Decision

Decision on policy updates to Early Competition in onshore electricity transmission networks

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This document sets out our decision on policy updates to Early Competition in onshore electricity transmission networks that we consulted on in February 2024. It includes our decisions on the Electricity System Operator's (ESO) proposed amendments to Early Competition Plan (ECP), role of the incumbent Transmission Owners (TOs) within Early Competition and conflict mitigation arrangements, Cost Benefit Analysis (CBA) performed by the ESO for Early Competition, Transmission Network Use of System (TNUoS) revenue over / under recovery, and options for dealing with Competitively Appointed Transmission Owner (CATO) / tender failure.

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Executive Summary

Background and context

Competition in the design, delivery, and operation of onshore electricity transmission infrastructure has an important role to play in helping us meet our decarbonisation targets at the lowest overall cost to consumers. Early Competition 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. By further introducing competition into the detailed design of the relevant projects, consumers should benefit from additional innovation and cost efficiencies in the delivery of critical electricity transmission investment projects. Since Early Competition is aimed at projects to be commissioned in the mid to late 2030s, it should not undermine the Government priorities around its 2030 decarbonisation target for the network.

In April 2021, the National Grid Electricity System Operator (**ESO**) published its Early Competition Plan (**ECP**),[1] and in March 2022 we published our decision to continue the development of an Early Competition model (March 2022 decision).[2] Our March 2022 decision sets out the roles and responsibilities of the ESO, 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). In February 2024, the ESO published its Early Competition Implementation - Update (**EC-I Update**).[3] Our February 2024 consultation summarised our initial views on the ESO's proposed amendments contained within the EC-I Update. It also set out proposals in a number of additional policy areas not covered in our 2022 decision. These

[1] ESO'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: ESO final Early Competition Plan, April 2021; https://www.nationalgrideso.com/document/191251/download

[2] 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

[3] EC-I Update: Early Competition Implementation Update by ESO setting out further developments in its Early Competition Plan (ECP) published in February 2024 https://www.nationalgrideso.com/document/301786/download

included the Cost Benefit Analysis (**CBA**) methodology to support identification of suitable projects for competition, conflict mitigation arrangements to ensure the TOs receive no unfair advantage through their tender support role, Transmission Network Use of System (**TNUoS**) over / under recovery, and options for circumstances of Competitively Appointed Transmission Owner (**CATO**) / tender failure.

What this decision document covers

This document sets out our views and decisions regarding the following important areas:

Amendments to the Early Competition model proposed by the ESO under its EC-I Update

We still consider that the ESO's proposed key adjustments to the Early Competition model have a good case for adoption. Specifically, we agree with the ESO that aligning the Early Competition model with the output of the Centralised Strategic Network Plan (**CSNP**) will provide more certainty to bidders and local stakeholders, and will allow an easier comparison of bids. We also agree that the resulting removal of the TOs' role in bid assessment should increase bidder appetite to participate. The amended model will remove the scope for non-network and network solutions to directly compete in Early Competition tenders as the identified non-network solutions would be procured through the ESO's Network Services Procurement (**NSP**) route.

TOs conflict mitigation in supporting Early Competition tender process

There are potential and perceived conflicts that would need to be addressed in order for TOs to be able to bid into Early Competition tenders. These relate to TOs potentially having advanced knowledge of the network planning process, additional detail about specific projects being tendered, and a risk of cross-subsidy from their incumbent price control funded activity. To address these conflicts, we will ensure that TOs will be obliged through their licences to act fairly and transparently in supporting the tender process. As such, TOs will be required to submit a conflict mitigation methodology statement for Ofgem approval ahead of a tender to be able to bid. This statement is expected to cover the separation of the bidding unit and the associated management structures, as well as the separation of costs, assets, and financing of the project subject to the tender process. Movement between the bidding unit and wider TO operation will be restricted

during the Invitation To Tender (**ITT**) stage. We consider the creation of a project-specific Special Purpose Vehicle (**SPV**) for each bid as the optimal means of ensuring suitable separation from the wider price control funded activities of the TO. This is the approach we expect successful bidders to take, but we remain open to consideration of alternative approaches that can be demonstrated to achieve the same level of separation and delineation.

CBA model used to identify suitable projects for Early Competition

We have determined that the ESO's proposed CBA methodology is suitable for identifying the appropriate projects to target for Early Competition. When reaching our decision on relevant projects identified in the 2024 second transitional Centralised Strategic Network Plan (**tCSNP2**), we will continue to work with the ESO to consider any additional qualitative considerations outside of the CBA methodology particularly relevant to the projects in question, including conducting project-specific feasibility studies.

TNUoS over / under recovery for CATOs

We have decided that it is not in consumers' interest to expose CATOs to TNUoS over and under recovery like the incumbent TOs.[4] Such revenue uncertainty for the expected financing structures of the CATOs would otherwise likely lead to increased costs to consumers.

Dealing with CATO/tender failure

We have decided to keep a range of potential options alongside a CATO of Last Resort (**OLR**) process to best reflect and address the specific circumstances of the project in question. This reflects an ultimate goal of avoiding the need to oblige another licensee to deliver a project. We are of the view that focus needs to be on an optimal outcome for consumers – an optimal approach employed during pre-construction stage, construction stage and operational stage will look different from each other.

[4] An existing TO winning an Early Competition tender would also be treated as a CATO

Next Steps

This decision confirms our support to the ESO in continuing to develop and work towards implementing the Early Competition regime in onshore electricity transmission networks. We expect that the development of CSNP will result in guiding and enabling the Early Competition regime to achieve its desired objectives.

In terms of the detailed development of the commercial model and the tender process, the ESO has developed and proposed a commercial model which we are currently reviewing and intend to consult on later this year. We are also developing tender regulations for Early Competition in conjunction with the ESO and Department for Energy Security and Net Zero (**DESNZ**). We will consult on the tender regulations during this summer.

Following the publication of tCSNP2 by the ESO in March 2024, this decision on policy updates to Early Competition, and our forthcoming consultations / decision on commercial model and tender regulations, we remain on course to identify one project as being suitable for Early Competition by the end of 2024.

Introduction

1. Context and related publications

1.1 This document sets out our updated decision on policy points regarding Early Competition and states our current views on the Electricity System Operator's (ESO) proposed changes in the Early Competition – Implementation Update (EC-I Update). We sought stakeholders' views through a consultation document published in February 2024. Stakeholders' responses and further stakeholder engagement have informed our final decision.

1.2 The main documents relating to this area of work are:

- Ofgem Consultation on policy updates to Early Competition in onshore electricity transmission networks (February 2024): Consultation on policy updates to Early Competition in onshore electricity transmission networks (ofgem.gov.uk)
- ESO Early Competition Implementation – Update: Onshore Electricity Transmission Networks (February 2024): Early competition | ESO (nationalgrideso.com)
- Ofgem Update on Development of Competition in Onshore Electricity Transmission (December 2023): Early Competition Onshore Transmission Update (ofgem.gov.uk)
- Ofgem Decision on the Framework for the Future System Operator's Centralised Strategic Network Plan (December 2023): Decision on the framework for the Future System Operator's Centralised Strategic Network Plan (ofgem.gov.uk)
- DESNZ Transmission Acceleration Action Plan (November 2023): Transmission Acceleration Action Plan: Government response to the Electricity Networks Commissioner's report on accelerating electricity transmission network build (publishing.service.gov.uk)

- Energy Act 2023 (October 2023): Energy Act 2023 (legislation.gov.uk)
- Report from Electricity Networks Commissioner Nick Winser CBE (August 2023): Accelerating electricity transmission network deployment: Electricity Networks Commissioner's recommendations - GOV.UK (www.gov.uk)
- Ofgem Decision on the Development of Early Competition in Onshore Electricity Transmission Networks (March 2022): Decision on early competition in onshore electricity transmission networks | Ofgem
- ESO Early Competition Plan – Onshore Transmission (April 2021): download (nationalgrideso.com)
- Guidance on the Offshore Transmission Owner (OFTO) of Last Resort Mechanism (ofgem.gov.uk)

Our decision-making process

1.3 In February 2024 we published a consultation document detailing our proposals on policy updates to Early Competition in onshore electricity networks, alongside ESO's proposed amendments to the Early Competition Plan in the ECI-Update. We received nine responses from a range of stakeholders and have engaged with stakeholders since then to get a better understanding of their views.

