1 As mentioned in Section 3, allowances for the Transmission Owners (TOs) to deliver onshore transmission projects are provided following project assessment once planning consents have been secured. This means that the TOs have limited financial exposure to cost changes that may occur during the preliminary works period as a result of the maturity of design options and the planning process. This is in contrast to the Early Competition model, where bids are submitted at a much earlier stage ahead of undertaking preliminary works.

4.2 Due to the length of time between submitting bids and a Competitively Appointed Transmission Owner (CATO) completing the preliminary works, it is likely that there would be cost changes as detailed project design develops and is refined as part of the consenting process. Some of these cost changes are inflationary and can be managed through indexation, however there could also be unforeseen costs that a bidder could not reasonably have been expected to include within its bid. This is an especially important consideration for Early Competition, where it could potentially take 4 to 5 years between submission of bids and construction starting.

4.3 Therefore, the commercial framework needs to contain a mechanism to adjust costs between bid submission and construction commencing. This must be done in a way that is transparent, does not distort the competitive tender process and ensures bidders cannot submit artificially low bids with a view to increasing costs after the successful bidder has been determined.

NESO proposals

4.4 As part of the Early Competition Plan (ECP), NESO had introduced the PPWCA / re-pricing[17] process for updating the Tender Revenue Stream (TRS) of the CATO after the preliminary works phase.[18] The fundamental principles of the PPWCA remain as detailed in the ECP, however NESO has subsequently refined this process with the publication of the Early Competition Implementation – Update (EC-I Update) in February 2024.[19] The proposed changes / developments have been made in the following areas:

- updating underlying costs by applying indexation based on pre-agreed indices
- additional details on qualifying a cost component as "reasonably foreseeable" at the invitation to tender (ITT) stage and
- proposing the level of the cap on upward cost adjustments that tries to make the commercial proposition attractive to the market while protecting consumer interest

NESO's current view

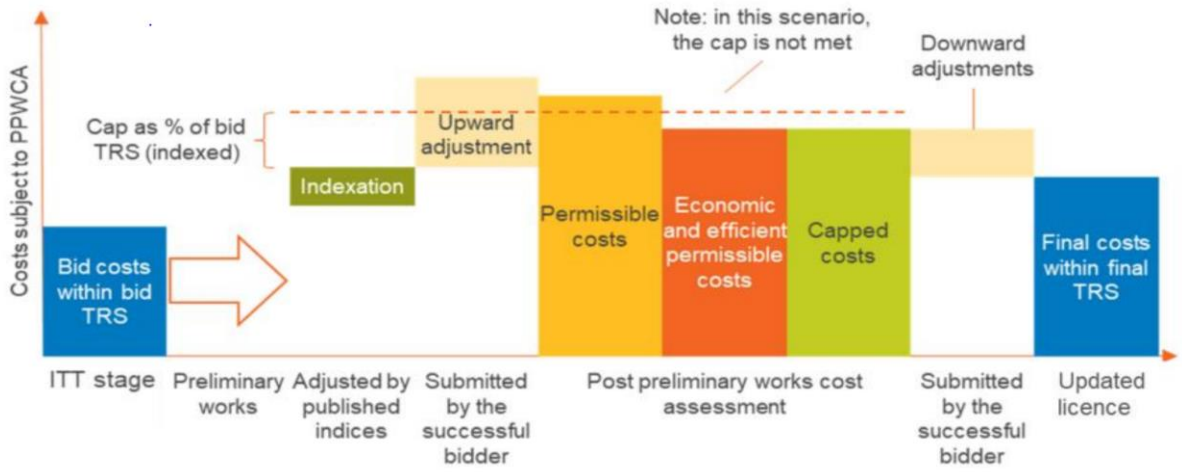
Indexation process step

4.5 The first amendment to the PPWCA process in the EC-I Update pertains to assessing the increase in underlying construction costs of a CATO revealed during the preliminary works stage. Increase in such costs is expected to be necessitated by (i) design modification due to consenting and surveys, and (ii) inflation from the ITT stage to completion of preliminary works as well as over the forecast construction period.

4.6 NESO, informed by market feedback, proposes that these two different cost drivers are separated and calculated individually. NESO proposes that inflation is calculated separately using indexation and an upward adjustment is made during the PPWCA process. This is to make the inflation adjustment more mechanistic and allow for a more transparent re-pricing process which could be more attractive to bidders.

[17] The terms "PPWCA" and "re-pricing" have been used inter-changeably throughout this document.
[18] https://www.nationalgrideso.com/document/191251/download Section 4.2.2
[19] https://www.nationalgrideso.com/document/301786/download Section 4.3

Figure 4: PPWCA process (including indexation adjustment)



4.7 NESO has proposed to include various appropriate inflation indices (which could include BCIS and BEAMA)[20] to calculate the indexation allowance at the PPWCA stage, with the approach pre-defined and set out at the tender stage. Subject to a reasonableness check by NESO, bidders will be required to assign their relevant cost buckets to their chosen pre-determined indices. In this way, each bidder will be able to prepare its bid by using the forecast data for each index in its individual financial model to calculate the bid TRS. Bidders will then be held to the unit costs submitted as part of their bid, subject to this indexation. The purpose of this measure is to provide flexibility to bidders when it comes to how they wish to manage future cost uncertainty.

4.8 To assess and update the underlying costs following the preliminary works stage, NESO proposes applying the actual indexation up until the cost assessment date based on information from the same data sources utilised for the original forecast data by the successful bidder, that is, the same cost indices included in the original bid will be applied at the cost assessment. Additionally, NESO proposes that the construction period would also be covered by applying new forecasts for each index from the cost assessment date.

Reasonably foreseeable test

4.9 While indexation can be used to adjust costs for inflation, this approach cannot be used to address unavoidable cost changes necessitated by surveys and

[20] The Building Cost Information Service: http://bcis.co.uk/ (Labour and product price indices) / http://www.beama.org/?pg=home (Indices associated with electrical and mechanical products)

consenting, typically as a result of exogenously driven scope changes. To ensure the integrity of the tender, as well as optimal project design, it is important that bidders are appropriately incentivised to manage and mitigate against foreseeable risks. This has to be balanced with ensuring that bidders are not incentivised to incorporate excessive contingency costs for low probability outcomes that may be driven by exogenous factors. The NESO proposals use the "reasonably foreseeable" test to determine which impacts bidders are or aren't expected to consider in their upfront bids.

4.10 In cases where consenting and surveys dictate a change in design leading to cost increase during preliminary works, the guidance under the ECP is to determine whether the reason for a cost change could have been foreseen by a competent bidder following good industry practice.[21] A cost increase identified as "reasonably foreseeable" at the time of bid submission is therefore impermissible and rejected. However, this test can be open to debate without clearly defining what constitutes as "reasonably foreseeable."

4.11 Under the EC-I Update, NESO's proposal is to align the "reasonably foreseeable" test with the technical evaluation of deliverability of the proposed solution at the ITT stage. Therefore, as part of the PPWCA, the cost increases submitted by the CATO following preliminary works would be tested by evaluating the information it would have had at the time of submitting its bid, had it made the necessary effort to achieve the highest score in each of the relevant technical evaluation categories at the ITT stage. NESO proposes that what is 'reasonably foreseeable' is defined at the ITT stage and included in the tender documentation.

4.12 NESO notes that following the development of the Centralised Strategic Network Plan (CSNP),[22] projects to be tendered for Early Competition are expected to recognise the optioneering work already undertaken during the CSNP process. This will allow all bidders to have a common baseline at the beginning of the tender stage in the form of the work already carried out by the TOs under the CSNP process, such as a broad route study area which can be developed upon by the bidders in their offered solution.

