

Early Competition Plan

Onshore electricity transmission

April 2021



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1 Executive summary

Ofgem's ask

As part of the [RIIO-2 Sector Specific Methodology Decision](#), Ofgem requested that the Electricity System Operator ("ESO") develop a plan for introducing early competition into the onshore electricity transmission network. Ofgem set out their minimum expectations for the plan in [an open letter to the ESO in 2019](#) and [an update on our progress in 2020](#), including a clear expectation that the ESO engages and consults with relevant stakeholders.

Developing a plan for early competition

This Early Competition Plan ("ECP") sets out our recommendations, built on the basis of invaluable feedback from our stakeholders and the independent challenge from the ESO Networks Stakeholder Group ("ENSG"). The ECP has been developed with support from KPMG LLP.

In reaching our recommendations we engaged with over 75 individuals from 50 different organisations. As set out in Figure 1, our engagement process was broad and iterative, providing a variety of opportunities for stakeholders to understand and to input their views on the range of issues the early competition model needs to address. The range of inputs received have been instrumental in shaping our recommendations, and we believe that our recommendations propose a model of early competition which is attractive to bidders and protects the interests of consumers.

Figure 1: Early competition engagement timeline



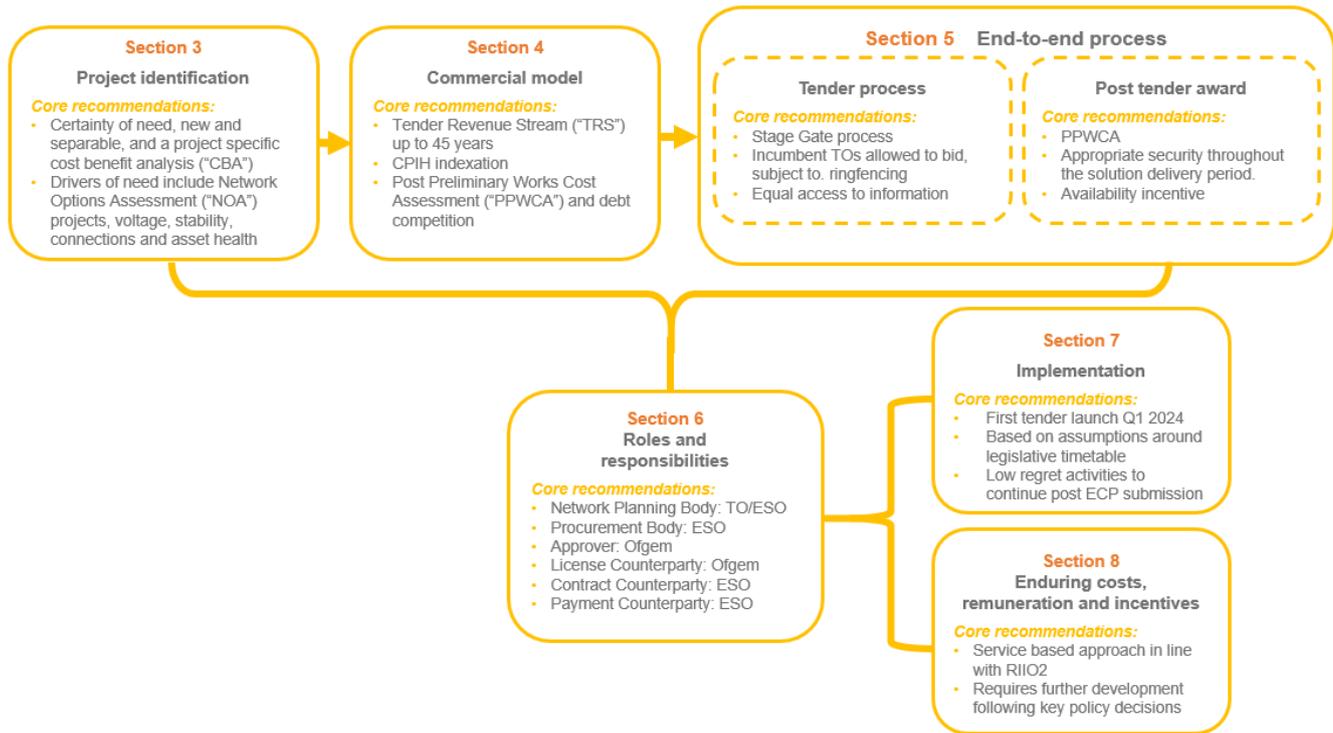
ECP structure

The ECP is comprised of six sections: how projects are identified for early competition; the commercial model; the end-to-end process for early competition; the key roles and responsibilities to facilitate that process; the implementation phase; and remuneration for the roles that the ESO could perform. Figure 2 presents these sections, the relationships between them and sets out our core recommendations for each.

There are two overarching considerations which should be noted when reviewing the ECP:

- First, we assume that early competition will be enabled under new and bespoke legislative and regulatory arrangements to be developed by BEIS and Ofgem. New legislation is required to allow for new transmission licences to be awarded; and current procurement regulations have conditions which may not be compatible with early competition
- Second, Ofgem's [Review of GB System Operation](#) and the following BEIS review of institutional arrangements may have a material impact on our recommendations. The overarching points of the Review are aligned to our ECP. However, details of the future role of the ESO, once confirmed by BEIS, will likely have the most impact on the Network Planning Body function (set out in Section 6.2.5) and the potential need to manage conflicts of interest.

Figure 2: ECP structure and core recommendations



Core recommendations

Project identification

There can be a number of different drivers for network investment (for instance reinforcements, compliance, connections, stability, voltage and asset replacement). Projects will only be selected where there is an opportunity to efficiently deliver net consumer benefit. Here we set out our recommendations of which drivers and criteria should be considered when identifying projects for early competition.

- **Criteria for competition** – The criteria we are proposing to use to identify projects suitable for early competition are (1) certainty of need, (2) that the project is new and separable, and (3) the positive outcome of a project-specific, consumer benefit, cost-benefit analysis ("CBA"). We are not proposing a lower value limit for early competition projects
- **Drivers of network investment need** – Our main focus of the project identification process is based on the Network Options Assessment ("NOA"). We also recommend that non-NOA driven projects (i.e. connections, compliance and asset health) should be considered for competition and set out any additional considerations that may be needed
- **Project identification process** – We recommend launching a competition at the "early" stage (i.e. after initial solution development) rather than "very early" stage (i.e. before initial solution development) to reduce the complexity of the tender process.

One of the key advantages from competition at an early stage (i.e. before the initial design has been done) will be allowing for a range of innovative solutions to be proposed. We recommend that, should a project be found to be suitable for early competition, then it should be competed at that stage.

Commercial model

The commercial model looks to balance the protection of consumer interests with attractiveness to potential bidders. It aims to foster competition and maintain competitive pressure post tender award.

We recommend a Tender Revenue Stream ("TRS") model as it enables a wide range of companies to participate and aids direct comparability between bids. It also protects consumers for the entire duration of the electricity transmission licence or contract.