1.4 We have published the non-confidential responses we received on our website, alongside this document.

Decision-making stages

Figure 1: Decision-making stages

Stage 1	Stage 2	Stage 3	Stage 4
Consultation open	Consultation closed. Deadline for responses	Responses reviewed and published	Consultation decision/ policy statement
21/02/2024	**20/03/2024**	**20/03/2024 - 25/07/2024**	**25/07/2024**

Date	Stage description
21/02/2024	Stage 1: Consultation open
20/03/2024	Stage 2: Consultation closes (awaiting decision), Deadline for responses
20/03/2024 -25/07/2024	Stage 3: Responses reviewed and published
25/07/2024	Stage 4: Consultation decision/policy statement

General feedback

We believe that consultation is at the heart of good policy development. We are keen to receive your comments about this report. We would also like to get your answers to these questions:

1. Do you have any comments about the overall quality of this document?
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. Are its conclusions balanced?
5. Did it make reasoned recommendations?
6. Any further comments

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

2. ESO's proposed amendments to Early Competition Plan in EC-I Update

Section summary

We set out the background for the Electricity System Operator's (ESO) proposals regarding changes to the Early Competition Plan (ECP) in its Early Competition - Implementation Update (EC-I Update). We also summarise our views and decision on these proposed amendments to the ECP.

Background

2.1 In our consultation, we provided an overview of the ECP developed by the ESO and laid out the changes to the ECP under the EC-I Update. We sought stakeholders' views on:

- If the ESO's amendments represented good value for money for consumers
- Aligning the scope of Early Competition tenders with the output from the Centralised Strategic Network Plan (CSNP)[5]
- Network solutions vs. non-network solutions.

Consultation position

2.2 In our consultation we supported the ESO's proposal to align the scope of the Early Competition tender with the output of the CSNP optioneering process. We recognised that the CSNP endorsement of the solution should simplify planning and consenting while providing additional certainty in network planning and for potential bidders. Supporting methodology for the first CSNP is still being developed by the ESO. We therefore explained in our consultation that the first Early Competition tender would

[5] The aim of the CSNP is to provide an independent, coordinated, and longer-term approach to wider network planning in GB to help meet the government's net zero ambitions. Decision on the framework for the National Energy System Operator's Centralised Strategic Network Plan (ofgem.gov.uk)

be based on the output of the second transitional CSNP (tCSNP2) / Beyond 2030, which was published earlier this year.[6] As such, the ESO has assessed these projects against the Early Competition eligibility criteria and through a competition CBA to identify the projects that are likely to provide the greatest benefit to consumers if subjected to an early model tender.

2.3 Our consultation also agreed that the revised approach would be best supported by different competitive processes for different solution types, i.e. transmission build and non-transmission solutions. This approach was necessitated by the complexity in designing a procurement event that enables an objective comparison of fundamentally different offerings. In addition, award for successful network and non-network bidders would look different, i.e. issuance of licence and award of contract respectively, thus creating another complexity in the process. The ESO proposed to employ its Network Services Procurement (NSP) route for procuring non-network solutions due to shorter tender timelines. We explained that interactions with the ESO's NSP process for procuring non-network services would need to be suitably clear and expressed the need to see non-network solutions identified as part of the future CSNP process in a meaningful manner. [7] We proposed that all viable solution types should be considered in the development of the electricity transmission network leading to tailoring of the competitive process(es) to address a specific requirement, either through Early Competition or network services.

Summary of consultation responses

2.4 In response to the February consultation, most respondents agreed with our position and the ESO's proposals. However, two incumbent Transmission Owners (TOs) raised concerns over the competition assessment / project identification process expected to be employed under the CSNP methodology.

[6] tCSNP2 (Beyond 2030 | ESO (nationalgrideso.com) refers to the combined output of the Holistic Network Design Follow Up Exercise and the Network Options Assessment. This output will be used for selection of the first project(s) for Early Competition tender.

[7] CSNP would be built on the lessons learnt from tCSNP2 and represents the enduring network planning process.

2.5 Among the TOs and a few of the of the non-TO respondents, there was a level of uncertainty about the role the CSNP process would play in the Early Competition model and how it would provide value for consumers. One TO welcomed further discussion on project selection and stated that tCSNP2 projects may require additional examination as the level of strategic optioneering and environmental assessment reflected is not as mature as anticipated for the CSNP process.

2.6 One TO noted that the CSNP scope and output were still to be refined as ESO developed the CSNP methodology. As such it supported using pilots to scope the future Competitively Appointed Transmission Owner (CATO) regulatory framework rather than locking down the framework while there was still uncertainty on CSNP in practice.

2.7 One respondent expressed that through making only network solutions eligible for Early Competition, ESO could lose out on non-network solutions that could improve innovation and efficiency. The respondent suggested that the ESO should improve the procurement process by expanding the scope for competition and ensuring that the CSNP methodology involved robust stakeholder engagement.

Decision

2.8 We have decided to accept the ESO's proposed amendments to the ECP under its EC-I Update due to its desired benefits. We agree that there is a good case for adopting the CSNP optioneering in the EC model. In particular it will provide additional certainty to bidders, ensure that solutions delivered by successful bidders align with the wider efficient design of the network and simplify the planning process It will also reduce the risk of TOs conflict of interest as they will no longer have to assess bidders' options / solutions.

2.9 We also conclude that the ESO's revised approach of not considering non-network solutions as part of the EC model would simplify the process, and non-network solutions identified as part of the CSNP would have a route to procurement through the NSP process in a meaningful way.

Rationale for decision

2.10 Overall, respondents were in favour of the proposed amendments to the ECP in the EC-I Update.

2.11 We recognise that the incumbent TOs are concerned about how defined the CSNP methodology is. Initially, the ECP was designed to allow each bidder to do individual optioneering based on a localised rather than a Strategic Environmental Assessment in the wider network plan context. Maintaining this approach could lead to increased consenting risks across different proposed solutions. The CSNP optioneering into the early model tender should mitigate these risks by identifying an indicative solution defining connection points and a wider route corridor, which have already taken relevant environmental constraints into account. As part of the future CSNP, we expect that additional examination of projects will also be undertaken, including but not limited to routing considerations including social and environmental impacts to support its delivery.

2.12 We expect the detail that will be provided to the bidders will include interface site details, technology and performance requirements, and routing constraints. Interface point details would include details of the interfacing substation(s) where the project connects to the wider transmission network. This interface detail will include technical details, interface design considerations, codes, and related technical specifications. Details of routing constraints would typically include an identified broad corridor or study area by taking the substation interface points into account, application of National Policy Statement / National Planning Framework, and other considerations such as location of large towns, Areas of Outstanding Natural Beauty, National Parks, as well as opportunities to utilise existing electricity transmission corridors.

2.13 Similar to a connections' feasibility study, the relevant TOs would need to provide the interface point details following selection of a project(s) at the start of the pre-tender stage. Under the CSNP, two or more interface points are proposed to be provided for each option. The requisite technology and performance data would be provided by the ESO to the bidders.

2.14 In the more immediate case of projects identified through the tCSNP, as explained in Chapter 4, additional project-specific feasibility studies commissioned by the

ESO are intended to provide supplementary detail in addition to the tCSNP2 output and also identify any further development required during the pre-tender period.[8] These feasibility studies cover information that we expect will largely be captured in the future CSNP assessment process.

2.15 Bidders would need to provide option studies outlining various route options considered to arrive at their proposed solution. While relevant constraints and risk information would be shared with the bidders, they would need to conduct their own desktop studies to validate their option studies.