4.13 However, the extent to which the information available to the bidders at the ITT stage could be categorised as "reasonably unforeseeable" remains to be seen as

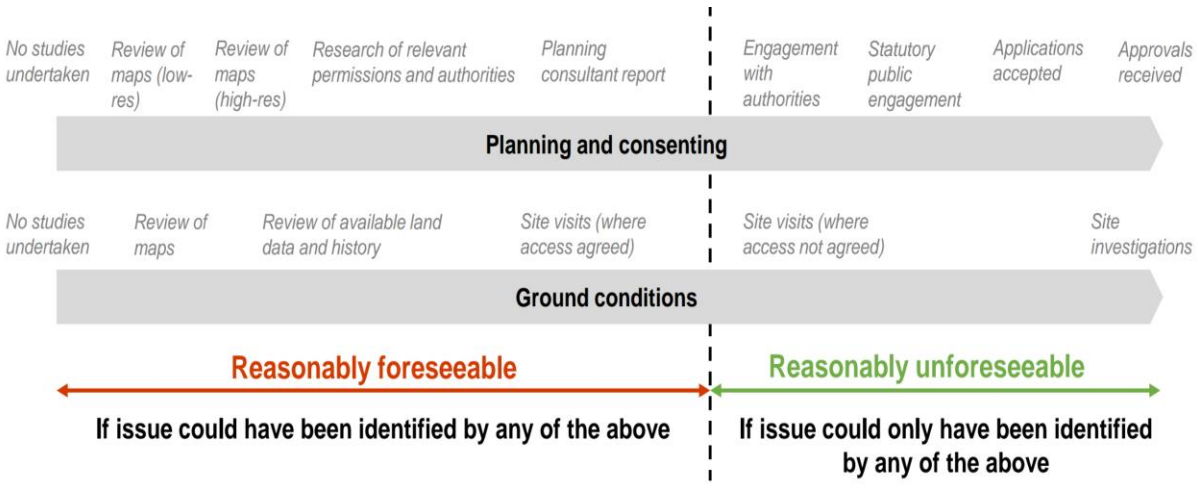
[21] ECP: download (nationalgrideso.com): Section 4.2.2, page 41
[22] Decision on the framework for the Future System Operator's Centralised Strategic Network Plan | Ofgem

the CSNP process is under development at this time. It is still expected that bidders will be limited to carrying out desktop studies based on the available information prior to the ITT stage rather than conducting their own on-site work. This is due to potential cost constraints and the disruption caused to the relevant authorities and landowners if multiple bidders were to approach them in the process of informing the bid design. NESO understands that bids based solely on publicly available information may require potentially significant modification that could not reasonably have been foreseen from desktop studies, such as changes to routes and asset locations, which could have a material impact on final costs.

4.14 NESO proposes that the technical evaluation of bids will only consider the desktop research performed by the bidders and will not award any increased score for undertaking steps such as stakeholder engagement. NESO concludes that the way the technical evaluation criteria has been designed, any information discovered by the CATO during the preliminary works stage leading to a design change can be categorised as "reasonably unforeseeable." This approach could provide the balance between bidders being able to propose solutions at the ITT stage with sufficient confidence and the avoidance of disruption to local communities at a stage when the final solution remains to be confirmed.

4.15 NESO proposes the 'reasonably foreseeable test' be based on the activities highlighted in Figure 5 below:

Figure 5: NESO proposed cost drivers for the reasonably foreseeable test



PPWCA upward adjustment cap

4.16 NESO proposes to apply a cap to the amount of upward adjustment for the cost items categorised as "reasonably unforeseeable." NESO assumes that the application of such a cap would:

- hold the bidders responsible for judging the risk associated with their own solutions and therefore incentivise them to mitigate risks associated with preliminary works while preparing their bids
- aid in consumer protection by deterring the bidders from claiming open-ended cost increases to the amount submitted at the ITT stage
- help protect NESO as the Delivery Body from the risk of legal challenge in case the cost of the winning solution increases to a level that could have a material impact on the outcome of the procurement process

4.17 While the concept of applying a cap to cost increases deemed as "reasonably unforeseeable" had been discussed in the ECP,[23] the level of this cap had not been determined. The EC-I Update now proposes to set the cap at 40% of the forecast construction costs, subject to tender-specific review following pre-tender market engagement.

4.18 NESO considers a 40% cap is consistent with the level of cost uncertainty given the expected maturity of design at the time of bid submission. NESO's market research found that the construction industry would typically expect to estimate costs within 50% of outturn costs, including a c. 10% construction contingency. Noting that the PPWCA process also allows for a construction contingency to be applied to construction costs, NESO considers a 40% cap on construction cost increases should therefore be applied between the bid submission and the start of construction.

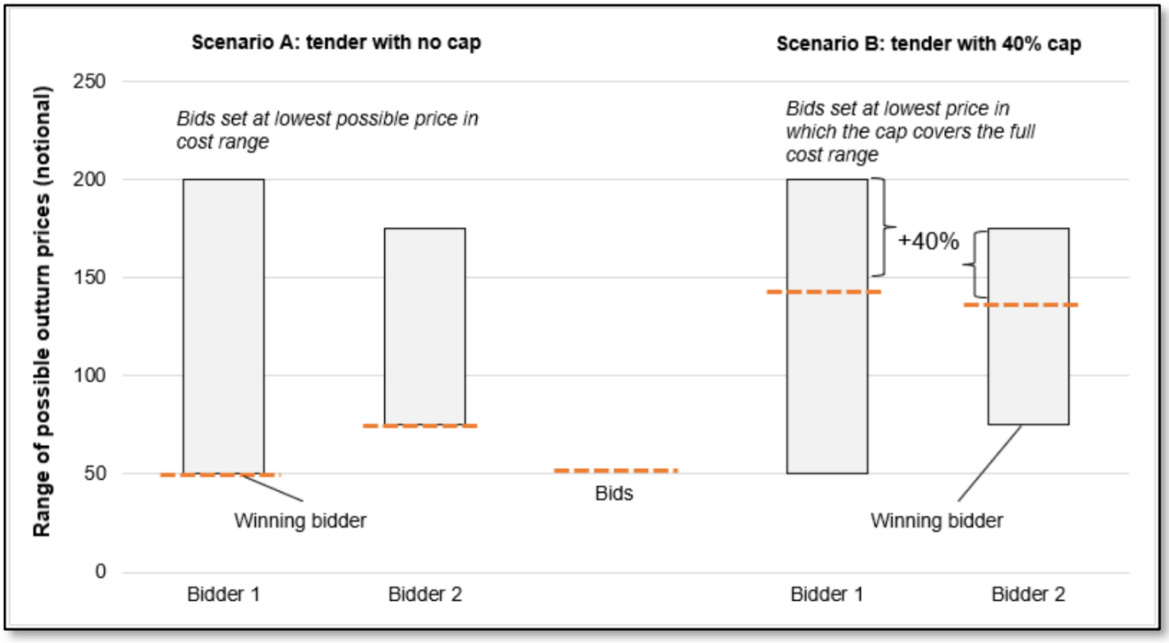
4.19 Following market feedback, stakeholders questioned whether a cap would deter bidders, especially given Early Competition is a new market and the outcome of the PPWCA process is uncertain. Stakeholders also queried whether bidders would add significant risk premium to their bids resulting in consumers potentially over-paying, and also whether bidders would walk away once a cap is reached, resulting in operational risk and additional costs to consumers.

[23] Early Competition Plan (ECP); download (nationalgrideso.com): Section 4.2.1

4.20 Following consideration of market feedback and further work undertaken by NESO after publication of the ECP in 2022, it proposes that a market-tested and calibrated cap should be included in the re-pricing arrangements as it can offer the following advantages:

- the cap plays an important role in incentivising bidders to assess the risk associated with their proposed solutions
- without a cap, bidders are incentivised to bid the lowest credible price (Scenario A in Figure 6 below). The tender process needs to be able to distinguish between a low priced (at the minimum expected outturn) but high risk (those whose range of outturn price is wider) bid, and a high priced but low risk bid
- with a cap, bidders are incentivised to bid the price where the top of the estimated outturn range sits within the cap and therefore to price the risk of reasonably unforeseeable cost increases (Scenario B in Figure 6)

Figure 6: Comparing bids: high-priced/low-risk vs. low-priced/high-risk



- the cap operates as a threshold below which the winning bidder takes zero distress for reasonably unforeseeable cost changes and 100% beyond it. There are two important factors that incentivise the bidder to continue with the project beyond the cap, namely the allowable reopeners, though limited in number in the PPWCA, such as for force majeure events, and the security

posted by the bidder acting as an incentive to manage risk effectively and continue with project delivery (see Section 2 above)

4.21 NESO recognises there are risks in introducing a new procurement model to the market and that bidders may be unfamiliar with the application of a cap. It has considered setting a higher cap above 40%, which may provide greater confidence to bidders that costs would be recoverable. NESO recognises that a higher cap potentially increases costs to consumers in the initial tenders, although this could be outweighed by the benefit of establishing Early Competition as a procurement model, with potential to incrementally reduce the cap in future tender exercises. However, when considered in the round alongside posting of security and the fact the cap is known at the time bids are submitted, NESO considers that a 40% cap on upward price adjustments creates the right incentives for bidders and should be more attractive to the market than other cost-sharing mechanisms.

4.22 As proposed by NESO, the PPWCA would therefore be a three-stage process administered by Ofgem to consider and allow / disallow the cost variations for TRS adjustment during the preliminary works stage:

- was the cost change reasonably foreseeable at the time of bid?
- if it was not, and was therefore "reasonably unforeseeable", is the cost economic and efficient?
- any permitted costs that are economic and efficient will be subject to the proposed level of cap

Ofgem view

4.23 Ensuring an appropriate allocation of risks at the various stages of project development, delivery and operation is key to balancing the need to attract new market entrants while seeking to drive down costs for consumers and holding CATOs to account for delivery.