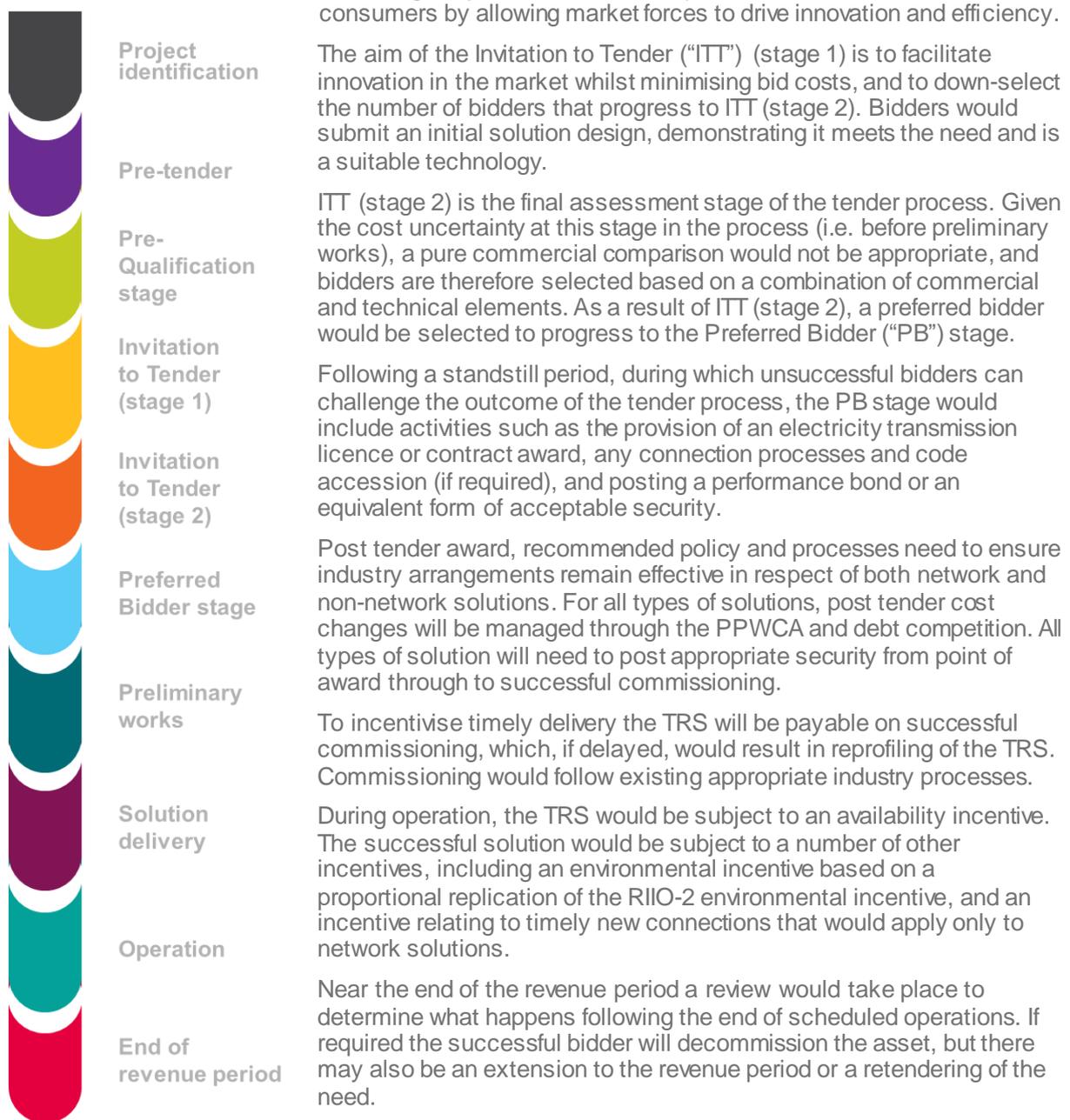
We recommend the revenue period is 'need dependent' and would be determined by the Network Planning Body (ESO) prior to a tender launch for up to a maximum of 45 years. During the revenue period we also recommend inflation-indexing a proportion of the TRS (at Consumer Price Index including owner occupiers' housing costs ("CPIH")) to achieve a natural hedge.

We recommend that at the point of tender award, the cost of equity, overheads and margins are fixed. We also recommend that the cost and size of debt (and so gearing ratio) and the underlying costs (e.g. labour and materials) remain adjustable via pre-defined mechanisms i.e. a Post-Preliminary Works Cost Assessment ("PPWCA") process and a debt financing competition. To maintain competitive pressure, we propose adjustments are only allowable on certain elements within the PPWCA, and that there is an overall cap on upward adjustments.

End-to-end process for early competition

Our end-to-end process for early competition includes the tender process and post tender award stages as set out in Figure 3.

Figure 3: End-to-end process



Roles and responsibilities

The ECP defines the roles and responsibilities needed to facilitate early competition. The table below sets out our recommendations as to which parties are best placed to undertake each role. We also summarise the rationale for the recommendations.

Table 1: Roles and responsibilities

Roles and Responsibilities	Key considerations
<p>Network Planning Body – is an existing network planning role and will be responsible for:</p> <ul style="list-style-type: none"> Assessing suitability for competition Supporting the technical assessment of bids. 	<ul style="list-style-type: none"> Potential conflicts of interest between transmission owner (“TO”) network planning roles and their participation in early competition Mitigation of conflicts through changes to network planning roles should be considered further in parallel to the BEIS review of institutional arrangements, due in 2021 As a minimum, we recommend: <ul style="list-style-type: none"> TOs – to ringfence bidding teams to mitigate conflict of interest with their role in supporting connection feasibility assessments and providing initial solutions for the NOA process ESO – to have an enhanced role in initial solution development to mitigate conflicts of interest with TOs providing initial solutions for NOA.
<p>Procurement Body – will be responsible for:</p> <ul style="list-style-type: none"> Design of the procurement structure and process Supporting the development of tender and contractual documents as well as management of the procurement process. <p>Contract Counterparty – will be responsible for managing and monitoring any obligations placed on a successful bidder who will hold a non-network contract (i.e. for any solutions that do not perform the function of electricity transmission)</p> <p>Payment Counterparty – will be responsible for managing financial transactions between the successful bidder and the other counterparties.</p>	<p>ESO is best positioned with:</p> <ul style="list-style-type: none"> Relevant experience and knowledge Existing relationships with key stakeholders Less cost and time required for upskilling compared to a new entity Economies of scope across roles Alignment with RIIO-2 ambitions.
<p>Approver – will be responsible for making the formal decision to progress to stages of the early competition end-to-end process</p> <p>Licence Counterparty – will be responsible for managing and monitoring any obligations placed on a successful bidder that is issued or has a transmission licence.</p>	<p>Ofgem is best positioned with:</p> <ul style="list-style-type: none"> Alignment with statutory duties to protect consumers Legal authority to manage and issue licences Experience in comparable roles (e.g. milestone approvals for interconnector business cases).

We go on to discuss the impacts of the roles the ESO is proposing to undertake and consider the enduring structure for these roles.