2.16 The full detail of the CSNP methodology will be consulted on later this year. This should set out in additional detail the level of design maturity and certainty that will be incorporated into the scope of Early Competition tenders. However, as elaborated above, we consider it clear that the optioneering output of the CSNP will confirm the required network capability for a project, required start and end points, and sufficient details around routing to define a tender process. As such we agree with the ESO's assessment that the CSNP will be able to provide certainty to bidders and simplify planning and consenting for projects delivered via Early Competition.

2.17 We disagree with the view that the ESO's proposed changes severely limit innovation. While an earlier tender could in theory lead to some additional innovation, there remains clear scope for innovation in the following elements of delivering large capital projects:

- Exact routing options and technology choice
- Supply chain engagement
- Planning and consenting strategy
- Design

[8] Chapter 4, paragraph 4.14

- Asset management approach
- Construction and delivery techniques
- Operations and maintenance.

We feel that there remains ample room for innovation while also allowing for early supply chain engagement. However, we will consider these factors in context of the commercial model which would be separately consulted upon later this year.

2.18 In order to ensure that non-network solutions are able to fully engage in the network planning process we remain convinced that the CSNP methodology should include robust proposals for enabling such non-network solutions to be considered in the early stages of the network planning process.

3. Conflict mitigation

Section summary

This section summarises our decision on arrangements to mitigate the incumbent Transmission Owners (TOs) conflicts of interest in running the Early Competition tender process.

Background

3.1 We want to ensure that as many bidders are encouraged to participate in Early Competition as possible. We also recognise that the incumbent TOs have a significant amount of knowledge and experience in the delivery of electricity transmission infrastructure. As such, so far as the appropriate conflict mitigation arrangements can be put in place, we consider the incumbent TOs should be able to enter bids into Early Competition tenders.

3.2 We identified the following as potential or perceived risks that would need to be addressed for the incumbent TOs to be allowed to bid:

- TO influence on options considered in analysis that determines the required network upgrades
- TO role in initial network design allowing them more time than rival bidders to develop proposed solutions
- TO role in reviewing other bidders and access confidential bidder information
- Risk of cross-subsidy from RIIO funding to lower bids / manipulate competition.

Consultation position

3.3 Our consultation proposed that the following conflict mitigation requirements would need to be implemented for the incumbent TOs to also bid into the tender process:

- Overarching licence obligations on TO conduct when providing technical information to enable the specification of a project for tender to bidders (as specified in paragraphs 2.14 and 2.17 above) and in their other tender support activities:

  (1) To act in a way that does not give the TO bidding party, or any other party, an undue advantage over any other participants in the tender. This was to include employee transfer restrictions from the TO bidding unit during the tender process, managerial separation and the clear delineation, preferably through the creation of a Special Purpose Vehicle (SPV), of the assets and funding from the existing RIIO arrangements.

  (2) To act transparently, making all relevant information available and clearly setting out the measures taken to mitigate conflicts of interest and protect sensitive information as per the Information Sharing Framework being developed with Department for Energy Security and Net Zero (DESNZ), the Electricity System Operator (ESO) and Ofgem.

  (3) Facilitate the tender process in a manner such that it may proceed timeously and efficiently with an external independent audit of the measures in place.

- In addition, we proposed that the participants will be required to submit a conflicts mitigation methodology and declare any conflicts of interest to us ahead of any tender they wish to bid into. This methodology will set out the steps they will take and the associated monitoring to ensure that the highlighted conflicts of interests, and risks are suitably mitigated in line with the requirements proposed.

Summary of consultation responses

3.4 In response to the February consultation, all the respondents agreed with our position and the ESO's proposals that the amended Early Competition approach eliminates the TOs' role in assessing potential bids, which was one of the central points of perceived conflict(s).

3.5 The non-TO respondents, despite the proposed measures felt the TOs would retain an unfair advantage over other bidders, with some respondents suggesting that they should be excluded from bidding. In contrast, the TOs felt that the other bidders would gain an unfair advantage, particularly in the employee restriction and business separation conditionalities. As such, the incumbent TOs saw our proposals as being overly prescriptive.

3.6 TOs suggested that ring-fencing bidding units could not represent consumer value, given the increased overall cost to bidding and the potential loss of key expertise in transmission delivery. TOs viewed the employee restriction measures as disproportionate that would drive unnecessary embedded costs, thereby reducing the potential pool of bidders. They also expressed reservations about sharing information of a strictly confidential nature with prospective bidders and opined that it could threaten the security of the GB network.

3.7 Supporting the proposal for an Information Sharing Framework, one TO inquired if there would be an opportunity to provide feedback on its development. The TO further explained that it expected the information sharing between Competitively Appointed Transmission Owner (CATO) and TO parties would continue to be subject to the same statutory and regulatory restrictions on information exchange that apply today.

3.8 We received a mixed set of responses to our preferred option of creation of an SPV for raising debt for Early Competition. TOs opposed the proposed company structure whereas the non-TOs were supportive of our proposal. TOs suggested that the SPV approach should not be mandated so that bidders could choose the route most appropriate for them to ensure that the bidding pool was as wide as possible. They expressed concern that by mandating an SPV approach, TOs might not choose to participate due to the additional organisational complexities and costs, thereby reducing competitive tension and the potential benefits that could be delivered to consumers.

3.9 One TO suggested that any solution allowing for the isolation and ring-fencing of the project specific assets from the wider TO asset base, debt to be raised against a specific project, and reflecting project-specific risk should be acceptable. If TOs could meet the requirements including financial ring-fencing, there should be no restrictions on TOs' company structure. It further referred to the ESO's Early Competition

Implementation – Update (EC-I Update) citing the legal and regulatory arrangements around the incumbent TOs in Scotland, that a mandated SPV approach would not work from a level playing field perspective without changes being made in primary legislation or through company restructuring.

Decision

Business separation measures

3.10 We have decided that the full legal separation of any bidding unit from the TO project development team is not necessary. The TO 'bidding unit' can be a separate company within the TO group (including an 'associate', as defined in Standard Condition A1). Separation of bidding units form the wider TO group during the bidding stage ensures there is not any uncompetitive advantage on the incumbents due to their network planning roles.

Employee transfer restrictions

3.11 We have decided to limit the employee restrictions to the initial 14 weeks of the Invitation To Tender (ITT) stage as opposed to the entire tender duration. We have concluded that after the initial 14 weeks of the combined ITT stage, the process does not offer any advantage to the incumbent TOs. In the initial 14 weeks of the combined ITT stage, bidders are allowed to ask questions of the ESO and possibly queries specific to connection sites which requires TOs to answer. After the 14-week period, there will not be further opportunity for bidders to ask questions and thereby no advantage on the incumbent TOs. Our guiding principle in the regime is to create a level playing field, and to ensure that our decision appropriately balances the concerns from bidders without putting unnecessary or bureaucratic restrictions on TOs. This duration reduction will save a considerable amount of time for the incumbent TOs to deal with the organisational and resource allocation challenges as conveyed through their responses.

3.12 We have decided that for each tender process, a compliance methodology statement should be submitted to us for approval as soon as possible before the tender commences. This methodology should describe the steps the TO has taken, and/or intends to take, to fulfil all its obligations to mitigate potential conflicts of interest. We

expect the timings and specific details of employees' separation to be set out in a final approved conflicts methodology statement. We will also require details of any involvement of other employees of the TO in the bidding unit to be specified in the methodology, including rules governing this involvement, in line with the obligations on conduct. This includes shared services employees and employees of central legal teams. We would assess the methodology and seek changes where needed.

3.13 For the avoidance of doubt, the same restrictions will apply to all the participating parties in the tender process. Our position and commitment to creating a level playing field is unchanged and the conflicts methodology statement approval will ensure that no player has any uncompetitive advantage over other players.

Managerial separation

3.14 Our decision is to require separation of management structures between the TO and any bidding unit up to, but not necessarily including, the TO parent board. Specifically, we will require the management of the bidding unit to be organised in such a way as separates it from the rest of the TO. Practically this will mean the creation of discrete management structures for the bidding unit.