4.24 Central to this trade-off is a technical but strategic question around the treatment of cost uncertainty during the preliminary works phase as the CATO finalises its detailed design for a project which could be impacted by consenting and surveys. Without suitably attractive regulatory and commercial arrangements on offer to bidders, there is a risk that the first tender process will not garner sufficient interest to protect consumer interest through timely delivery and cost efficiency.

4.25 An important strategic question is how to balance the priorities of maximising the number of bidders and long-term expansion in the number of TOs against maximising the transfer of risk onto the CATO to drive cost saving on competed projects.

4.26 We note that NESO has proposed the use of a TRS model based on experience in the Offshore Transmission Owner (OFTO), Public Private Partnership (PPP) / Private Finance Initiative (PFI) and the Direct Procurement for Customers (DPC) model in the water sector. NESO's proposal to link the TRS uplift with pre-defined indices with regard to underlying bid costs appears logical and can help drive market interest in Early Competition. We also note that construction costs are fixed at the point of bids submission under a late competition delivery model as the solution has already been finalised based on a prescribed planning approval. The time between bids submission and construction start is typically short, that is 6 to 12 months and therefore the successful bidder is exposed to the risk of potential inflation to cover the construction period only.

4.27 However, in an Early Competition model this time period between bid submission and construction start can span a lengthy period of 4 to 5 years, exposing the bidder to an additional risk of inflation from the point of bid submission to the start of construction. Therefore, our current view is that NESO's proposal to separately calculate the indexation component of the upward cost adjustment during re-pricing process is fair to the bidders and is a step to add transparency to the PPWCA process.

4.28 In our current view, the NESO model contains a risk that if the cap is too low or the cost too difficult to estimate, it will put bidders off or drive inefficient, high upfront bids. Particularly given the potentially subjective distinction between "foreseeable" and "unforeseeable" cost increases. When compared to the counterfactual TO delivery under RIIO, where TOs have greater protection against the risk of design changes outside their control during the pre-construction period, bidders would face the full impact of unforeseeable costs beyond the 40% cap.

4.29 The proposed model vests Ofgem with the responsibility of a significant technical role in conducting the reasonably foreseeable / unforeseeable and economic and efficient cost review during the PPWCA process. This will need us to understand the bid submission of the successful bidder / CATO to be able to undertake subsequent assessment regarding what a competent bidder should have

reasonably foreseen, including how this was assessed at the time by NESO. Our current view is that it is reasonable that Ofgem makes this assessment to ensure consistency with the prevailing cost assessment approach for the incumbent TOs.

4.30 While NESO has given more thought to defining the "reasonably foreseeable" cost increases, we acknowledge that the definition of what is "reasonably foreseeable" vs. "reasonably unforeseeable" could veer into subjectivity and become controversial, thus potentially becoming very difficult to administer in practice. Unless this test is spelt out in sufficient detail, it may be exposed to wide interpretations and disputes. Therefore we consider clear articulation and distinction from NESO between what is reasonably foreseeable/unforeseeable to be an important factor in the effectiveness of the PPWCA mechanism and encourage NESO to continue sharpening these definitions.

4.31 We have been identifying ways in which we can incrementally amend the NESO's proposed approach to address its perceived limitations while maintaining sufficient incentive properties on bidders. Potential changes to NESO's PPWCA proposal we are considering include:

- setting a flexible cap for the first tender to ensure we get a strong level of bids, but with enough of an incentive on bidders to build in contingency upfront to ensure a true competition on costs and design is able to take place
- consider the allowance for specific high impact, low probability events to sit outside of the overall cap to avoid the inclusion of excessive risk premia in bids for low probability scope changes occurring
- detailed guidance for how the foreseeable / unforeseeable test will be assessed within a joint NESO and Ofgem decision-making framework to facilitate decision-making on whether a scope change is or isn't foreseeable as soon as practical
- focus the identification of the first tender project on projects that are not too complex from a technical and consenting perspective. Selecting a complex project for the first tender runs the risk of not gaining sufficient interest from the market and potentially delayed project delivery. We have a range of potential options to address and prevent tender failure, however implementing a CATO Of Last Resort process for the first tender will likely

cause delivery delay and could undermine industry confidence in the Early Competition model

4.32 Overall, our current view is that the proposed NESO model appears well designed and incentivises sensible bidder strategies, however given the level of cap and current market conditions, we are concerned it may not be attractive to some bidders. We welcome stakeholders' views on NESO's proposals for the PPWCA arrangements and the potential amendments outlined at paragraph [4.31].

5. Payment mechanism and performance incentives

Section summary

This section sets out the National Energy System Operator's (NESO) proposals for the mechanism by which a Competitively Appointed Transmission Owner (CATO) will receive its revenue as well as its proposed range of performance incentives.

Questions

Q5. Do you agree with NESO's proposals regarding the payment mechanism and performance incentives to apply to a CATO?

Background

5.1 The payment mechanism is the tool by which a CATO will receive its revenue. The Early Competition Plan (ECP) set out NESO's original proposal to pay a CATO through a Tender Revenue Stream (TRS), subject to an incentive on asset availability. This payment mechanism along with a set of incentives for a CATO has been further elaborated by NESO in its Early Competition Implementation – Update (EC-I Update).

NESO proposals

5.2 In the ECP,[24] NESO set out three key principles on the payment mechanism to allow a CATO to recover its costs once a network solution has been delivered:

- TRS model: has been successfully implemented in comparable markets such as Offshore Transmission Owners (OFTOs) and adopted in the water sector through Direct Procurement for Customers (DPC). Under a TRS model, bidders propose the regular payment they require to provide the service, which is determined based on their costs
- Indexation: NESO considers indexation vital to ensure the bidder has matching revenues in each period to cover its project cost. The ECP suggested adopting the Consumer Price Index including housing (CPIH) as the index for the TRS as initial capex costs and relevant financing costs should not increase with inflation

[24] ECP: download (nationalgrideso.com): Section 4.1.1, page 29

- Availability incentives: the ECP proposed incorporating availability incentives into the Early Competition revenue model, consistent with existing OFTO and Public Private Partnership (PPP) arrangements

5.3 The EC-I Update sets out NESO's updated proposals regarding the payment mechanism and performance incentives.[25] NESO's proposals assume that the key performance indicator will be measured availability of the system, and that the successful bidder will install suitable equipment on its assets to allow communication with the control room.

Availability incentive

Measuring availability

5.4 NESO proposes that availability information is recorded by the control room regarding a CATO asset's Operational Capability Limit (OCL) and Service Capability Schedule (SCS), with reasons recorded for any reduction in service to determine if the event was a transmission or non-transmission service reduction. It proposes that the CATO licence should set out reasons for an outage that would not be considered a penalised outage, such as if it was caused by the actions of another Transmission Owner (TO).

Service reduction adjustments

5.5 NESO proposes applying a mechanism based on current OFTO arrangements which links asset availability with revenue, with adjustments for an annual measurement, exclusion of the major outage deduction cap and special provisions for the last operating year.

5.6 NESO's proposals for linking availability to revenue are as follows:

- setting a specific target availability for each tender, but assumes the 98% target used in OFTOs provides an appropriate initial reference point from which to develop a tender-specific target
- any 1% deviation in availability from the target value leads to 2.5% TRS adjustment (up or down)
- in each operating year except the last one, revenue cannot be adjusted down by more than 10%, corresponding to 94% availability when the target is 98%. NESO proposes that if underperformance exceeds this

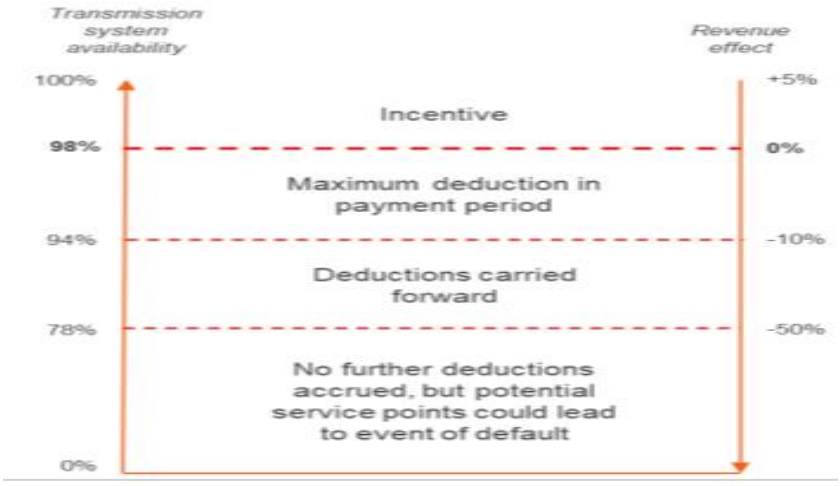
[25] EC-I Update: download (nationalgrideso.com): Section 4.6, page 39

threshold any penalties are deferred and carried forward to future operating years until they are redeemed within the 10% revenue adjustment cap

- If availability falls more than 20% corresponding to 78% availability where the target is 98%, no further financial deductions are applied even if carried forward, but service points would continue to accrue that could lead to an event of default

5.7 Figure 7 below demonstrates the revenue impact of availability:

Figure 7: Revenue impact of availability



5.8 NESO proposes that in the last operating year, the revenue could be decreased by up to 50% of the TRS for the last regular payment, and in the case of a negative value to the proposed residual value payment. This is required to redeem all the deferred penalties that could arise.