Role of the TOs

We recommend that TOs should be able to participate in early competition. They should also compete as bidders do, to facilitate the most transparent and fair process.

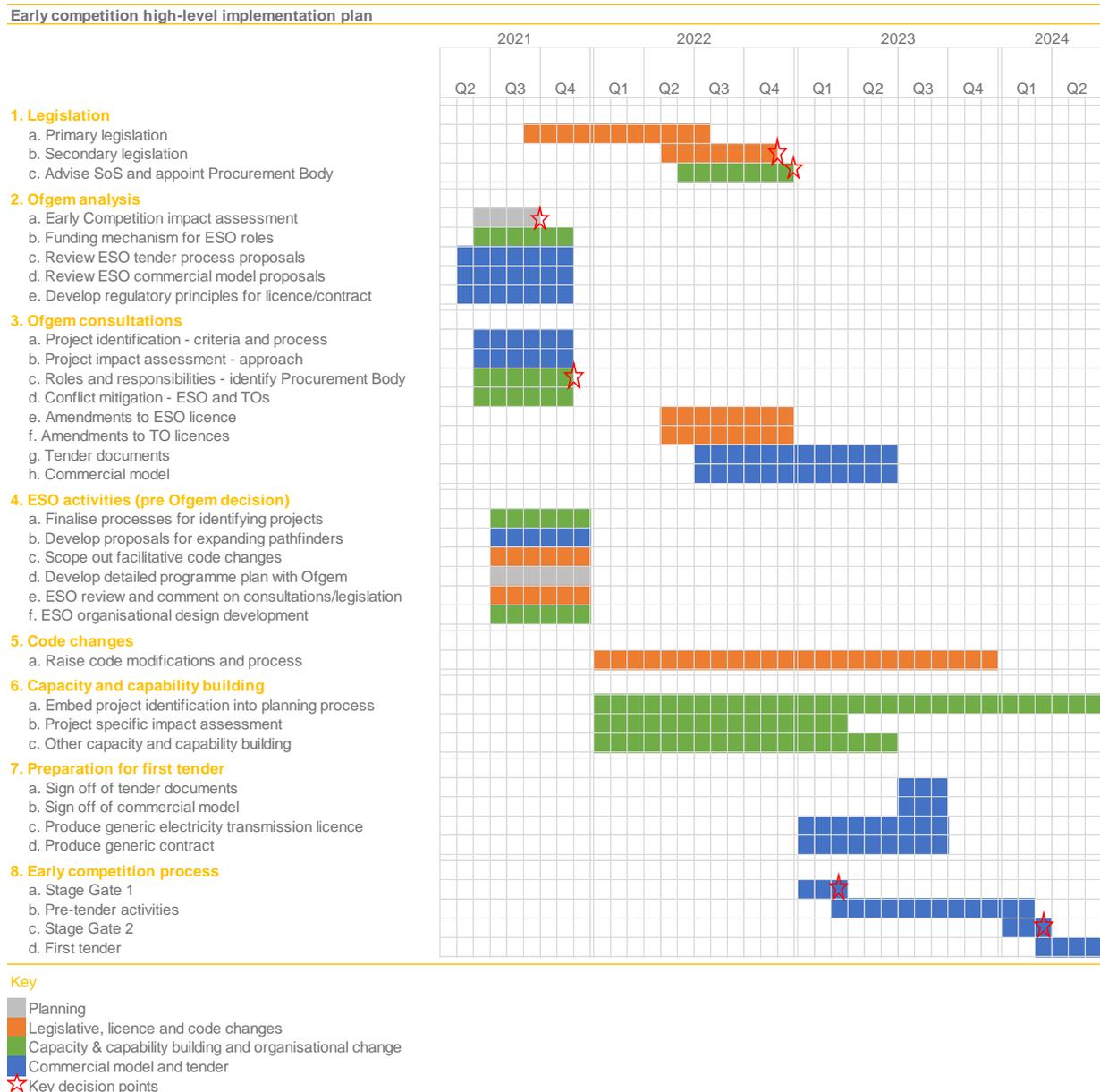
TOs bidding into an early competition and also having a role in network planning could give rise to potential conflicts of interest. We therefore recommend some form of ring-fencing or functional separation of the TO bidding team from the team working on the Network Planning Body (TO) role.

We also recommend that network planning roles and responsibilities for early competition are further considered in light of broader work looking at the ESO’s role in network planning considered further in parallel to the BEIS review of institutional arrangements, due in 2021.

Implementation

We recommend that the earliest the first tender could be launched is Quarter 1 2024. Figure 4 sets out the timetable to achieve this and is based on assumptions regarding the passage of the necessary legislation by Government and decisions being taken by Ofgem.

Figure 4: Implementation plan and timeline



To help achieve this timetable, we have agreed with Ofgem to continue a number of activities ahead of a decision on early competition. These include working on a detailed implementation programme, developing criteria and processes for identifying network needs for tender, and looking at adapting our operating model to accommodate the new roles we could undertake related to early competition.

Enduring costs, remuneration and incentives

Early competition as set out in our proposals is estimated to be in the region of £4.8m to £6.3m to implement. The cost of running competitions will vary with the project size and complexity, but we expect a portion of the cost being fixed regardless of size. For a £250m project we estimate the cost to run a tender of between £4m – £5.75m (1.6% to 2.3% of project value).

We have considered evidence around taking on new roles for early competition, which we believe represent four different service offerings and have concluded that it will substantially alter our risk profile. As all four roles require us to take on additional risk, we would expect some form of additional remuneration for performing the services to balance the asymmetry of the risks and incentivise us in our central role. Our view is that the most appropriate approach to remuneration is to price the services rather than the risks associated with the services.

We consider that the existing RIIO-2 cost recovery mechanism is reasonably well suited to recover costs for these services and so there is no need to operate a parallel regulatory cost regime for these roles. In terms of incentivisation our view is that the incentives for the early competition roles and services should be incorporated within the existing ESO incentive framework.

We note our early view will require further development and stakeholder input during the implementation phase and may evolve as more information becomes available and key policy decisions for early competition are made by Ofgem/BEIS. We would expect that these issues would be subject to consultation at the appropriate time.

Afterword

The recommendations set out in this ECP are our best view of a model for early competition based on the evidence available to us and the views of the stakeholders we engaged.

We thank all the stakeholders who engaged with this project for taking the time in helping us develop these recommendations. Their challenge, suggestions, support and feedback have been instrumental in shaping our recommendations.

Further development of recommendations and engagement with stakeholders will be required along with development of appropriate legislation, licence(s) and code changes in any subsequent implementation phase.