Information sharing

3.15 We have concluded that the Pre-Qualification Questionnaire (PQ) checks, along with national security checks and NDAs, will ensure that the parties progressing ahead in the tender process would be safe to share information deemed sensitive and confidential. The information sharing framework to be developed in collaboration with DESNZ, ESO, and Ofgem will have the ESO as the information intermediary and stakeholders will have the opportunity to provide feedback as was requested in the response to our consultation. Information exchange between parties will be subject to the same statutory and regulatory restrictions on information exchange that apply today.

Financial separation

3.16 We have decided that we will require the TO and its bidding unit to be sufficiently separated financially, meaning that the costs incurred by the bidding unit are not

recovered from regulated revenue related to any other of the TO's activities or assets. We consider that financial separation is covered by the obligations contained in Standard Licence Condition B5 (prohibition of cross-subsidies) and B6 (Restriction on Activity and Financial Ring Fencing).

3.17 We have further decided that all bidders would comply with the same level of requirements as Offshore Transmission Owners (OFTO) bidders. OFTO bidders are required to sign confidentiality agreements to gain access to confidential information on a project, and a 'conflicts of interest' declaration. We have decided that the NDA should be submitted to the ESO, and the conflicts of interest declaration be submitted for our approval no later than the start of the ITT stage of the tender. Where a bidder has highlighted conflicts of interest in making this declaration, we would ask for and assess information from the bidder on separation measures in place, which could include a memorandum of understanding.

3.18 We encourage bidders to engage with us as soon as practicable after we select a project for Early Competition to inform us of potential conflicts of interest and to ensure any conflicts are mitigated. Any bidder with potential conflicts of interest that has failed to implement appropriate conflict mitigation arrangements may be excluded from bidding.

Scrutiny

3.19 We have also concluded that an external independent audit will be required to ensure compliance by the incumbent TOs with the conflict mitigation measures. In the interest of increasing the confidence in the appropriate mitigation measures in place, we feel that an independent external audit serves the purpose well and won't be a significant burden on the incumbent TOs deciding to participate in the tender process.

3.20 With regard to the bidder(s) company structure, we remain of the view that creation of a project-specific SPV is the optimal approach for bidders as it allows for the isolation of competed assets and revenue from wider company assets and raised debt. As such, while we remain open to engage with potential bidders on an alternative approach that satisfies and addresses these concerns, our clear preference is that

successful bidders use an SPV for each bid to keep the two regimes, i.e. Early Competition and RIIO, separate thus creating a level playing field for all bidders.

Rationale for decision

3.21 From a level playing field perspective, restrictions on employees that have participated in the development of projects being tendered is critical. It is essential to impose restrictions on employees participating in the bidding units from the respective TOs to ensure that incumbent TOs do not have any unfair advantage over third parties due to their network planning role or earlier understanding of the network requirements. Therefore, we consider the bidding unit employees restriction condition till the first 14 weeks of the ITT stage of the tender process as appropriate, and it alleviates the concern raised around the duration of the restriction while maintaining a level playing field.

3.22 With clear delineation between individuals supporting the Centralised Strategic Network Plan (CSNP) and the tender process, and the TO bidding team and prevention of employees moving between them, bidders should gain confidence that the TO will not benefit from holding any information back from bidders, nor gain an unfair advantage from the work carried out to support the CSNP.

3.23 We discussed with the ESO the concerns stakeholders raised around sharing critical national infrastructure information with third parties. The ESO confirmed that information related to critical national infrastructure will only be shared with bidders who have passed the PQ and national security checks. There are additional confidentiality checks such as the NDAs as part of the tender pack that address concerns as well. Also, with the ESO as the information exchange intermediary, we consider the concerns raised by the TOs as resolved, and there should not be any threat to the security of the GB network via such information sharing with potential bidders.

3.24 Cross-subsidy from RIIO price control funding is a potential risk to a fair competitive process. Without the ability to clearly delineate the costs and financing of the project that is subject to competition, there is a risk that other TO funding, through RIIO, could be used to unfairly reduce the cost of their bids. The ESO emphasises the importance of delineated cost capture and a project-specific debt-raise to reduce the risk of unfair outcomes.

3.25 Regarding company structure for bidding to Early Competition tenders, an SPV allows for isolation and ring-fencing of the project-specific assets from the wider TO asset base. It allows debt to be raised against a specific project and reflect project-specific risks. Specific project generated cashflows can be monitored and allocated to lenders and investors. These conditions are difficult to recreate effectively under a corporate structure, potentially leading to an arrangement that could be difficult to assess against cross-subsidy requirements, deterring market participation. The SPV structure also facilitates easy asset transfer (i.e. re-tendered at the end of revenue period).The SPV approach should provide the optimal level of clarity for all bidders, and therefore provide confidence that the competition being undertaken will take place fairly. This is the approach we expect successful bidders to take, but we remain open to consideration of alternative approaches that can achieve an equivalent level of separation and delineation.

4. Cost Benefit Analysis (CBA)

Section summary

We set out our decision on the CBA model and methodology developed by the Electricity System Operator (ESO) to advance projects for Early Competition in this chapter.

Background

4.1 The ESO's proposed CBA methodology is set out in detail in its Early Competition - Implementation Update (EC-I Update). It centres on the consideration of a range of costs and benefits that could occur from applying Early Competition to a project rather than the RIIO counterfactual. Where these costs and benefits have been able to be quantified through comparative benchmarks or other evidence sources, they have been captured within a quantitative CBA model. Additional costs and benefits that cannot be robustly quantified are considered within the qualitative element of the CBA which is used alongside the quantitative modelling to make a recommendation of whether Early Competition should be used to deliver an electricity transmission project.

4.2 This CBA methodology along with the wider consideration against the criteria for Early Competition[9] will be used by the ESO to make a recommendation to us about the projects it considers should advance to pre-tender market engagement as part of the Early Competition tender process.

4.3 The ESO's consultants, KPMG supported the ESO in developing an Excel-based financial cost benefit analysis model. This model captures and compares the quantifiable costs and benefits for development, procurement, and delivery across the two approaches.

4.4 The CBA model derives an indicative estimate of the revenue that would be recovered from consumers if a qualifying project is funded through an Early Competition model. This is referred to as the factual case which is compared on a Net Present Value

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

(NPV) basis to the equivalent modelled cost to consumers of delivering a qualifying project under the RIIO counterfactual.

Consultation position

4.5 We consulted on the ESO's proposed CBA methodology and its elements and considered the CBA model and the wider CBA methodology fit for the purpose of identifying suitable projects for Early Competition.

4.6 We proposed to work with the ESO to determine an appropriate and proportionate approach that allows us to supplement the CBA result with consideration of project specific qualitative factors in a sufficiently timely manner.

4.7 With the commercial, regulatory, and legislative arrangements for Early Competition in development phase, we acknowledged that we do not see the CBA methodology as developed by the ESO to remain static. We expect the ESO to continue working with internal and external stakeholders, Department for Energy Security and Net Zero (DESNZ), ourselves, and others to refine its approach and integrate it into the network planning processes and help make Early Competition a transformative delivery model in the sector.

Summary of consultation responses

4.8 The consultation received a mixed response from stakeholders. Third parties broadly agreed with the methodology and the stated position of updating the CBA as further regulatory, commercial, and legislative details emerged. Third parties also suggested running the CBA process as far in advance as possible to fill the pipeline with projects and give bidders certainty of upcoming opportunities. They further agreed that as scope for cost reduction from competition was revealed, the assumptions or methodologies in the CBA would need to be updated over time. It was further suggested that the CBA take into consideration the wider benefits of competed projects such as supply chain investment, increased financial capacity, innovation, and learning from each competition process, and resilience to avoid slowing the pipeline of projects coming to market.