First and last period adjustments

5.9 The performance is measured for an annual period that could slightly differ from 365/366 days for the first and last year (the Operating Year) should the revenue period start or end part way through the Operating Year, and an adjustment based on the current Operating Year performance is applied in the following Operating Year.

5.10 NESO proposes that the Operating Year is defined based on the commissioning date whereas the annual period will be pre-defined at licence award and monitored consistently between different CATOs.

5.11 During the first Operating Year, no TRS adjustments are applied as there will be no data from the previous year, that is performance will be deemed equal to the target (98%), and performance in the last Operating Year is considered in the residual value payment adjustment using the same principles that are applied for TRS adjustments.

Seasonality adjustments

5.12 NESO proposes that the availability mechanism should use Seasonality Factors, which is a method used to incentivise planned outages during periods with fewer network constraints. While this mechanism is used in OFTOs, NESO is proposing a changed approach for CATOs which intends to incentivise management of the asset to ensure peak availability at times of high onshore network demand, rather than fit the needs of a single offshore wind generator.

5.13 NESO's proposed approach involves applying a monthly weighting 'Seasonality Factor' to encourage outages to be taken when they would have the least impact on the system (currently assumed April – September). NESO recognises that the Seasonality Factor period may need to be modified as necessary during the revenue period to fine-tune the planned outage schedule, however it expects changes to be limited in frequency and following appropriate notice to the CATO to minimise any financial impact.

Other incentives

5.14 In addition to the availability incentive, the ECP also discussed three additional performance incentives for CATOs, which intend to replicate the relevant parts of the RIIO-ET2 incentive framework that NESO considers should apply to both incumbent TOs as well as CATOs. These additional incentives concern stakeholder engagement, environmental considerations and timely new connections.

5.15 NESO has also considered whether it is appropriate to apply a delivery incentive, similar to the approach taken by Ofgem under the Accelerated Strategic Transmission Investment (ASTI) framework[26] where daily rewards / penalties

[26] Decision on accelerating onshore electricity transmission investment | Ofgem: Chapter 7

accrue for delivering a project earlier / later than a target delivery date. Following a review of the ASTI delivery incentive, NESO does not consider it appropriate to apply this in respect of Early Competition for two reasons:

i. the optimal delivery date will be determined by the outcome of the Centralised Strategic Network Plan (CSNP) and delivering earlier than this date does not create consumer value, unlike in ASTI where there is consumer benefit delivering projects as quickly as possible, and

ii. CATO will begin receiving its TRS once the project is commissioned, which already creates a financial incentive to deliver as planned

5.16 However, NESO proposes that as part of the pre-tender stage for each project, NESO and Ofgem should still consider if the specifics of a particular project warrant an early delivery incentive if it could create additional consumer value. Where this is the case, NESO proposes any incentive should be calculated as follows:

- economic assessment team review projects deemed critical from the CSNP and test whether early delivery of a solution triggers customer benefits or constraint cost savings
- during pre-tender, NESO considers the required date for delivery against the feasibility of achieving that date
- during tender stage, bidders demonstrate proposals for achieving the required Earliest In Service Date (EISD) and, if beneficial to consumers, any mechanism they may have in place for achieving early delivery
- during delivery stage, if a CATO is able to deliver the asset earlier then the revenue period will also start and end earlier

5.17 NESO does not propose any financial penalties for late delivery against the target delivery date. It considers the CATO not receiving any TRS until a project is commissioned acts as a sufficient incentive as it would continue to incur debt costs with no revenue which reduces the potential returns for shareholders. In an example given in the EC-I Update,[27] NESO notes that delay of 12 months to a £500 million project with a Weighted Average Cost of Capital (WACC) of 6.4% would have an annual TRS loss of around £50 million, or £137,000 per day. For

[27] EC-I Update, paragraph 4.6.6

context, this is higher than any daily reward / penalty applied to any of the ASTI projects.

Environmental incentive

5.18 NESO proposes dual reputational and financial incentives concerning environmental impact, which are based on the RIIO-ET2 environmental incentives.[28]

5.19 The proposed reputational incentive is to submit an Environmental Action Plan (EAP) as part of the tender process as well as an Annual Environmental Report to be submitted from licence award until decommissioning. NESO proposes that the EAP should set out bidders' environmental plans and commitments including carbon footprint, energy efficiency and biodiversity with annual reporting against these.

5.20 The ECP acknowledges an obligation on CATOs to minimise leakage of pollutants such as SF6[29] and NESO proposes a financial incentive on leakage to be set in line with the RIIO-ET2 approach. NESO acknowledges that the current mechanism for TOs is based on previous performance, which a CATO will not have. Therefore, when setting a baseline and performance targets, NESO proposes creation of a baseline based on what 'good' performance means with respect to gas leakage now, and then setting incentives to promote / exceed the required performance.

Timely new connections incentive

5.21 The proposed timely new connections incentive replicates the RIIO-ET2 approach. As set out in the ECP,[30] NESO proposes a discretionary penalty of up to 0.5% of annual base revenues for defined process failures. This is linked to expected obligations under licence and industry codes in relation to making competent connection offers in designated timescales, on the facilitation of new connections, consistent with the approach for current TOs.

[28] RIIO-2 Final Determinations - Core Document (REVISED) (ofgem.gov.uk) Chapter 4
[29] Sulphur hexafluoride (SF6)
[30] ECP: download (neso.energy): Section 5.3.3, page 95

Stakeholder engagement incentive

5.22 NESO proposes an obligation in the CATO licence[31] for CATOs to publish a stakeholder engagement report within three months of the conclusion of the preliminary works stage, which will set out best practices and lessons learned in respect of the preliminary works stage. The intention is that this information could be considered in future tender processes and support identification of any deficiencies in the stakeholder engagement process. This is a reputational incentive only with no financial rewards available for stakeholder engagement activities, which is consistent with the RIIO-ET2 approach.

Equity gain share

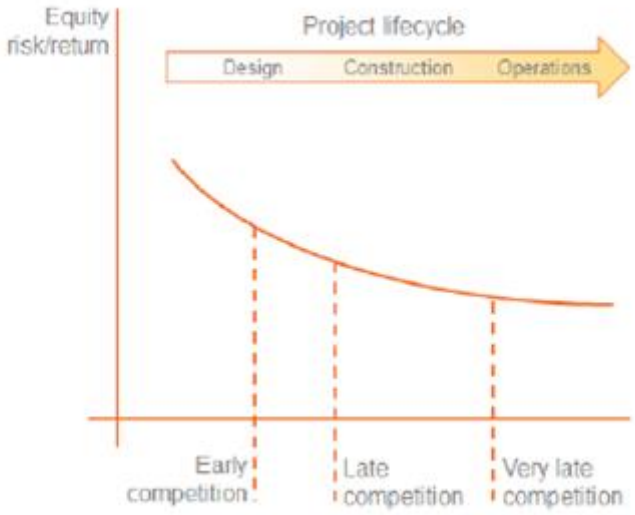
5.23 The ECP sets out NESO's consideration of the basis upon which equity is invested in Early Competition projects, including the point at which the cost of equity is fixed, the point from which equity sales are permitted, and whether any gain sharing with consumers applies on the sale of equity.[32] NESO suggested a preferred position on fixing the cost of equity and when equity sales are permitted, but noted that further consideration was required regarding gain sharing with consumers when selling equity.

5.24 The ECP also includes the pros and cons of requiring investors to share gains on an equity sale, suggesting that while it would appear that equity sharing would reduce the appearance of profiteering, such a requirement could result in bidders requiring a higher cost of equity to offset the gain share which may not provide value for money for consumers.

5.25 With bidders expected to set their required equity return in their bids and only permitted to sell their equity post-commissioning, it is to be expected that any sale will result in an equity gain to reflect the changing risk profile of the project, as described in Figure 8 below.

[31] We expect to consult on the CATO licence in early 2025.
[32] ECP: download (nationalgrideso.com): Section 4.2.1, page 38

Figure 8: Illustrative diagram of risk through the project life cycle



5.26 NESO expects that bidders, under competitive pressure, will set a return requirement that blends the project risks through design, construction and operation. If the bidder chooses to sell equity to recycle its capital for future projects rather than continue to own the project through the relatively low risk operations phase, it will see a profit reflective of how successfully the project has reduced the risk.