2 Background and approach

2.1 Introduction

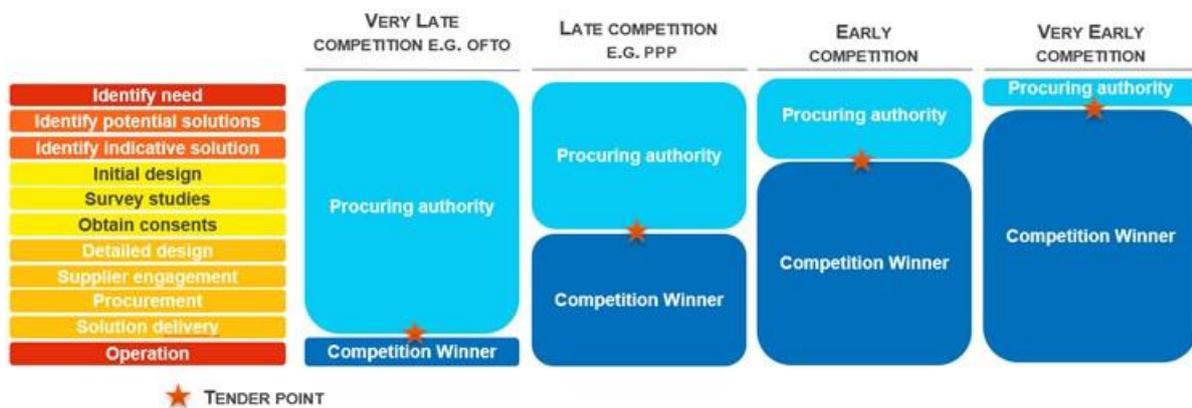
The future of energy is changing. Consumers are looking for greener sources of power, but these have to remain affordable and reliable. Electricity transmission has a central role to play in delivering on this objective.

Ofgem has been developing competition policy for the delivery of onshore electricity transmission for a number of years. It first introduced the concept of a Competitively Appointed Transmission Owner (“CATO”) as part of the [Integrated Transmission Planning and Regulation \(“ITPR”\)](#) project in 2013-2015, developing it further through the [Extending Competition in Transmission](#) project during 2016. Delays in implementing a CATO regime arose from difficulties in legislative scheduling.

The CATO regime being developed by Ofgem is a form of “late competition”. Late competition is where the tender is launched after the procurement authority has developed the initial design and obtained the consents/planning permission.

The late competition model has been widely used in other infrastructure markets (e.g. Public Private Partnerships (“PPP”)). Ofgem had previously introduced a form of “very late competition” into offshore transmission, where the Offshore Transmission Owner (“OFTO”) acquires the asset post completion.

Figure 5: Models of competition



2.1.1 What is early competition?

“Early competition” is where a tender is launched after an indicative solution has been identified but before the initial design has been done and preliminary works (including surveys and consents) have been undertaken. Bringing the tender point even further forward, prior to an indicative solution being identified, would mean a “very early competition”, with only the need being competed.

Early or very early competition could be the key to unlocking further innovation to address network needs. It could help break down barriers by encouraging new solutions from both network solution providers (i.e. CATOs) and non-network solution providers.

For late competition, bidders are able to price their bids based on their detailed design. For early and very early competition the level of cost uncertainty at the tender stage is likely to be significantly higher as the consenting, planning and surveys could lead to material revisions to the design post-award.

Any early or very early competition model must balance system needs against costs of procurement to ensure the right solutions are selected, while always keeping consumers and security of supply front of mind.

2.1.2 Scope of the Early Competition Plan (“ECP”)

In the [RIIO-2 Sector Specific Methodology Decision Document](#), published May 2019, Ofgem requested that the ESO develop a plan for early competition.

Further details were provided in [Ofgem’s letter of 24 September 2019](#), noting that the plan is to focus solely on models of early competition (i.e. competition that occurs before a detailed solution design is produced), with Ofgem continuing the thinking and development of late competition models (i.e. competition that occurs after the solution is designed and consented).

Ofgem subsequently published [an update on early model competition in March 2020](#). This set out their expectations for early competition, provided an update on phase 1, the interactions with RIIO-ED2 and the next steps. Ofgem noted in this letter that design-only competitions were better explored as part of existing workstreams on innovation rather than in early competition.

Ofgem asked the ESO to produce a plan looking at how early models of competition could be introduced to construct and own transmission assets, by April 2021¹. The details of the request were set out as follows (excluding the design-only competition):

A. A clear description of at least two proposed early competition models, covering the whole project lifecycle. These models should cover:

- a. An early competition model for the **design and deliver** of a solution (sometimes referred to as Design, Build and Own (“DBO”). This model should be able to operate:
 - i. once legislation is in place to allow CATOs; and
 - ii. before CATO legislation is in place (such as existing network licensees competing with parties able to deliver non-network solutions).

As part of this, Ofgem also asked the ESO to:

- a. outline views on criteria to determine which types of system needs are better suited to early competition for design and delivery
- b. consider who should be the counterparty for non-network solutions
- c. consider how all participants can be given equal access to all of the necessary information required to submit bids (such as land surveys)
- d. consider the role of data, including consulting with the Energy Data Taskforce.

B. Roles and responsibilities of parties under each of the early competition models

Ofgem asked the ESO to:

- a. outline the proposed roles and responsibilities of all parties in each model
- b. consider the scope of the ESO’s own possible role, including practical implications (costs, expertise and risk implications)
- c. consider what role the ESO could play in supporting competition at the distribution sector level from 2023 (e.g. auditing, running and/or assessing the tender process).

C. Interactions with ESO RIIO-2 Business Plan

Ofgem asked the ESO to:

- a. explicitly indicate which new roles or functions are not covered under existing revenue streams of RIIO-1 and prospectively RIIO-2
- b. set out how its performance in delivering the proposed early competition models could best be measured through the RIIO-2 performance and incentives framework.

¹ Ofgem initially asked us for a plan by February 2021 and we subsequently agreed an extension to April 2021

2.1.3 Context

There are two key assumptions which underpin the ECP and should be kept in mind when reviewing our recommendations:

- We assume bespoke new legislative and regulatory arrangements by BEIS and Ofgem will be in place to facilitate early competition
- All our recommendations are based on the status quo of responsibilities and processes for network planning (as BEIS' review of system operation or the expected consultation on institutional arrangements are yet to take place).

We have developed our recommendations and the model for early competition based on the information currently available. We recommend that a number of areas are further considered during the implementation phase as there are dependencies on decisions by Ofgem and BEIS on competition and the review of system operation.

Without our first assumption (that BEIS/Ofgem will develop and implement bespoke new legislative/regulatory arrangements), many elements of the ECP would no longer work. Our second assumption (using status quo responsibilities and processes) mean that the expected reviews and consultations by BEIS on the role of the ESO may lead to material changes to the way that network planning is undertaken in GB and will have knock on impacts on our recommendations.

Legislative and regulatory arrangements

The elements of early competition which are not compatible with the existing arrangements are: the award of a contract or transmission licence from the same procurement process; the treatment of reasonably unforeseeable change to the winning solution following the preliminary works stage; and the potential risk that early competition contracts are considered as "construction contracts".

Granting of CATO licences

Bidders into early competition that propose a network solution would be awarded a CATO licence if successful. However, the current legislative arrangements in GB do not allow for CATO licences to be granted following a competitive process. By contrast, tenders where the successful bidder is a non-network solution do not require a legislative change to enable them to participate in the market.