4.9 While recognising the evolving nature of the CBA, the incumbent TOs stated that the view on Capital Expenditure (CAPEX) savings from competition was overstated while the abandonment costs in case of tender failure had not been factored in. Two TOs said that not exempting projects from competition would lead to delays that should be factored into the CBA, and also argued that introducing competition would increase financing costs. TOs further claimed that the ESOs Impact Assessment was incomplete and did not address the impact of any reallocation of risk to consumers. One of the incumbent TOs suggested that introducing a competitive tendering delivery model could further exacerbate the existing supply chain constraints, and that the CBA did not consider the CAPEX savings and operational efficiency embedded in the RIIO framework. They further requested that the counterfactual based on RIIO include scenario analysis (including CAPEX savings and operational efficiency) to allow a fair comparison between the CATO model and the RIIO model. Another TO encouraged Ofgem to factor in the quantifiable consumer detriment of a CATO OLR into the CBA process and ways to safeguard consumers from abandonment costs.

4.10 A non-TO respondent was of the view that including a First Of A Kind (FOAK) premium could lead to double counting and expressed a desire to see a future pipeline of projects to be competed under the Early Competition regime.

Decision

4.11 We remain of the view that the ESO's CBA model, and its wider methodology is suitable for identifying projects for Early Competition. The proposed CBA methodology uses appropriate benchmarks, and through its sensitivity analysis captures a range of potential outcomes from a competitive process in a proportionate manner.

4.12 Stakeholders' input and experience from other competitive models, such as the Offshore Transmission Owner (OFTO) regime and Direct Procurement for Consumers (DPC) in the water sector, suggest there are likely to be various "unknown unknowns" in terms of potential costs and benefits which may be discovered as solutions are developed. We agree with this suggestion and would incorporate such parameters in future iterations of the methodology as the regime evolves. This is also the reason the FOAK premium is being included in the first iteration and may be revisited later.

4.13 We do not agree that the expected savings delivered by competition are a result of a transfer of risk from TOs to consumers. Furthermore, TOs have not identified which risks carried currently by TOs would be transferred to consumers under the ESO's proposed commercial model.

4.14 As stated in our consultation, we would look at projects holistically, analysing both project specific qualitative and quantitative elements. For identification of project(s) for Early Competition in the second transitional Centralised Strategic Network Plan (tCSNP2), the ESO has conducted shortlisting of projects based on the Early Competition criteria and other factors (new, separable, certainty of need etc.) and is conducting feasibility studies to further understand the suitability of project(s) for competition. A wide range of qualitative components like environmental and societal benefits, community engagement, planning and consenting risks, will be considered along with a net NPV value from the CBA model to select project(s) for the regime. In future iterations based on the Centralised Strategic Network Plan (CSNP), we expect the analysis to have improved further and the reliance on feasibility studies to have reduced. If we are convinced that further analysis might be required, we will augment the CBA results with appropriate qualitative studies.

4.15 We disagree with incorporating the potential risk of a CATO OLR in the CBA as the Early Competition regime is yet to be implemented. Having decided to revisit the methodology as the regime progresses and other elements are known, we do not consider incorporating a CATO OLR in the CBA model appropriate as of now.

Rationale for decision

4.16 The CBA is used as a means of getting an indicative view of whether it may be in the interest of consumers to deliver a project via competitive tender rather than via the RIIO counterfactual approach. The ESO's methodology is not designed to quantify every possible potential variable and uncertainty, nor is it feasible to expect it to attempt to do this. Overall, we consider it is sufficient in quantifying the key elements that are critical to factor in the decision on whether or not to pursue competition for a project, with the wider qualitative factors suitably captured within the wider qualitative methodology.

4.17 We consider that the benchmarks used for the CBA remain appropriate. The modelled revenue for the factual case is built up from an extensive range of benchmarks capturing the indicative range of potential costs throughout the life cycle of the project. Financing cost benchmarks are based on a range of comparably large competitively delivered investments within the UK which have been delivered through a project finance approach and reflect how the ESO expects projects to be financed under its proposed Early Competition model.

4.18 The factual case also includes the costs that arise in running the tender process, as well as in the case of projects where competition is expected to lead to delays, a forecast of any additional constraint costs that consumers incur because of the delay. A detailed list of costs and benefits can be seen in Appendix 1.

4.19 The RIIO counterfactual is modelled based on the funding arrangements in place for the current RIIO-2 price control. Project costs are recovered over 45 years with the allowed Weighted Average Cost of Capital (WACC) applied each year as an annual return on the project costs that have yet to be recovered.

4.20 To ensure a fair comparison between factual and counterfactual revenues with different timing profiles, a common discount rate is used to allow a fair comparison of the overall cost of both approaches on a fair basis. In line with the Treasury's Green Book guidance on CBA, the Spackman approach (as described in the assumptions in the ESO's methodology document) and the social time preference rate is used to arrive at an NPV of the cost or benefit to consumers of competition relative to the counterfactual for each qualifying project.

4.21 The ESO will use its wider network planning analysis to capture the CBA impact of any potential delay to commissioning driven by the Early Competition tender process and associated constraint costs and risks for each of the assessed projects. Since the process undertaken through the Early Competition model effectively replicates the stages of development undertaken in the RIIO counterfactual, there should not be an inherent level of risk caused to projects at a suitably early stage of development. This alleviates the concern stakeholders had raised in their responses.

4.22 The CAPEX savings cited by the methodology is a conservative estimate from a widely sourced robust evidence base and sensitivity analysis of comparable economic regimes. Benchmarking evidence from across a range of comparable projects was used to identify an indicative range of potential cost savings that can be achieved through a more competitive approach to project delivery.

4.23 On constraint cost calculation, the ESO anticipates that the future CSNP processes would move away from multiple scenarios to more defined pathways and therefore the most appropriate scenario for that pathway would be used in any constraint cost calculation.

4.24 The qualitative aspects of the CBA add further nuance to the analysis and enhance its suitability for the regime. The approach set out by the ESO provides a comparative assessment framework for qualitative costs and benefits of delivering solutions which address transmission needs under an Early Competition framework versus a regulated framework. Factors proposed for use in the CBA model for qualitative assessment include large consortium costs, additional system costs, bidder portfolio effect, and innovation in delivering system, processes, technology, and ecological benefits. Detail on the proposed qualitative assessment elements can be seen in Appendix 2. The qualitative assessment process is the final step in the CBA. The factors set out in this section and the total score from the framework described above will supplement the results from the quantitative assessment and help determine the delivery route that provides best value to consumers.

4.25 Nevertheless, it is likely to be helpful in case of some projects to further understand the underlying assumptions around the project-specific risks before reaching a final decision. For example, more detailed assessment might identify that an assumed delivery date may be particularly conservative or optimistic compared to other projects, meaning there could be a higher or lower risk of delay from Early Competition than would be identifiable through the CBA. We have therefore been working with the ESO to determine an appropriate and proportionate approach that allows us to supplement the CBA results with consideration of such factors in a sufficiently timely manner.

4.26 In considering wider factors and potential risks, it is important to distinguish between whether these are specific to the Early Competition model or inherent in the

delivery of large infrastructure projects. For example, delay or non-delivery could occur for several reasons at different stages in a project's development depending on the nature of the project, independent of whether an Early Competition model is used. There could be unforeseen ground conditions, planning consents may be delayed, associated generation projects may fall away or be delayed, or there may be major issues with contractors (eg insolvency) or other supply chain bottlenecks (eg lack of equipment supply). These project-specific risks are inherent in the development of high-value projects and apply to both the status quo and the Early Competition model and so are not specifically quantified in the ESO's CBA methodology. This further negates TOs' concerns around the efficacy of competition in project delivery.

4.27 In terms of the suggestion that competition would increase financing costs, we have seen no evidence to support this view and so have decided not to factor this in the CBA. In fact, given the scale of investment needed in the next few years, there is reason to consider that, as suggested by the non-TOs in their responses, there may be additional consumer benefits in a range of parties other than the TOs sharing the costs associated with the financing of such a scale of investment.

4.28 The enhanced qualitative and quantitative aspects with appropriate sensitivities indicate that the CBA is appropriate for its role in identifying the first project for Early Competition.

5. Transmission Network Use of System (TNUoS) revenue over/under recovery

Section Summary

We set out the background for our proposal of TNUoS revenue over / under recovery and summarise our decision in this regard.