5.27 NESO considers that applying a gain share to any such sale is likely to encourage bidders not to sell given they would be required to share the proceeds, and instead hold projects for their entire life cycle and retain all the benefits, reducing the amount of capital being freed for re-investment. NESO considers that while this approach may appeal to some investors, others such as infrastructure funds that specialise in taking development risk where the operating period does not provide the returns required by investors would be against it, potentially limiting the market.

5.28 Therefore, to maintain as much investor interest as possible, NESO proposal does not support an equity gain share.

Ofgem views

5.29 We note that NESO's proposal of TRS indexation to CPIH inflation is standard practice in similar type of infrastructure concessions such as OFTOs and PPP, and therefore our current view is that we agree with this proposal.

5.30 The RIIO price control framework includes a suite of incentives that apply to the TOs across a range of operational activities, including on asset availability and environmental performance. We consider incentives play an important role in driving high performance and providing additional consumer value and want to ensure that appropriate performance incentives are in place for CATOs as well. CATOs should be incentivised to maintain availability through a regime that supports both incentives as well as deductions in cases of under / non-performance of services.

5.31 NESO's conclusion that the CATO "not receiving any TRS until the project is commissioned is a sufficient incentive" has been standard practice proposed for delivery incentives in other contexts, such as the current OFTO regime.[33] This approach balances commercial incentives with financeability. Adopting this proposal for Early Competition would, as a result, follow standard regulated / infrastructure project finance delivery and our current view is that this could create a stronger incentive for timely delivery.

5.32 However, we observe that the process for early delivery if set out by NESO would need careful consideration so as not to subject a CATO to an overly ambitious delivery schedule. We expect the delivery of the project to have some degree of time requirement associated with it to address the system need. A too ambitious timeline could put bidders off, or result in cost premiums into bids to allow the bidder to manage the ambitious timeline. We also expect that bidders may not be confident on what is an achievable EISD until project consents have been achieved in practice. We will continue to engage with NESO ahead of the tender process to ensure that the need for commercial delivery incentives is balanced with an achievable delivery date.

5.33 The availability incentive structure for CATOs proposed by NESO takes inspiration from the OFTO regime and provides a CATO with an incentive to maintain greater than expected availability, which can ultimately work to consumers' benefit.

5.34 We currently consider that those incentives proposed by NESO for CATOs which are consistent with RIIO-ET2 should be aligned, where appropriate, with the

[33] Consultation on initial proposals for an OFTO Build model to deliver non-radial offshore transmission assets (ofgem.gov.uk): para 4.17

recently determined RIIO-ET3 framework.[34] Therefore, we expect the timely new connections incentive proposed by NESO to be suitably comparable with any connections' incentive being introduced in RIIO-ET3, which intends to incentivise a better approach to building network capacity as opposed to the current focus on connections process.

5.35 A new CSNP Funding Mechanism (CSNP-F) has also been proposed for RIIO-ET3.[35] The CSNP-F delivery incentive would be similar to the ASTI incentive. However, we do not consider it necessary or appropriate to apply a CSNP-F incentive to Early Competition projects as NESO's proposed commercial arrangements already provide a strong financial incentive for timely delivery of projects.

5.36 Additionally, while the range of likely incentives in the RIIO-ET3 framework is wider than those incentives proposed by NESO for CATOs, this reflects a different scale of operation with TOs managing a large portfolio of assets on the network while CATOs would, in the short to medium term at least, be managing only a limited number of assets. Therefore, we currently agree with NESO that incentives around asset health, which play a key role in incentivising TO behaviour, are disproportionate for CATOs and are therefore currently not proposed to be included in the commercial framework at this time.

5.37 We expect equivalent environmental consideration by TOs and CATOs across the network. These considerations should be beneficial to consumers but some of the proposed measures may be disproportionate given the size of a CATO's operation in relation to that of the TOs. Therefore, we may consider to apply environmental incentives in line with our own policy objectives.

5.38 We acknowledge that the equity return / investment value could look different for various phases of the project life cycle, especially during the low-risk operations phase. Typically, we would expect any investor benefits from refinancing, if allowed, once a project reaches the lower risk operational period, to be shared with consumers.

5.39 NESO's observation that mandating an equity gain share may inhibit certain type of investors, such as infrastructure funds, from participating in Early Competition tenders also appears to hold some weight. However, we remain

[34] RIIO-3 Sector Specific Methodology Decision – ET Annex (ofgem.gov.uk)
[35] RIIO-3 Sector Specific Methodology Decision – ET Annex (ofgem.gov.uk):page 25

concerned that this proposal could, in certain circumstances, result in generating excessive profit from an equity sale during the low-risk phase as earnings required during the high-risk phase have already been secured by the investor selling its equity. Therefore, we particularly welcome stakeholders' response to NESO's proposal on equity gain share in addition to the views on the overall proposals in the section.

6. Additional works obligations

Section summary

This section contains the National Energy System Operator's (NESO) proposals for Competitively Appointed Transmission Owners (CATOs) to undertake additional works on their assets beyond the scope of work originally tendered.

Questions

Q6. Do you agree with NESO's proposals regarding the additional works obligations?

Background

6.1 As the electricity transmission network expands due to decarbonisation of energy in support of the government's Net Zero obligations, it is likely that a CATO will have to undertake additional works on its assets over time, either to increase network capacity or to facilitate new network connections.

6.2 The scale and scope of likely additional works will not be known to bidders when submitting their tenders and therefore the cost of these works cannot be included in the bidders' requested Tender Revenue Stream (TRS). NESO therefore proposes a post-award and pre-commissioning design adjustment process and funding for CATOs to facilitate additional network requirements.

NESO proposals

6.3 In the Early Competition Plan (ECP),[36] NESO set out its expectation that CATOs would be responsible for all new relevant capital investment in their network, except where additional network requirements meet the competition criteria and could also be competitively tendered.

6.4 NESO's view was that the Offshore Transmission Owner (OFTO) regime served as an appropriate starting point for additional works, although the 20% cap for additional works under the OFTO regime needed to be disapplied as there would be a greater likelihood of exceeding the cap when facilitating connections onshore. NESO also recognised that an uncapped obligation could be a concern in relation to future financing and further thinking was required in this area. During the implementation phase since publication of the ECP, NESO has done further thinking around (i) design adjustment process for changes incorporated

[36] ECP: download (nationalgrideso.com): Section 5.3.3, page 96

between award and commissioning, and (ii) new investment pricing and financing.

Design adjustment process post-award and pre-commissioning

6.5 NESO proposes that consistent with the ECP , post-award of a licence the CATO would be obligated to support the development of the wider network in line with its obligations as a Transmission Owner (TO) under the System Operator Transmission Code (STC).[37] NESO considers there to be three drivers of additional work at this stage:

- user connections: provide offers to design, build and operate user connections to the CATO system[38]
- wider network user connection impact: modify CATO asset as a result of user connections elsewhere on the transmission network[39]
- Transmission Investment Plan: modify CATO asset to support development of the wider network following changes in another TO's Transmission Investment Plan

6.6 NESO recognises that for all projects there will be a point at which the scope of the design changes caused by additional works may lead to delivery delays due to additional design, consenting and construction time, which may result in consumers being exposed to additional constraint costs. With this in mind, NESO considered the following options in relation to changing designs after the award of a CATO licence but prior to the assets being commissioned:

- no changes to the design allowed until the asset is commissioned – NESO rejected this option on the basis that it was inconsistent with TO obligations and may lead to sub-optimal outcomes for consumers and connecting parties
- changes to the design mandatory at any point ahead of commissioning – NESO rejected this option due to risk of delays to commissioning and risk of significant additional preliminary works for a CATO, such as requirement to re-submit planning and consenting applications

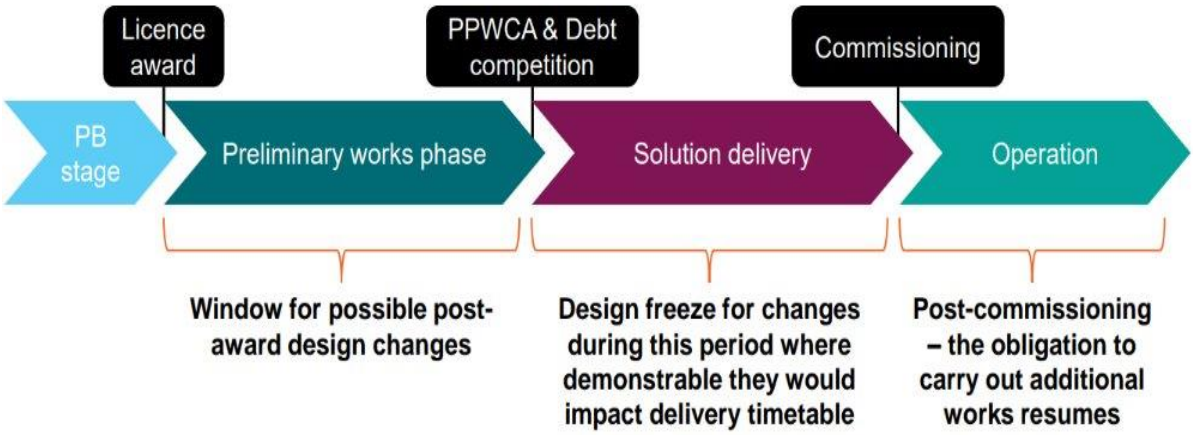
[37] In the event that the CATO is not a current party to the STC, there is a process for admittance of new party members set out in the STC.
[38] NESO assumes obligation borne out of TO licence Standard Condition D4A with detail in STC Section D (Part 2)
[39] NESO assumes CATO considered an Affected Transmission Owner Construction Offer to user under STCP 18.1