As primary and secondary legislation to enable early competition has not yet been developed, we have used the [2016 draft CATO legislation](#) as the starting point for developing our plan. We have assumed that our recommendations for the early competition model would be facilitated by the new legislation, with any required changes incorporated into the draft CATO legislation as necessary (we have not developed the required changes in detail).

Part of the request from Ofgem to the ESO when developing the plan was to consider what pre-legislative form of early competition could be developed. Pre-legislative forms of early competition are discussed in more detail in Section 7.2.

Procurement regulations

We also considered whether the Utilities Contract Regulations ("UCR") were the appropriate procurement regulations for early competition. These are the default regulatory arrangements for procurements in the utility sector.

We received legal advice that there are a number of key elements of early competition which are inherently incompatible with the UCR. Two key examples are the direct competition of network and non-network solutions, and also the potential for material change of scope and costs post-contract (or electricity transmission licence) award.

With regards to the first example, the UCR does not allow for the award of an electricity transmission licence on the bidder's choice of solution. A key requirement of early competition is to develop a framework which allows network solutions and non-network solutions to compete. There are a number of other technical challenges; but, from a legal perspective, UCR does not seem to have the flexibility which allows for these circumstances.

With regards to the second example, the UCR has requirements which limit the amount of changes to the contract post-award on the basis that the amendments can be construed as being material

changes which can prejudice unsuccessful bidders. Contract (or electricity transmission licence) award under early competition, by design, takes place before the preliminary works are complete. The scope and costs of successful bidders' projects may materially change during the preliminary works stage. For example, the route of a transmission solution may need to change due to a ground condition which was not previously known and therefore was reasonably unforeseeable. Early competition therefore needs a legislative and regulatory framework which allows for material changes to the commercial arrangements post-tender award without the need to re-tender the project. More discussion on how our model accommodates such changes can be found in Section 5.3.1.

We assume that to enable early competition as we have recommended, new primary and secondary legislation with early competition tender regulations will be required. These will likely be comparable to the Offshore Transmission Owner ("OFTO") tender regulations.

Our recommendations for early competition and in particular our recommendations for the tender process are therefore not based on UCR compliance but they do draw heavily on the principles of UCR e.g. fairness and transparency, etc. For the avoidance of doubt, we expect any new procurement legislation will only apply to the competition run by the Procurement Body in respect of the network need and any other procurement (e.g. between bidders and contractors) will need to continue to comply with the prevailing procurement legislation.

Construction contracts

The purpose of early competition contracts is the provision of network services, such contracts will also govern the design, construction and technical assessment phases of each project. This means that there is a risk that these contracts could be considered to be "construction contracts" pursuant to the Housing Grants, Construction and Regeneration Act 1996 (the "Act") and, therefore, subject to the provisions of the Act.

The Act requires construction contracts to establish a payment mechanism which entitles the construction party to be paid in instalments, as opposed to payment once construction is complete. The ECP is not intended to operate in this way (and we understand that the late CATO process is not expected to operate in this way either); successful bidders will only have the benefit of a revenue stream once the construction phase is complete and the solution is fully operational. While this represents the fairest approach in terms of consumer value, there is a risk that a successful bidder could seek to rely on these provisions and insist on stage payments or else suspend construction work. This would have a detrimental impact on the project in question, as well as the reputation of the early competition process as a whole.

The Act allows for the creation of exemptions by way of secondary legislation. This route was used in relation to Private Finance Initiative ("PFI") contracts in the Construction Contracts (England and Wales) Exclusion Order 1998 which specifically exempted PFI from the provisions of the Act. To help remove the risk of successful bidders seeking to rely on the payment provisions of the Act, we would recommend that a similar exemption order is created for contracts awarded pursuant to the early competition process.

Review of system operation

We were aware that during the course of the development of the ECP Ofgem was undertaking a review of system operation. We were aware that this was going to be published not long before the ECP was due to be completed.

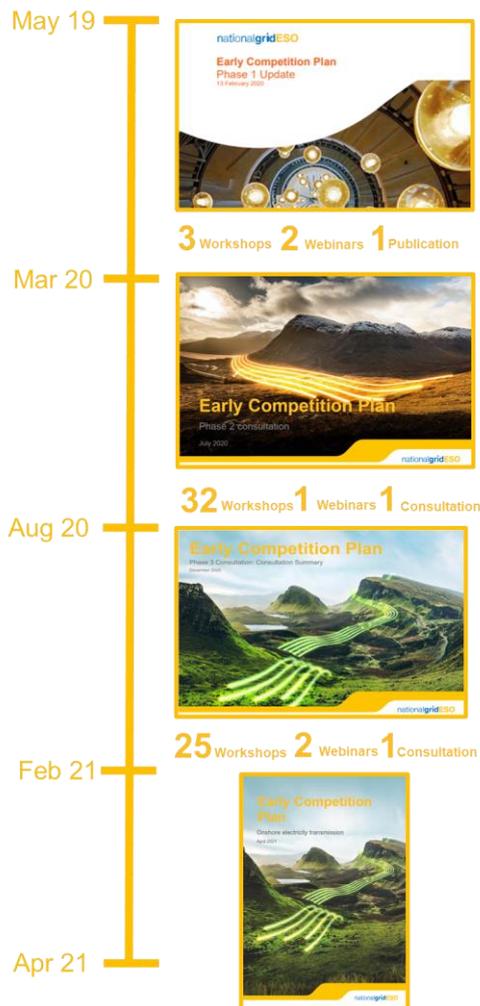
The review of system operation was published 25 January 2021. This set out wide ranging recommendations from Ofgem which broadly related to the ESO taking on more responsibilities in relation to network planning and facilitating competitions. In 2021 BEIS will take Ofgem's proposals and consider if and how they should be implemented and publish a consultation on institutional arrangements with their own proposals.

Clearly the proposals will have a significant impact on the early competition arrangements in terms of initial solution development and running of the competition. The recommendations in the early competition plan are on the basis of the current role the ESO plays and the activities it currently undertakes. We did not substantially adjust any of our recommendations based on the proposals of the review of system operation for two reasons.

Firstly, there was very limited time to update our recommendations based on the suggestions of the review. Secondly, until BEIS takes the recommendations forward and makes its own assessment of the future role of the ESO then the actual impact of the review on early competition is unknown.

2.2 Stakeholder engagement

Figure 6: Four stages of developing the ECP



In developing the ECP we split the project into four key phases as outlined in Figure 6.

- **Phase 1** focussed on high-level models to narrow down options for detailed consideration
- **Phase 2** took the models recommended by stakeholders in Phase 1 and considered the options for the building blocks to create an end to end process. This was consulted on in July 2020 to test our direction
- **Phase 3** looked to build on the Phase 2 recommendations, taking stakeholder feedback to amend and further develop elements ahead of further consultation in December 2020 such as through our Roles Thought Paper in September 2020
- **Phase 4** was the finalisation of our recommendations, taking stakeholder feedback from our final consultation to refine our recommendations set out here in our final ECP.

Phases 2 to 4 were developed with support from KPMG LLP.