Background

5.1 Our consultation explained that under Early Competition, Competitively Appointed Transmission Owners[10] (CATOs) will be allowed to recover their revenue via TNUoS charges under their licence provisions, in a similar manner to Transmission Owners (TOs) and Offshore Transmission Owners (OFTOs). The Electricity System Operator (ESO) is responsible for calculating the level of TNUoS recovery on an annual basis. The calculation of the level of TNUoS to be recovered in a year is based on a forecast that will not exactly align with the exact amount that is needed to be recovered to fund consumer and generator costs across onshore and offshore networks.

5.2 Under RIIO, TOs are expected to absorb any TNUoS under-recovery, whereas OFTOs receive their full stipulated revenue even during the periods of TNUoS under-recovery by the ESO. The rationale behind this model is that as opposed to the TOs, OFTOs could suffer more severe financial repercussions from a fall in expected cash flow as they are not as highly capitalised as TOs. As CATOs are likely to be similar to OFTOs in company structure and capitalisation, we need to ensure that their revenue recovery requirements are met so as not to jeopardise consumers' interest.

[10] An existing TO winning an Early Competition tender would also be treated as a CATO

Consultation position

5.3 In our consultation we presented the following options for CATO TNUoS revenue recovery:

- Should a CATO be treated as TOs and exposed to any cash flow shortfall because of TNUoS under-recovery, or
- Treated like OFTOs and recover its full revenue.

5.4 We expressed that exposing CATOs to revenue uncertainty would not be in consumers' interest. Under Early Competition, we expected the bidders to structure project financing as a typical project finance approach which requires revenue certainty to ensure timely payment of debt obligations. Therefore, we proposed that due to likely similarities in company structure and capitalisation, CATOs should be treated like OFTOs and receive revenue in full without being influenced by periods of TNUoS under-recovery by the ESO. However, we stated our willingness to reconsider this proposal in future depending on the level of subsequent CATO penetration in onshore network ownership.

Summary of consultation responses

5.5 Overall, aside from two of the three existing incumbent TOs, majority of the respondents were supportive of our proposal to allow CATOs to recover their revenue through TNUoS. The incumbent TOs were of the view that treating CATOs like OFTOs to allow them full revenue recovery during periods of TNUoS under-recovery would increase their risk exposure (in terms of TNUoS under-recovery.) Two non-TO respondents, while agreeing with the proposal in principle, expressed concern that it could distort the signal achieved through the wider TNUoS charge.

5.6 One TO agreed that our proposal suited competition but added that it would increase the risk borne by the TOs during periods of TNUoS under-recovery. It also welcomed our consideration to revisit the decision in future, depending on the level of CATO penetration in onshore transmission network ownership.

5.7 The other two TOs expressed concern that the proposal presented significant risk to TOs who would have to assume all of the revenue collection risk for both OFTOs and CATOs as the proportion of projects undertaken through CATOs increases. This incremental cashflow risk had not been quantified under the ESO's Impact Assessment. Ofgem was asked to consider if the TOs should continue to bear this risk and its appropriate mitigation / compensation.

5.8 Among the non-TO responses, two respondents supported the proposal of CATOs revenue recovery through TNUoS and treating them along the same lines as OFTOs based on their company structure and capitalisation. However, using the same means as OFTO regime, eg, charging CATO assets on the same basis as OFTO assets (although a CATO asset could be similar to a TO asset other than ownership), would likely distort the signal achieved through the TNUoS charge. These respondents were of the opinion that this would result in driving generators away from the location of CATO projects that cost more to build than the historical average in the TNUoS model, and in turn create an incentive for generators to locate where CATO assets would be less expensive than the historical TNUoS average.

Decision

5.9 We will allow CATOs to recover their full revenue irrespective of TNUoS under-recovery by the ESO in particular years. We remain open to re-visiting this decision once CATO penetration in onshore network ownership has risen to a level that warrants our intervention to ensure fairness among market participants and protection of consumers' interest.

Rationale for decision

5.10 It is of paramount importance that the Early Competition model for onshore transmission networks serves the primary purpose of protecting consumers' interests while remaining attractive to bidders. The model's viability therefore depends upon creating certainty by preventing risks that deter market participation. We have taken this factor under consideration while reaching our decision.

5.11 There are likely similarities between CATOs and OFTOs in company structure and capitalisation while being significantly smaller in size and structure to the incumbent TOs. Therefore, allowing CATOs to recover full TNUoS revenue recovery is more suitable for the financing structure expected to be delivered through Early Competition. This revenue certainty will also allow risk management for bidders which is in consumers' interest.

5.12 While in theory, concern raised by the incumbent TOs about the residual risk (of revenue uncertainty) arising for them from TNUoS distribution if CATOs are allowed full revenue recovery during periods of TNUoS under-recovery may hold some weight, it must be noted that we will extend similar treatment to all successful bidders, including incumbent TOs who win a CATO tender, as part of running a fair competition.

5.13 Furthermore, the TOs' responses acknowledge that the magnitude of this risk exposure is dependent upon the proportion of the number of CATOs relative to the aggregate electricity transmission sector. This implies that it will take some time to reach this threshold level of CATO penetration in the electricity transmission network to trigger concerns about risk exposure to TNUoS revenue uncertainty for the incumbent TOs.

5.14 In response to the concern expressed about creation of a secondary locational signal leading to distortion of the signal achieved through the wider TNUoS charge, similar treatment of CATOs to OFTOs will be limited to the TNUoS recovery model and would not use a charging methodology similar to OFTOs. Offshore generators pay most of the cost of the OFTO assets, and these are levied through their offshore local charges. The connecting offshore generator is almost entirely responsible for meeting the costs of the OFTO asset to which it is connected. In short - the offshore generator, as the sole user of the asset, faces charges which are directly related to the construction cost of that specific asset.

5.15 Onshore local circuits transport power from a generator to the Main Integrated Transmission System (MITS). The costs assigned to these assets is not linked to the actual cost of their development, but to the value assigned to the relevant asset type (400kV overhead line, 275kV underground cable etc.) under the TNUoS charging methodology, set out in the Connection and Use of System (CUSC) code. These are based on a historical average construction cost of that type of asset. Onshore local

circuits can be used by multiple generators, each facing the same cost signal. In summary, the generator, who may be a sole user, or share the asset with other generators, faces charges which are based on an average historical construction cost, which is not directly related to the construction cost of the asset in question.

5.16 Therefore, concerns raised around secondary locational signals and distortion of signal achieved through the wider TNUoS charge are not relevant to the CATO regime under the Early Competition model.

6. Options for dealing with CATO/tender failure

Section summary

We set out our view and decision on dealing with various scenarios of Competitively Appointed Transmission Owner (CATO) / tender failure under the options available to us.

Background

6.1 Delivery of critical projects in a competent and timely manner is of critical consideration in terms of the interest of consumers. To this end, just like the incumbent Transmission Owners (TOs), CATOs will be governed under a specific set of obligations and requirements to act in an efficient and sensible manner while delivering essential services. However, there may be circumstances arising during the tender process, project development and operation that may lead to a tender / CATO failure.

Consultation position

6.2 In our consultation we highlighted different circumstances in dealing with an Early Competition tender failure and where it may be necessary to appoint a CATO Of Last Resort (OLR). Based on those different circumstances, we took a nuanced approach towards this process as a 'one-size-fits-all' approach would not be appropriate. We set out the principles and different options we will apply when appointing a CATO OLR depending on the project specific details.

6.3 We highlighted that before employing the CATO OLR process, our priority would be to exhaust all other options while ensuring un-interrupted transmission of electricity on the lowest cost to consumers. While we reserve the right to implement the CATO OLR mechanism at any stage during the project lifecycle should the need arise, we view this option as being one of the extreme elements at the end of the framework spectrum. For example:

- if there are failures ahead of energisation, we would always consider re-tendering the project if sufficiently early.

- in the majority of cases, we are likely to consider whether it is in consumers' interest for a failing CATO project to be delivered by an existing TO through the prevailing RIIO price control arrangements (eg LOTI/ ASTI) before considering implementation of the CATO OLR mechanism. This would essentially involve providing sufficient funding to account for the costs and additional risks involved with the TOs taking on the work of a failed or failing CATO.