- Changes to the design dependent on timing and scope change request – this is NESO's preferred option as, in its view, it balances potential for creating delay against optimising value for consumers (further detail below)
- changes forecast by NESO and anticipatory works included within the scope – NESO's view is that consideration of anticipatory works is best placed as part of a holistic network planning process rather than being considered in isolation as part of a single need tender event. It is not proposing a separate process outside of NESO's existing network planning processes such as the Centralised Strategic Network Plan (CSNP)

NESO's proposal

6.7 NESO proposes a phased approach to project design and additional works with different obligations on a CATO during different stages of the process, as set out in Figure 9 below. NESO proposes that the CATO will need to determine whether undertaking additional works would likely lead to a delay in commissioning and therefore plan the additional works (either pre- or post-commissioning) accordingly.

Figure 9: NESO's proposed design adjustment process



6.8 NESO proposes that:

1) once a licence has been awarded the CATO will commence preliminary works phase. During the preliminary works phase the CATO is required to consider post-award changes

2) the CATO is required to determine, on a case-by-case basis, whether the solution can be modified to accommodate connection applications or other drivers of additional works

3) if the CATO considers the additional works would compromise or delay the delivery of the original solution it must justify this to Ofgem in written format within a prescribed timeframe

4) if Ofgem disagrees with the CATO's assessment it can obligate the CATO to undertake the works, with the CATO able to dispute this decision through the standard dispute mechanism available to it

5) costs associated with changes to the design as well as costs involved during the preliminary works stage will be included within the Post Preliminary Works Cost Assessment (PPWCA) / re-pricing mechanism

6) once the asset has been constructed and commissioned, the obligation on the CATO to carry out additional work resumes

New investment pricing and funding

6.9 NESO proposes that a CATO would not be subject to the 20% cap on additional works that applies in the OFTO regime.[40] This is because the purpose of the cap under OFTO was to ensure the requirement was financeable and OFTOs were not exposed to uncapped liabilities. Additionally, there is also no mechanism under the OFTO regime by which the cost of additional works or new connection prices are determined.

Pricing additional works

6.10 During the implementation phase, NESO has considered a range of potential mechanisms for pricing additional works:

- determination – prices could be set through a regulatory determination (or equivalent framework). CATO would submit costs to Ofgem and a final decision would be made following Ofgem's cost assessment. NESO rejected this approach as, in their view, there would be no competitive pressure on costs and the process could be time-consuming
- central cost database – NESO holds series of unit costs from successful tenders to build up its own costs database to set allowances for CATOs.

[40] Generic OFTO Licence TR11_V1 (ofgem.gov.uk): page 80

NESO rejected this approach as, in their view, it would require a significant amount of resource, may be incomplete and may not reflect contemporary market prices

- CATO unit costs – unit costs (underlying costs) bid by the CATO could be used to build up an estimate of the additional works, plus a level of indexation. A benefit of this approach is that costs are reflective of competitively set costs by the bidder, however this approach is less useful where the additional works involve capital works that did not form part of the original bid. This could potentially be mitigated by asking bidders to include a range of unit costs in their bid unrelated to their project in order to build up a database, however NESO considers it unduly complex to include this within the tender process.
- design and build tenders – CATO could run a design and build tender under the supervision of Ofgem or NESO and that fixed price would be used to determine the pricing of the additional works. The CATO would then be incentivised to manage the construction process efficiently as it would only be provided with a fixed allowance, with any underspend shared between the CATO and design and build tender. Under this approach the CATO would need to set out the technical specification, outline design and design and build contracts and tender arrangements, to be approved by Ofgem or NESO, with this oversight ensuring the process is competitive and the price paid by consumers reflects the market price

6.11 NESO's proposed approach for pricing additional works is to use a combination of the CATO unit costs and design and build tenders. Elaborating further, it proposes using unit costs plus indexation where the additional works are comparable to the bid design, however where additional works involve different technologies, materials or processes NESO proposes using a design and build tender to set the price. NESO also proposes that the CATO can request Ofgem to run a design and build tender if the unit costs do not reflect market prices due to factors which are not reflected in the index, such as supply chain issues.

Funding additional works

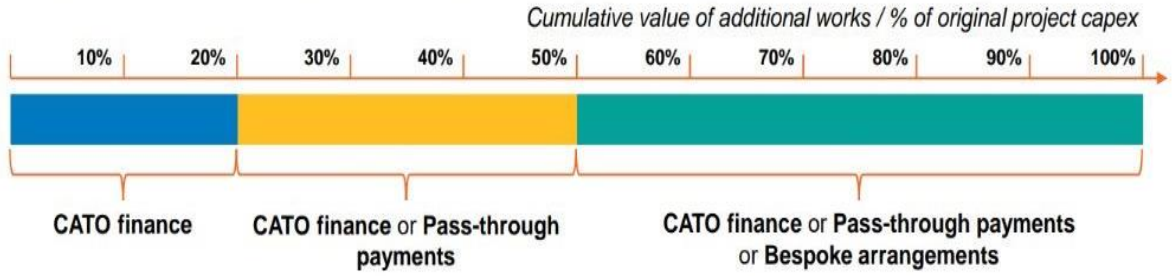
6.12 NESO's market engagement suggests that (i) lenders would not be willing to lend to projects where the requirements under the commercial arrangements

could materially impact the firmness of cashflows for maintaining debt servicing, and (ii) investors, while welcoming the opportunity for further investment, were uncomfortable with an obligation to further invest capital. NESO's proposed funding arrangements seek to address the financial challenges faced by a CATO in having an uncapped liability for additional works.

6.13 There is a limit to the scale of additional works a CATO would be responsible for delivering before those works meet the criteria for Early Competition[41] and NESO expects bidders to be able to determine a 'technical' limit to the liability during the tender stage.

6.14 NESO's proposal for Early Competition is to introduce a series of thresholds to the cumulative level of investment that the CATO is required to undertake through additional works, with each threshold providing the CATO a range of funding options to enable them to optimally determine their financing structures. This proposal is demonstrated in Figure 10 below.

Figure 10: Cumulative value of additional works and NESO proposed funding approaches



6.15 Under the NESO's proposed approach, the cumulative level of investment up to 20% of the original capital cost (not indexed) requires the CATO to finance the additional works. This means bidders must ensure they can access or draw on an additional 20% of finance relative to the original project capital costs. This is an equivalent obligation to that placed on OFTOs. Under this mechanism, the CATO will get a TRS uplift by using the financial model to calculate the

[41] Projects must be new, separable, certain, and likely to provide consumer benefit through being competitively tendered to be eligible for Early Competition selection.

adjustment based on the bid cost of equity. The CATO will be able to run a debt competition to set the cost of debt, overseen by the Delivery Body.

6.16 For additional works cumulatively in excess of 20% of original capital costs, NESO proposes that the CATO has the option to either (i) self-finance the works based on the process set out above, or (ii) select a pass-through payment. Under this approach the CATO will set the price of the works based on either method set out above, and then receive that revenue ahead of construction. The CATO will then not need to raise any finance and will not receive any adjustment to the TRS for the capital works, although there may be a need to adjust the TRS to reflect adjustments to operational costs, determined on a case-by-case basis between the CATO and Ofgem.

6.17 For additional works cumulatively greater than 50% of the original capital costs, NESO proposes that the CATO has three options – either (i) finance the works itself, (ii) receive an upfront payment or (iii) propose a bespoke funding arrangement with Ofgem. The bespoke arrangement would be the equivalent to a 'side' Regulated Asset Base (RAB) funding arrangement, a separate revenue stream or an entirely different model. NESO proposes that this arrangement would be negotiated with Ofgem on a case-by-case basis to reflect the risk profile of the additional works.

6.18 NESO also proposes that Ofgem produces guidelines to inform CATOs of the process and possible options, which may depend on the nature and cost of the work involved.

Ofgem view

6.19 We acknowledge that the nature of the additional works can potentially have a significant impact on the originally tendered project. Therefore, we currently consider it would be imperative to document the scope and timing of the additional works in question as far ahead as possible to allow the bidders to fully understand it.