Stakeholder engagement has been key to shaping the development of our recommendations. Our engagement strategy has been delivered through a variety of routes. This was in part driven by the constraints brought about by the Covid-19 pandemic, which meant we needed to find different ways to connect with our stakeholders. We have run a series of workshops – face to face and virtual, consultations and webinars across different phases of the project.

Throughout our project we focused on co-creation and engagement with stakeholders at every step of our work. We made sure that we were listening and responding to

stakeholders. We actively sought feedback both in relation to developing the model for early competition and how we conducted our stakeholder engagement. We have captured all stakeholder feedback and how we have responded to it in an appendix to this ECP (see Appendix 10, You Said We Did).

To enable our stakeholders to get involved, we committed to being as transparent as possible throughout each phase. We have worked to ensure that we share stakeholder feedback received openly on our dedicated website along with all of our updates and consultation documents.

During our project, we recognised the benefits of drawing upon expertise from different industry groups. This ensured we were focusing on the right areas, removing barriers to entry and designing the model to achieve fair outcomes for participants that deliver value for consumers whilst remaining attractive for potential investors. We developed our engagement strategy to broaden our traditional stakeholder groups and utilised governance groups to help achieve this.

Along with Ofgem we recognise early competition could have a material impact on several stakeholder groups and therefore fair stakeholder representation was crucial to the development of this ECP. We formed the ESO Networks Stakeholder Group ("ENSG") consisting of a team of industry experts, whose role it was to challenge our stakeholder engagement and recommendations.

Feedback from this group has been invaluable and has influenced how we have conducted some of our engagement. An independent report from the ENSG will be published separately from the ECP.

Further detail on our engagement strategy and stakeholder feedback on our early competition recommendations and stakeholder approach are included in the Appendix, Developing the ECP.

They are generally supportive of our stakeholder engagement, praising the effort that has gone into our stakeholder engagement and the way we have managed to move the work forward in challenging circumstances this year. Whilst the ENSG felt the number of responses to our Phase 2 consultation was disappointing they recognise that feedback was received through other means such as webinars and bilateral discussions. They also commented that we have continued to try to increase audiences, leveraging ENSG contacts resulting in an increase in responses to the Phase 3 consultation. Overall, the ENSG has been satisfied that we have considered the proposals thoroughly. The ENSG has conducted deep dives into contentious areas such as the role of the TO to explore our approach and proposals. Here the ENSG felt we could have explored the counterfactual approach with stakeholders more. In response we organised an additional workshop with industry just on this topic to include feedback into our plan. A note from the ENSG on our engagement "ESO Networks Stakeholder Group - Report to the ESO Board by the Chair" is published separately to this ECP.

2.3 Outline of the recommended model

Central to the plan is an enduring end-to-end process for competing network needs at the 'early' tender stage. Figure 7 provides an outline of our recommended end-to-end process developed in consultation with stakeholders.

Figure 7: Project timeline under early competition



The recommended process requires the establishment of six key roles:

- **Network Planning Body** – identifying network needs suitable for early competition
- **Procurement Body** – running the tender process to recommend the successful bidder for a network need
- **Contract Counterparty** – managing the contract awarded to a successful non-network solution
- **Licence Counterparty** – managing the licence awarded to a successful network solution
- **Payment Counterparty** – making payments to the solution provider
- **Approver** – makes the formal decision to conclude a stage of early competition.

The governance of the process, managed by the Approver, is structured around these five key points:

- **Stage Gate 1** – approve which network needs should be subject to early competition
- **Stage Gate 2** – approve the launch of the tender process
- **Stage Gate 3** – approves the preferred bidder or approval of bidder recommended to win the tender
- **Stage Gate 4** – approve the start of solution delivery
- **Stage Gate 5** – approve the preferred end of revenue period option.

In the rest of this document we set out how we arrived at this recommended end-to-end process, the details of how we see it operating and the steps for implementing the model.

2.4 Document structure

This document, the ECP, is arranged into the following sections:

- **Identifying projects for an early competition** – sets out the basis for selecting network needs suitable for tender (section 3)
- **Commercial model** – describes the recommended revenue model, how cost uncertainty may be dealt with and the allocation of risk between a successful bidder and the consumer (section 4)
- **End-to-end process** – details the recommended process steps and the arrangements in the event of a process failure (section 5)
- **Roles and responsibilities** – identifies the roles required to support early competition and their activities (section 6)
- **Implementation** – sets out an indicative timetable for key activities required to establish the early competition model and the potential cost (section 7)
- **Enduring costs, remuneration and incentives** – considers what early competition may mean for the ESO in terms of costs, risk and remuneration (section 8).

The ECP is supported by a number of other documents, as shown in

Figure 8, which set out additional detail on the recommended model and how it was developed with stakeholders.

Figure 8: Document structure of the ECP



In this document we use four different call out boxes to highlight regulatory or licencing assumptions, information boxes, our recommendations and key stakeholder feedback.



Licencing assumptions

Information boxes



Recommendation



Stakeholder feedback



3 Identifying projects for early competition

This section presents our recommendations for how projects are identified as suitable for delivery through early competition. This section presents the existing Networks Options Assessment ("NOA") process for network reinforcement needs. It then considers the criteria for identifying which network reinforcement needs are suitable for early competition. We discuss other potential drivers of network investment and the project identification process.

3.1 The existing NOA process

The [NOA process](#) identifies and recommends major network reinforcement projects. This process starts with the production of the Electricity System Operator's ("ESO") Future Energy Scenarios ("FES") document, setting out possible scenarios for energy production and demand in the future. The ESO, working with Transmission Owners ("TOs"), then determines the impact those scenarios will have on the network and where reinforcement may be required.

The technical output of this is published firstly in the System Requirement Forms ("SRFs"), which set out the network needs for planning purposes. The ESO's Electricity Ten Year Statement ("ETYS") then sets out this information and highlights its implications more broadly for wider stakeholders.

Following this, TOs identify potential options, such as adjusting settings on existing assets or building new transmission assets. The ESO also considers potential commercial and operational options. In 2020, Ofgem asked the ESO to introduce the Interested Persons Options process to enable third parties to also submit potential solutions into the planning process. The ESO then takes all of these options and analyses which combination of options best addresses the needs of the network.

This analysis is published in the NOA. TOs then respond to the signals in the NOA by progressing, holding/delaying or stopping projects, where appropriate, for the following year. This process is repeated with the decision to proceed, hold/delay or stop being reconsidered annually.

3.2 Criteria for early competition

Our recommendation is that projects should be identified for early competition based on a consumer benefit cost-benefit analysis and if they are new, separable and certain. There should be no minimum value. Projects that do not meet the criteria for early competition could still meet the criteria for late competition and may be competed after preliminary works have been completed. For example, a need may not be certain enough to tender through early competition and so it is progressed through the preliminary works by the TO. Following preliminary works, the need may meet the criteria so that the project could be tendered under the late competition framework.

Recommendation



There should not be a minimum value threshold. Potential projects should be identified based on criteria of new, separable and certain; and subject to a cost benefit analysis of expected achievable consumer value. Projects are also only progressed if there is sufficient market appetite.