6.4 However, under several circumstances it may be necessary for Ofgem to appoint a CATO OLR to build / operate a project that was chosen for an Early Competition tender:

- The failure of a CATO during construction due to financial distress
- The failure of a CATO during construction due to a significant breach of licence conditions
- The failure of a CATO during operations due to financial distress
- The failure of a CATO during operations due to a significant breach of licence conditions
- CATO awarded the tender decides not to proceed with project construction
- CATO requires amendments to its regulatory arrangements that undermine the integrity of the Early Competition tender process
- We are unable to appoint a CATO due to failure of Early Competition tender exercise
- End of tender revenue period.

6.5 For valuation and transfer of assets, we proposed that in line with the current Offshore Transmission Owners (OFTO) OLR regime:[11]

- Incumbent CATO would receive a transfer value reflective of the net asset value after regulatory depreciation (unless such value was negative, in which case the CATO OLR would be the recipient)

- CATO OLR will receive an annual revenue stream sufficient to fund an efficiently operating business and to meet the cost of purchasing the assets (where such cost falls to the CATO OLR).

Summary of consultation responses

6.6 Responses to our consultation supported the idea of exhausting all the possible options to ensure un-interrupted supply of electricity before invoking a CATO OLR process. Stakeholders agreed with having a range of options at our disposal that we would consider depending on the different lifecycle stages at which a project might fail.

6.7 Non-TOs choosing to respond to this issue supported our consultation position. However, a couple of non-TO respondents were concerned that running a competitive process for appointing a CATO OLR would result in delays and increased costs to consumers.

6.8 One TO also supported our approach in dealing with tender / CATO failure and employing the CATO OLR mechanism after exhausting all other avenues. It called for similar principles to those contained in the Licence Conditions for OFTO OLR to be applied to the CATO OLR approach.

6.9 The TO further sought clarity if there would be due consideration of costs and risks when establishing how the TO / CATO OLR would be reimbursed for taking on a

[11] OFTO of Last Resort Mechanism, this guidance outlines the steps we would follow prior to initiating an OFTO of Last Resort process, such as proactively engaging with the licensee and funders or other regulatory and statutory options such as Energy Administration. Guidance on the Offshore Transmission Owner (OFTO) of Last Resort Mechanism (ofgem.gov.uk)

project part way through development, recognising that delivering to the original time frame would likely be challenging, and that there was a potential impact across the wider portfolio of work. It also posed the question whether it would be mandatory for an incumbent TO to take on a project, either within or outside its transmission area.

6.10 Two TOs highlighted the need to exercise due diligence in taking over the asset in question, and to assess the asset condition and specification prior to assuming liability for the operation and management of the asset. Both highlighted reputational concerns in taking over a failed CATO asset and asked for technical standards for CATOs to be held to a similar level of asset delivery as that of TOs, especially in terms of technical specification. One TO suggested to include a clause for exceptional event claims, similar to the OFTO regime when assuming responsibility over an asset. The other incumbent TO said as part of its response that it did not support Ofgem making a unilateral decision on direct appointment of an incumbent TO if assets were in its transmission area. It was also of the view that our proposal had insufficient detail on the impact of CATO delivery on risk for incumbent TOs and consequences for consumers.

Decision

6.11 We have decided to keep a range of potential options alongside a CATO OLR process to best reflect and address the specific circumstances of the project in question in case of a tender / CATO failure. We are of the view that focus needs to be on an optimal outcome for consumers – an optimal approach employed during pre-construction stage, construction stage and operational stage will look different from each other.

6.12 We expect that CATOs will perform to high standards and meet the requirements of users. However, to deal with specific circumstances of failure, a toolkit of suitable options leading to efficient outcomes is imperative to draw upon, including the CATO OLR process. These scenarios are very unlikely, and we would anticipate implementing a range of measures to mitigate these risks in a similar way to the OFTO regime, i.e. through the tender process and licence obligations. Therefore, we would act according to the principles and options outlined in our consultation document for dealing with tender / CATO failure and appointing a CATO OLR where appropriate.

Rationale for decision

6.13 A CATO OLR process is a competitive process and will only be run where we consider that it is in the interest of consumers to do so. Like the incumbent TOs, CATOs will be governed under a specific set of obligations and requirements to act in an efficient and sensible manner while delivering the essential services. Tender documents will specify clear requirements on bidders in terms of their financial resilience as well as monitoring and reporting arrangements to ensure that measures can be implemented at all project stages to avoid and prevent a CATO failure.

6.14 As is currently the case with the OFTO developers, we expect that successful bidders will need to provide and maintain intervention plans to address emerging financial concerns or performance issues as soon as possible. In terms of asset delivery, CATOs will be bound to industry standard norms and technical specifications as reflected in the relevant industry codes.

6.15 The aim of the CATO OLR mechanism is to minimise the risk of an asset becoming stranded or delayed in connecting to the onshore electricity network and provide certainty to all stakeholders that, should a CATO business fail, another CATO would be in place for the entire period of the original revenue term. The flexibility of the CATO OLR mechanism is intended to enable a seamless transition of obligations throughout the revenue term. Therefore, before employing CATO OLR process, other options for ensuring un-interrupted transmission of electricity should be exhausted, including engaging with CATO and its financiers to settle the issues, enforcement action for rectification of performance issues and licence compliance, and re-tendering the project when it is expedient to do so in consumers' interest. To this end, approach to appointing CATO OLR will be decided by Ofgem dependent upon circumstances and specific failure of the incumbent CATO.

6.16 As we have already clarified, the CATO OLR will be appointed in a timely manner in a way that seeks to limit (i) project delays and consumer exposure to constraint cost impact, or (ii) outages/drop in service levels on the transmission network.

6.17 Under the circumstances where we decide to employ the CATO OLR process by exercising the option of directly appointing an incumbent TO, we will aim to reach an

acceptable negotiation position in line with RIIO guidelines. We would expect an incumbent TO to deliver the project, but under complex circumstances, we will reconsider this option and take into account the associated costs, risks and delivery dates on a project-by-project basis. We will continue to engage with the incumbent TOs to address such circumstances and remain open to implementing measures that align with the objectives and successful delivery of the Early Competition model.

6.18 Ahead of the first CATO tender we will issue CATO OLR Mechanism guidance if necessary. We expect this to follow a similar approach to the equivalent OFTO OLR guidance.

7. Conclusion and next steps

7.1 This decision confirms our support to the Electricity System Operator (ESO) in continuing to develop and work towards implementing the Early Competition regime in onshore electricity transmission networks. We expect that the development of Centralised Strategic Network Plan (CSNP) will result in guiding and enabling the Early Competition regime to achieve its desired objectives.

7.2 We will continue to work with the ESO to ensure that the underlying model is supported through appropriate changes to the existing Transmission Owner (TO) licences and ESO licence to fulfil its obligations under the forthcoming role of the National Energy System Operator (NESO).[12] We will also work on the drafting of the transmission owner licence that would be awarded to the successful Competitively Appointed Transmission Owner (CATO). We will review and approve the final tender process, tender documentation, and commercial model ahead of the first competition.

7.3 In terms of the detailed development of the commercial model and the tender process, the ESO has developed and proposed a commercial model which we are currently reviewing and intend to consult on later this year. We are also developing tender regulations for Early Competition in conjunction with the ESO and Department for Energy Security and Net Zero (DESNZ). We aim to consult on these tender regulations during this summer.

7.4 Following the publication of the second transitional Centralised Strategic Network Plan (tCSNP2) by the ESO in March 2024, this decision on policy updates to Early Competition, and our forthcoming consultations / decision on commercial model and tender regulations, we remain on course to identify one project as being suitable for Early Competition by the end of 2024. The next stage in this process is the expected consultation on the regulatory treatment of tCSNP projects. This will include the relevant projects from the tCSNP2 that have been shortlisted for additional feasibility assessment as part of the consideration for the first project to be selected for competitive tender.