6.20 Post-award, our current view is that CATOs would be obligated to facilitate additional works required for wider network development. A clear definition of the level of obligation would enable the bidders to duly consider these obligations at the tender stage. For this purpose, NESO can refer to the network planning documentation that identifies the future infrastructure needs. This

should lead to the appointment of a CATO amenable and understanding to the need of additional works in context of wider network development.

6.21 Our current view is that NESO should also consider the scenario where a number of individual connection requests may constrain a CATO's ability to respond. One option to prevent such a scenario could be to establish periodic windows for connection requests to enable CATO response and compliance. NESO's Connections team should give due consideration to this issue to facilitate robust network planning.

6.22 We currently consider that NESO's proposals are practical overall with a few exceptions, some of which we have outlined above. On the basis that a CATO is subject to an additional works obligation, we also currently support the concept of exploring various methods of financing the additional works.

6.23 The proposal that a CATO should self-finance the additional works below or equal in value to 20%, and optionally up to 50%, of the original project cost can draw some concern. For highly capital-intensive projects, it has the potential to constrain a CATO to varying levels in financing the obligated additional works. By and large, financing risk a CATO may subject itself to at various thresholds proposed by NESO needs to be acknowledged and mitigated. We also have concern around intergenerational fairness, especially in respect of larger projects. If 50% of the value of a project were to be recovered as 'fast money',[42] current consumers would be paying more now for a benefit received by future consumers. We therefore currently think that this proposal needs further consideration and welcome stakeholder feedback.

6.24 Additional works are driven by existing connection and network planning processes – if these processes change in future, NESO's proposals included in this section could be reviewed.

6.25 We welcome stakeholders' response to NESO's proposals for additional works obligations on a CATO.

[42] Fast money refers to revenue received immediately rather than being capitalised into the Regulatory Asset Value.

7. Revenue period

Section summary

This section includes the National Energy System Operator's (NESO) proposals dealing with the revenue period over which a Competitively Appointed Transmission Owner (CATO) recovers its costs and the next steps following the end of the revenue period under the Early Competition regime.

Questions

Q7. Do you agree with NESO's proposals regarding the revenue period and end of revenue process?

Background

7.1 An important consideration for the Early Competition model is the revenue period, which is the period over which the Tender Revenue Stream (TRS) will be paid to the CATO to construct, operate and maintain assets on the electricity transmission network.

7.2 In the Early Competition Plan (ECP), NESO set out the mechanism by which the CATO would recover its costs once the network solution has been delivered, including the revenue model, the start of the revenue period, the length of the revenue period and arrangements at the end of the revenue period.[43]

NESO proposals

7.3 Subsequent to publishing its ECP, NESO has identified several changes required to the ECP position. In the Early Competition Implementation – Update (EC-I Update), it has proposed modifications regarding the length of the revenue period, the end of the revenue period, revenue stacking and asset transfer / termination at the end of the revenue period. These proposed changes are explained in detail below, and are based on the following assumptions:

- network needs are likely to be long lasting and best met by a long-term solution, therefore in setting the revenue period NESO has taken the asset life of a typical overhead line solution as a guide

[43] ECP: download (nationalgrideso.com): Section 4.1

- residual value payment on decommissioning can be financed out of Transmission Network Use of System (TNUoS), as if at the end of the revenue period it is determined the asset will not be re-tendered, then there will be no incoming asset owner to finance the residual value payment

Length of the revenue period

7.4 The ECP considered three options in setting the length of the revenue period:

- in line with network need
- in line with asset life
- in line with precedents such as Public Private Partnerships (PPPs) and Offshore Transmission Owners (OFTOs)

7.5 The ECP position was for the revenue period to match the network need (up to a maximum of 45 years, in line with RIIO-2 policy), however as explained in the EC-I Update,[44] NESO identified that the current approach to network planning does not allow for the end of network need to be forecast and assumes an enduring need. Therefore, NESO reconsidered the two alternative options – setting the revenue period in line with asset life and setting the asset life in line with precedents.

7.6 NESO's view is that there will be little variation in asset life for network solutions and the network need will be long lasting, therefore it proposes setting a fixed revenue period to ensure solutions are available for a minimum length of time. NESO notes precedents such as PPPs and OFTOs generally adopt a revenue period of 20 to 25 years, however these are very different assets to those expected in onshore transmission, where an overhead line may not require major maintenance for 40 years. NESO considers this an appropriate benchmark over which to set the revenue period and amortise the assets, and also proposes an option to undertake maintenance and extend the asset life – this would require a period of time for reinvestment to take place before the asset fails, suggesting an optimal revenue period shorter than 40 years.

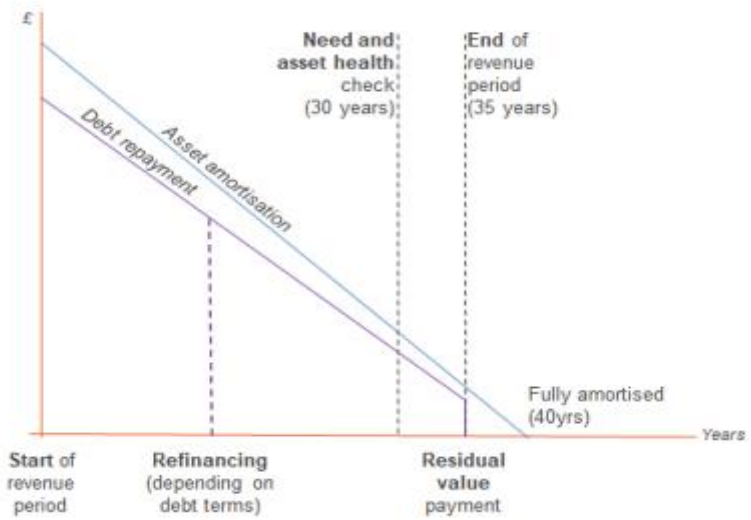
7.7 Therefore, NESO's proposal is to adopt a standard 35-year revenue period for Early Competition projects and it further proposes that the asset is amortised over 40 years, allowing a residual value payment at the end of the period.

[44] https://www.nationalgrideso.com/document/301786/download:Section 4.4.1

7.8 NESO acknowledges that a 35-year revenue period could be challenging for a number of lenders, in particular banks, where market engagement suggests a revenue period of around 20 years is preferable. Other lenders, such as bond providers, have indicated to NESO that they can lend over longer periods but typically on less flexible terms.

7.9 NESO expects the CATO to undertake an assessment of alternative financing structures as part of their debt funding competition following preliminary works. NESO also proposes that to allow for a number of possible financing options, Ofgem should offer to take refinancing risk (upside and downside) to allow for shorter term debt that may be available on more competitive terms. The TRS would then be fully adjusted at Financial Close to reflect the original cost of debt and adjusted again following the permitted refinancing. This arrangement would be separate to any gain sharing provisions where a CATO requests a refinancing. Figure 11 demonstrates the interaction between asset life, revenue period and debt repayment under NESO's proposed approach.

Figure 11: NESO's proposed asset life, revenue period and debt repayment



7.10 The five-year difference between the asset amortisation period and the revenue period means that the asset has a residual value. With a defined revenue period and the option to extend, NESO proposes that the residual value amount is pre-defined, calculated as 5/40ths of the opening asset value and paid in lump sum at the end of the period. NESO considers that setting the residual value up front can create consumer value by potentially allowing bidders to raise debt against

the residual value and providing money against which any payment deductions or costs of rectifying poor asset condition could be offset.

End of the revenue period

7.11 The ECP considered three options for the end of the revenue period where the network need remained and there was a residual asset value:[45]

- retendering the need into which the existing asset owner could bid
- extension of the existing licence by negotiation, and
- extension of the existing licence on pre-agreed terms

7.12 For setting a defined revenue period with the possibility to extend significantly beyond that period, NESO needs to accommodate that extension in the commercial framework. Therefore, NESO proposes that five years prior to the end of the revenue period (year 30) a network need and asset health check is undertaken. NESO proposes different approaches depending on the length of enduring network need:

- the need ends at or around year 35: NESO proposes assets are decommissioned and the CATO paid the residual value payment out of TNUoS
- the need ends at or around year 40: NESO proposes the CATO's revenue period is extended with payment for operation and maintenance plus a margin during the extension, with residual value payment made from TNUoS to avoid the need for the CATO to raise new finance
- the need extends materially beyond year 40: the revenue period no longer being set by the length of the need opens up the possibility of the need extending beyond the term of the initial revenue period, making retendering more likely.

7.13 A competitive retendering process, ensuring that the cost of the extension represents value for money, becomes more important. NESO suggests that for facilitation of this process, the existing assets need to be transferable to the winning bidder who would finance the residual value payment, creating a level playing field. NESO proposes that in the event of a failed re-tendering, a process

[45] ECP: download (nationalgrideso.com): Section 4.1.4, page 32

must be established to take over assets and continue to meet the network need, such as a CATO of last resort.[46]

7.14 NESO further stresses the importance of asset health for retendering should the need extend beyond year 40. Asset health is important to establish the asset value at the point where the asset may be retendered. NESO proposes that bidders must submit details of their maintenance strategy during the bid stage and this strategy should be included within the technical assessment of bids. Further, an asset condition survey at the end of the licence period is proposed. NESO also proposes that the CATO commissions an independent assessment of the condition of the asset 5 years before the end of the licence period to include details of remaining life and remedial works required.