In considering our recommendations for the Early Competition Plan ("ECP"), we have focused on areas where there could be consumer value to be gained from competition. This is based on Ofgem's previous work on the benefits of competition and international precedents.

There are additional factors that Ofgem will need to consider in determining their final view on criteria for competition. Ofgem will need to consider the impact of uncertainty on TO business planning and the number of new providers they want to introduce. Further detail on each criterion is set out below.

3.2.1 Value

There could be potential to gain value from projects of all sizes through competition, provided a proportionate tender process is being used. We recommend Ofgem to continue to reflect on ongoing

learnings from the ESO's NOA Pathfinders and international case studies in coming to a final decision on the criteria for identifying projects for early competition.

Stakeholder feedback



All three TOs have highlighted that not having a value threshold will mean they have little certainty over what may be competed. This could make their business planning challenging and undermine investor confidence in networks as stable, predictable regulated entities. Ofgem may also wish to reflect on this in coming to a decision on a value threshold.

Three other stakeholders supported not setting a value threshold. One cited the ESO's NOA Pathfinders projects, which are already exploring whether value can be gained from competing lower value network needs.

We also considered comparable competitive transmission delivery models. Small (below £50m) value projects have been competed in the US. For example, the Imperial Valley project in California Independent System Operator ("CAISO") was originally valued at \$25m; the successful bid price was \$14m. Many competitive projects in the US have now been completed and further learnings on the consumer value delivered may soon be available.²

However, it will be important to ensure processes are proportionate to the scale of the projects. For small projects (below £50m) an adapted version of the process outlined in the ECP is likely to be required.

3.2.2 Cost benefit analysis

Our recommendation is that the ESO, as an extension to its current Network Planning Body (ESO) role, undertake a cost benefits analysis ("CBA") before making a recommendation to Ofgem on whether to tender a project. We recommend this would be run for all projects that meet the other recommended criteria (set out below), as part of the NOA process. CBA would be updated following pre-tender activity, prior to the launch of the tender. This pre-tender activity would also help inform whether there is sufficient appetite to realise the benefits of competition.

The cost of a delay due to running a competition could be significant, due to the fact that there will be underlying system operation costs that could be mitigated by the project. This CBA process will help ensure that projects are only competed where the cost of delay and other costs are not likely to outweigh the benefits that might be gained through the competition.

Stakeholder feedback



Stakeholders did not object to this approach. Two stakeholders who expressed support for this approach wanted to better understand the calculations that would be used.

We recommend that a CBA methodology would be developed and published in collaboration with Ofgem and the wider industry. The key value drivers could be based on:

Costs:

- Procurement costs (determined based on benchmarks and any subsequent implementation)
- Additional constraint costs from any delays to solution implementation due to running a procurement exercise (determined by the ESO, based on estimated impact on the Earliest In Service Date ("EISD"))

² [Brattle \(2019\) Cost Savings Offered by Competition in Electric Transmission, p31](#)

- The successful bidder costs that bidders are expected to price into their commercial offers as part of Invitation to Tender ("ITT") stage 2
- Contract management costs or additional network governance costs of the contract/licence counter party as a result of the competition.

Benefits:

Estimated benefits of competition (based on competition benefit assumptions determined by Ofgem based on other competitive processes (e.g. Offshore Transmission Owner ("OFTO"), water industry, Pathfinders, late competition, early competition learnings). These could be:

- Cost efficiencies gained from lower capital expenditure or operating expenditure than would have been incurred under the counterfactual
- Lower costs of financing
- Environmental or social benefits of competition e.g. lower carbon intensity or a lesser ecological impact
- Innovation in terms of design or approach leading to cost savings or other non-financial benefits.

We note that Ofwat has included standard assumptions for each of the above for undertaking similar cost benefit analysis. This cost benefit analysis assessed the suitability of projects for Direct Procurement for Customers ("DPC"). DPC is a competitive delivery model for water infrastructure worth more than £100m whole life totex. These may not be appropriate for early competition but can be used as a starting point when developing the cost benefit analysis. Ofwat's assumptions have yet to be market tested and compared to outturn results as no DPC project has yet delivered.

3.2.3 New and separable

We recommend that 'new and separable' are important criteria to ensure clear ownership arrangements. We recommend that the same definitions are adopted as for the late competition, as set out in Ofgem's [Guidance on the Criteria for Competition](#).

Stakeholder feedback



No stakeholders objected to the new and separable criteria. A construction company highlighted that it is important for an independent party to consider whether TOs proposals could be altered to become new and separable if they do not initially meet this criterion. We agree and recommend the ESO would undertake this activity.

3.2.4 Certainty of the need

We recommend that a certainty measure is required in order to give the market confidence about revenue certainty, and to reduce the risk of consumers paying for a competition for a network need that is ultimately not required. We recommend that, in order to provide enough confidence that the network need will not disappear, the project should be required in more than one FES scenario.

Stakeholder feedback



Three TOs highlighted concern with this measure, including that it is too simplistic and does not provide enough confidence. It was highlighted that signals for projects in NOA can change year on year. It was also highlighted that this represents a lower level of certainty than the approach that will be used for Large Onshore Transmission Investment ("LOTI") projects. A TO suggested an approach similar to LOTI should be considered.

We recommend that the LOTI process should be kept in mind when developing more detailed recommendations during the implementation phase. An early competition specific approach needs to be developed due to differences in the delivery models.

It was also highlighted that our recommended approach differs to the least worst regret approach used in NOA. However, we would highlight that the least worst regret approach for NOA serves a different purpose, which is to recommend the course of action for the following year.

Stakeholder feedback



Three stakeholders broadly supported our recommended measure. However, one highlighted the importance of the accuracy and resilience of the inputs into FES and NOA. They further highlighted that some projects that don't meet the early competition certainty measure should still be considered for late competition. Another felt that there is a need for longer term planning of networks and highlighted a current lack of connection space.

We agree that this measure does not guarantee the need will not change. At the same time, we feel that this will help give more confidence to the market and avoid competing projects with very low certainty. Given the limitations of this measure, we recommend continuing to explore ways to gauge certainty during implementation.

3.2.5 Market appetite

We initially considered whether market appetite should be a formal criterion as part of our phase 2 and 3 consultations. Stakeholders agreed that market appetite would play an important role but highlighted the challenges with assessing it.



Stakeholder feedback

A TO fed back that it would be unclear and ambiguous.

We recommend that market appetite is taken into consideration as part of the 'Stage Gate 2' (see Section 5.1) decision to launch a tender. Unlike the other criteria we are not proposing how this would work in practice as market appetite is a complex and a subjective area to test. We recommend that this is an area further developed and explored by Ofgem and as part of the implementation phase.

Including market appetite as evidence considered for Stage Gate 2 will indicate whether the market engagement has identified enough interest that would warrant running a tender. This would be determined through stakeholder input into the NOA process and through market engagement, potentially including a Request for Information ("RFI") or Expression of Interest ("EOI") process, during the pre-tender stage. Needs with greater market appetite are more likely to generate benefits from competition due to higher levels of competitive pressure.