[12] Becoming the National Energy System Operator (NESO) | ESO (nationalgrideso.com)

Appendices

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Appendix 1 – Material costs and benefits considered in ESO proposed CBA

Table 1: List of costs considered in the CBA

Costs	**Difference between factual and counterfactual**
Pre-tender costs	Costs incurred by the procurement body associated with preparing for a tender under the factual case (e.g., staff time/hire, tender design/calibration).
Tender costs	Costs incurred by the procurement body for running the tender under the factual case (e.g. bid assessment, due diligence, external support fees, commercial negotiation and Post Preliminary Works Cost Assessment (PPWCA)).
Bidder costs	Costs associated with developing bids (e.g. initial design, building bid teams, supplier engagement, surveys) for the successful bidder under the factual case.
Large consortium costs	Costs incurred by the bidder for assembly of large consortium which do not apply to sole or small consortia under the factual case.
Project cost estimate	Under the factual case these are bidder's initial design costs following the PPWCA. These costs are in comparison to the counterfactual cost allowance under RIIO-T2 regime.
Constraint costs	Additional costs incurred by the ESO under the factual case due to the timescales of delivery of the scheme relative to the counterfactual (e.g. these can be driven by varying construction time periods, potential for delay, time to tender, etc.).
Additional system costs	Additional costs incurred by the system operator under the factual case in relation to implementation (e.g. outage requirements), operation (e.g. availability) or existing system reinforcements. This is effectively

	netted off against any system costs associated with counterfactual delivery.
Financing costs	Under the factual case this is benchmarked cost of debt (i.e. base rate plus margins and any reserve costs (e.g. Lifecycle Reserve Accounts (LRA) or Lifecycle Reserve Facilities (LRF)), cost of equity incurred by the bidder and levels of gearing. Under the counterfactual case this will be the WACC for the relevant regulatory period. The difference in financing costs is driven by the overall WACC achieved.
Contract/ License management	Costs incurred by the procurement body under the factual case, associated with preliminary works stage, PPWCA, performance monitoring, payments, conflict resolution, etc.

Costs	Difference between factual and counterfactual
Difference in terminal value	These costs are incurred under both cases to operate assets beyond the revenue period. For example, the counterfactual case may have a RAB at the end of the revenue period when there is no residual value in the factual case. The additional return on the WACC and depreciation in the counterfactual would be post-revenue period cost to consumers which would exist under the counterfactual case and not under the factual case.
Incentives	These are potential additional costs incurred by the procuring body due higher incentives. How incentives are set for the factual case is described in the ECP. Under the counterfactual this would be RIIO incentives mechanisms and rates.
Planning cost	Visual impact of early competition design may involve additional costs for stakeholder management, time in planning process and changes to design under factual case in relation to the counterfactual case.
TO portfolio costs	Under the counterfactual case, incumbents may have lower costs due to economies of scale and scope (e.g. having local operations teams and in-house expertise, avoidance of interface costs). Whereas under factual these could be additional construction or operational costs to meet obligations.
Additional regulatory costs	Additional costs associated with award of network solutions under the factual case including licencing, oversight, monitoring, engagement, reporting etc.
First of a Kind premium	This is applicable to the first few tender rounds as they may not be fully efficient due to lack of precedents, knowledge and higher risks from adopting new delivery route. As the process is repeated bidders and the procuring authority would gain more experience and knowledge and be able to more accurately price and manage risks leading to reductions to the FOAK premium.

Table 2: List of benefits considered in the CBA

Benefits	**Difference between factual and counterfactual**
Innovative technology, process or system	Benefits from more efficient / innovative technology, processes or systems that could be introduced by bidders under the factual case that is typically not used by the incumbent. This could result in capex or opex efficiency adjustments to the counterfactual project cost estimate.

Access to a wider pool of expertise and capital	Bidders could bring in a wider pool of experience (including international) and capital (including financial instruments) which TOs do not typically use. This could result in a lower cost of equity under the factual case. Cost of equity would be an input to the model as a cost under the factual and the counterfactual. The benefit would be captured as the delta between these two inputs
Detailed allocation of risk	The use of project finance structures under the factual case will enable detailed allocation of risk which can allow for higher levels of gearing but with potentially higher cost of senior debt compared to notional in counterfactual. This is still likely to mean a net benefit driven by the delta in overall cost of debt and gearing between the factual and counterfactual.
Bidder portfolio effect (economies of scale)	This could appear when the bidders have economies of scale (e.g. a large transmission company with expertise in a particular geography or skills which is new or not accessible by the incumbent TO).
Revenue start point	Under the counterfactual case, consumers bear the cost as expenditure for development of the need begins whereas under the factual revenues for bidders start post commissioning of the asset. This timing difference in cash flow results in a benefit under the factual.
Reduced overrun exposure	Under the factual case, the costs are fixed following a PPWCA so consumers do not pay for additional costs incurred post that stage. Under the counterfactual there is a cost sharing mechanism. This could result in a potential benefit to consumers.
Ecological impact	Consumers could benefit from increased biological and ecological diversity from construction and operation of the asset compared with the solution proposed by the incumbent under the counterfactual case.

Carbon emissions	Consumers could benefit from potentially reduced carbon emissions from construction of the asset proposed under the factual case compared to the counterfactual case.
Social benefits	Consumers could receive social benefits such as job creation or some form of diversity benefit from the factual solution compared to the counterfactual.

Table 3: How these costs and benefits are classified in the CBA

Classification	**Costs**	**Benefits**
Elements that are excluded from the methodology and model. These are not considered relevant for the methodology	Differences in terminal value Incentives Planning costs	Innovation in social benefits Reduced overrun exposure
Elements that are included in methodology but not the model. Impact of these factors on total value for consumers will be assessed qualitatively	Large consortium costs Additional system costs TO portfolio effect	Innovation in ecological impact Reduced carbon emissions Bidder portfolio effect
Elements that are quantifiable and included in the CBA model subject to additional sensitivity analysis.	Project costs Constraint costs Financing costs	Innovation in technology, process and system Access to wider pool of debt and equity capital Detailed allocation of risks
Elements that are included in the CBA model without additional sensitivity analysis.	Pre-tender costs Tender costs Bidder cost First-of-a-kind premium Contract/ License management costs Additional regulatory costs	Revenue starting point

Appendix 2 – List of ESO proposed qualitative assessment factors

Title	Description
Large consortium costs	Costs involved in assembling and managing large consortia. For very large projects (in excess of £1bn) there is limited market precedent of delivery by sole bidders or small consortia. Lenders typically prefer to lend to projects of this nature in syndicates which typically leads to longer negotiation, more contracts (e.g. intercreditor agreements, ISDAs14 etc.), increased due diligence etc which would not necessarily exist if there were only a single lender.
Additional system costs	These additional costs range depending on the solution and could include varying system reinforcement costs. The key point for consideration for early competition is whether a different solution would likely drive materially different outcome for additional system costs given the underpinning assumption that the counterfactual and factual solutions are functionally the same.
Bidder portfolio effect	The need being tendered may have characteristics which make it more efficient for the incumbent TO to develop compared with a third party due to economies of scale. The ESO will need to consider feedback from the pre-tender process to assess this factor. If the market is of the view that it is not able to be more efficient that the TO then that need may be less suitable for competition.
Innovation – ecological impact	This factor would depend on whether a bidder is likely to propose a solution which could deliver ecological benefits which the TO's reference design would not. Similar to the portfolio effect factor the ESO will need to rely on feedback from the market in the pre-tender process to inform the assessment for this factor. Additionally, the ESO will need to consider the policy steer from government and Ofgem on what level of weighting ecological impact should have in the tender process.

Innovation – systems, processes and technology	This is a benefit expected to be realised from the introduction of early competition. Whilst some of the benefits from improved systems, process and technology are captured as part of the cost efficiency adjustment, the ESO will need to consider other qualitative benefits such as improved adaptability to future changes, smoother operability etc compared to the solutions proposed by the incumbent. As this benefit is captured under both the qualitative and quantitative analysis caution is needed to ensure that this benefit is not overstated. The ESO should consider the scope for potential innovation versus the benchmarks.