7.15 NESO proposes that this independent assessment be submitted to Ofgem to consider the remaining asset health and condition, the CATO's maintenance strategy, and consider any penalties for poor asset health. Following a re-tender event, the winning bidder from that process, if different from the incumbent will then purchase the asset from the incumbent CATO at a price in line with the residual value of the asset, less any penalties as stipulated in the condition assessment report.

Revenue stacking

7.16 In the ECP, NESO stated that "we would support the model accommodating revenue stacking opportunities, to the extent they are possible."[47] With the proposed changes to the revenue period and ability to transfer assets at the end of the revenue period, NESO considers that revenue stacking would become more complex or potentially unachievable – if assets providing the solution are earning revenue from other sources, the complex contractual arrangements could hinder the transfer of assets following a retendering.

7.17 NESO therefore proposes that Ofgem consider whether licensing arrangements can sufficiently delineate any additional services a CATO may provide that utilise assets that may need to be transferred.

[46] Decision on policy updates to Early Competition in onshore electricity transmission networks (ofgem.gov.uk): Chapter 6
[47] ECP: download (nationalgrideso.com): Section 4.1.1

Asset transfer

7.18 In its ECP, NESO stated that "there will be no transfer throughout or at the end of the revenue period, other than in a CATO of last resort position". However, with a proposed fixed revenue period of 35 years and potential to transfer the asset at the end of the revenue period, NESO has further considered its approach to transferring assets, including how termination and compensation on termination could be impacted by the introduction of an asset transfer mechanism.

7.19 NESO considers the ability to transfer assets to a new operator as a key element of its proposals around the revenue period, and proposes that the approach be consistent with the CATO of last resort process developed by Ofgem. The Energy Act 2023 modified Ofgem's powers under the Electricity Act 1989 in respect of its powers to make 'a property scheme' - meaning that, unlike previously under the OFTO regime where a negotiated commercial agreement between parties is required, Ofgem is now able to mandate a transfer of assets. NESO proposes that this arrangement be explored for the end of the revenue period, with bidders made aware of potential for mandated asset transfer in the tender documentation so they can price their bids accordingly.

7.20 The ECP provided for termination following a bidder or 'no fault' default. NESO considers the ability to terminate a CATO following persistent breach of its obligations or long-running under-performance to be an important incentive to encourage timely and safe delivery and operation of the asset. However, without the ability to transfer assets following a termination, the incentive is significantly reduced.

7.21 NESO recognises that further consideration needs to be given to the impact of an asset transfer mechanism on termination:

- compensation on termination – the value of the asset being transferred could form the basis of any compensation payment to the CATO. This may provide additional comfort to lenders that there will be some recovery of outstanding loan amounts following termination. NESO suggests that any termination payment may need to be financed from TNUoS should the incoming asset operator be unable or unwilling to finance

- timing – while the date of an end of revenue asset transfer is known, well established and can be planned for, a termination may occur with significantly less notice, with the time available to either run a new procurement exercise or appoint a CATO of last resort considerably shortened. NESO's view is that termination arrangements will need to accommodate this
- flexibility – termination arrangements should reflect where in the project life cycle the termination occurs. The nature of the assets will be significantly different whether the termination occurs in preliminary works, construction or operation, and alternative termination arrangements may be required depending on when the default occurs

7.22 NESO proposes reviewing the termination provisions and providing a more detailed analysis once further information on asset transfer is available and the approach to asset transfer is established.

Ofgem view

7.23 We note that the proposed 35-year revenue term seeks to balance more than one objective, however it would be a departure from the RIIO methodology which allows for a 45-year revenue term. The ECP identifies that a 35-year revenue period incentivises the CATO to steward and maintain the asset by virtue of provision of a residual value payment. NESO is proposing to align the term of revenue relatively closely with the economic life of the asset, leaving a 5-year period to incentivise maintenance of the asset. This implies looking for a tenor of debt finance where the market is thinner as opposed to the market acceptance for a 20 to 25 years tenor.

7.24 We currently agree with NESO that there will potentially be a greater range of debt finance available for operational assets than there will be for greenfield, where the market is more specialist. Although we note that OFTO experience suggests that the market may identify innovative solutions to the CATO's project financing requirement with a 35-year revenue term.

7.25 However, to ensure a range of competitive debt funding solutions, NESO is proposing that consumers should be exposed to any refinancing risk, both upside and downside, as taking this risk could allow for a shorter-term debt that may be available on more competitive terms.

7.26 We observe that the efficiency of raising a long-term (35 years) debt will only become known at a later date. Any debt not fully amortised by then would require a refinancing commitment, most likely by consumers. This would essentially involve Ofgem making commitments which would have implications for the financial structure. We will give this proposal very careful consideration by weighing the range of possible outcomes and the associated pros and cons as taking the downside risk may be in conflict with our duty to protect consumers' interest.

7.27 An alternative to the proposed refinancing risk allocation by NESO could be the application of a refinancing gain share mechanism similar to the current OFTO regime.[48] Under this arrangement, a refinancing that results in a refinancing gain greater than zero is subjected to a gain share with the consumers. However, this gain share is not applied to refinancing undertaken to remove an OFTO from financial distress. We seek stakeholder views on provision of this mechanism under the Early Competition regime.

7.28 While reaching our decision in due course, we would also consider the trade-off between the priority to improve the financeability of investments under the Early Competition regime and maintaining relatively stable tariffs for customers over time. We have concerns that under NESO's proposed approach a CATO could initially secure low-cost financing only to refinance at higher rates in the future with that risk being placed on consumers, and we need to ensure that consumers are adequately protected. We anticipate stakeholders' response to this issue with great interest.

7.29 Our current view is that end of revenue period options based on asset health assessment seem reasonable. The importance of asset health and maintenance is a key consumer protection consideration. The proposed requirement for having the maintenance strategy as part of the technical bid assessment highlights the importance adequately. We currently agree with having a requirement of an independent assessment of the asset health condition 5 years before the end of the licence period with details of remaining life and remedial works required. We consider the evaluation of the independent asset health report along with the maintenance strategy should be a good metric to evaluate

[48] Generic OFTO Licence TR11_V1 (ofgem.gov.uk): page 62

any inadequacies in the overall asset health, and to calculate any penalties for poor maintenance to be deducted from the remaining residual asset value.

7.30 We also note NESO's proposed re-tendering option in a scenario where the network need extends materially beyond year 40. However, this option if exercised in future, would need to be implemented under a late / very late competition model instead of the Early Competition regime. A late / very late competition model for onshore transmission networks has not been developed at this time. Therefore, we will carefully consider this proposal going forward.

7.31 We welcome stakeholders' views and encourage potential bidders and incumbent TOs to engage with us on these proposals.

8. Conclusion and next steps

8.1 This consultation confirms our support to the National Energy System Operator (NESO) in continuing to develop and work towards implementing the Early Competition regime in onshore electricity transmission networks. As stated throughout this document, our intention is to introduce a commercial framework to onshore Early Competition that is suitably appealing to potential bidders and investors while also protecting consumer interests by reducing costs and fostering innovation in the design and delivery of suitable onshore infrastructure projects.

8.2 To achieve the above-mentioned desired outcome, we recognise that the Early Competition regime relies on maximising competition as the competitive pressure is ultimately meant to drive consumer benefit. While NESO's proposed commercial framework introduces a well-rounded package of measures geared towards maximising market participation, we look forward to engaging with the stakeholders before finalising the commercial framework. Our objective is that the framework retains its commercial viability and balances appropriate risk allocation between the bidders and consumers with the necessary incentives, controls and regulatory oversight throughout the process.

8.3 We will continue to work with NESO to ensure that the Early Competition framework is supported through modifications, where appropriate, to the Transmission Owner (TO) licences and the NESO licence to reflect their respective roles in the tender process. We will also continue developing a transmission licence that will be awarded to a CATO, which we intend to consult on in early 2025.

8.4 We recently published our consultation on the draft Tender Regulations, which were developed in conjunction with NESO and the Department for Energy Security and Net Zero (DESNZ).[49] Once a final decision on the Tender Regulations is reached and the regulations come into force, the legislative framework to allow for competitive tendering in onshore electricity transmission will be in place.

8.5 We welcome stakeholder feedback to this consultation on all elements of the proposed commercial framework that will apply to a CATO.

[49] Draft Electricity (Early-Model Competitive Tenders for Onshore Transmission Licences) Regulations 2024 for consultation | Ofgem

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

We will not be sharing your personal data.

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 12 months.

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

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.

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