3.3 Drivers of network investment

Our recommendation is that connections, compliance, asset replacement and voltage/stability are all potentially suitable for competition. However, the number of suitable projects in some areas is likely to be limited. Our views on each driver is set out below.



Stakeholder feedback

Stakeholders did not express objection to these recommendations, except where indicated below. Two stakeholders requested further clarity on the distinction of each driver.

We agree there are interactions between some of these drivers and that the interaction between different processes needs to be further considered. However, we have highlighted each driver below to ensure all are considered regardless of the underlying processes.

3.3.1 NOA planning

As set out in Section 3.1, the ESO identifies major network reinforcements based on potential future energy needs. These are the primary source of needs that could be suitable for early competition.



Recommendation

Connections, compliance, asset replacement, voltage and stability are all potentially suitable for competition.

3.3.2 High voltage and stability

The ESO’s NOA Pathfinder projects already begin to compete some high voltage and stability driven investment. We anticipate that (subject to learnings from the Pathfinders) such projects will continue to be competed in the future.



Stakeholder feedback

Some stakeholders have asked how the NOA Pathfinders and early competition processes will interact.

We anticipate that the NOA Pathfinders process and early competition processes will be merged or aligned wherever possible to provide consistency for bidders. However, we need to ensure that processes remain proportionate to the value and nature of the need being tendered, which may lead to some differences in approach.

3.3.3 Customer connections

Customer connections drive different elements of work, including enabling works and connections wider works. Connections wider works are reinforcements that add additional capacity to the existing network and which do not usually need to be completed prior to the connection. The ESO’s RIIO-2 Business Plan recommendations set out our intention to bring connections wider works within the scope for NOA. Therefore, these projects would be captured through the NOA process and identified for competition through that route.

Enabling works are the part of a connection project that are required for a customer to connect to the network. They are not usually included within the NOA process. These projects will be dependent upon the customer connection proceeding, which can be uncertain, and there would need to be enough time to run a competition without delaying the customer’s connection date. Therefore, many of these projects will not be suitable for competition. However, some enabling works can be driven by multiple connecting parties. We recommend such projects should be considered for competition. An example of where this situation might arise is onshore works driven by multiple offshore wind connections.

Stakeholder feedback



Some stakeholders highlighted concerns over customer connection dates being negatively affected by the competition. They raised concerns about the impact this could have on achieving Net Zero. It will be important to consider the likely timeframes and risk of delay for each procurement process, before deciding to launch an early competition.

A potential equity investor agreed that enabling works should be considered for competition but felt in some cases, in particular single connections, they may be more suitable for late competition.

In order to identify suitable projects, the ESO would need to build a process step into the existing connections process.

3.3.4 Asset replacement

TOs are responsible for replacing their aging assets like-for-like in order to maintain the network (subject to assessment of the ongoing need for the asset). Asset replacement can also be driven by visual improvements, such as undergrounding overhead lines.



Stakeholder feedback

Some stakeholders suggested asset replacement projects are not separable.

We agree this is often the case as asset replacement schemes will typically involve utilising existing assets in part. However, on occasion, some replacement projects could be made to be separable. These occasions may be rare, however.

In our RIIO-2 Business Plan, we set out recommendations to bring some large asset replacement schemes into scope for NOA where alternative options or betterment of existing solutions may be available instead of like-for-like replacement. This would identify any projects suitable for competition that go through NOA. We recommend that TOs are required to report to the ESO any projects that meet the criteria and that do not go through NOA.



Stakeholder feedback

A potential equity investor highlighted a challenge with identifying suitable projects sufficiently far in advance for early competition. They also highlighted that the benefits from TO negotiated frameworks may be hard to replicate.

We recommend that the scope to identify asset replacements sufficiently far in advance to run a competition is explored further in considering whether to compete asset replacement projects. Ofgem may wish to consider the benefits of TO negotiated frameworks further when undertaking its cost benefit analysis of competition benefits.



Recommendations

Competitions should be launched early rather than very early.

NOA process may need to be adapted to facilitate early competition based on the lessons learnt from the Interested Persons process.

3.3.5 Compliance

Some projects may not be recommended to proceed in the NOA as they are not required for economic purposes. However, they could still be progressed by a TO due to the need to maintain a network compliant with the Security and Quality of Supply Standard ("SQSS"). We recommend that such projects may be suitable for competition, providing there is enough time to run a competition without risking compliance (or if Ofgem consider a compliance derogation to be appropriate).

Such projects might not be highlighted for competition through our standard NOA process. Therefore, we recommend that TOs will be required to report to the ESO any projects not recommended by the NOA, which they consider need to be progressed for compliance reasons. The ESO would then consider the scope for competition. Ofgem will need to monitor TO reporting to ensure projects are identified in enough time to allow a competition to be run where possible.

3.4 Project identification process

This section presents our recommendations for how projects would be identified for competition through the NOA process.



Stakeholder feedback

Stakeholders who formally responded to our Phase 2 consultation agreed with this recommendation.

3.4.1 Tender points and NOA integration

Our recommendation is that competitions should be launched early rather than very early.

At the very early point there is limited clarity on what is being tendered for as no option development has occurred. Any tender specification would be vague, meaning bidders have less clarity on what is most desirable for the network. For example, the tender would specify the capacity required across a particular boundary, with no restrictions on the location of solutions.

In addition, ongoing network planning during the tender would be very difficult, because of the uncertainty over the solutions that might be submitted. Each proposed solution would have a different knock-on consequence for the rest of the network, meaning the rest of the network could not be planned until this solution would be known. These knock-on costs would also need to be fairly accounted for when assessing the cost of each proposed solution.

Under early competition, the tender will define more parameters which bidders must adhere to. For example, in addition to the capacity, the early competition tender would also specify the approximate geographical location required. This will reduce the variability of bids that can be submitted, but should still enable alternative solutions to be provided, within those parameters.

In order to trigger the launch of a competition, we recommend introducing a new NOA signal. This signal would be given to projects that meet the early competition criteria. We anticipate that for most projects this signal will be given when a project has a 'Hold' recommendation, as this means that an increased delivery time due to the tender process can still be accommodated before the reinforcement is economically needed to address constraints on the system. Some projects with a 'Proceed' recommendation – meaning there is no slack in their delivery timescales – may still be competed if the likely benefit of competition outweighs the impact on consumers of delaying the delivery of the project to facilitate the tender process.

We recommend that the project would continue to be assessed in the NOA until the tender is launched (stage-gate 2). We intend to further explore how best to treat competed options within network planning subsequent to the tender launch. However, our expectation at this point is that, following the tender launch, the competed option would be treated as baseline network for the purposes of NOA assessment. We recommend undertaking regular assessments of the network need that is driving the project. This would highlight if there is a significant change that either suggests the project is no longer needed, or that the required delivery date has changed. This process would be similar to the ad hoc needs assessments that take place for Strategic Wider Works ("SWW") projects.

3.4.2 Projects not eligible for early competition

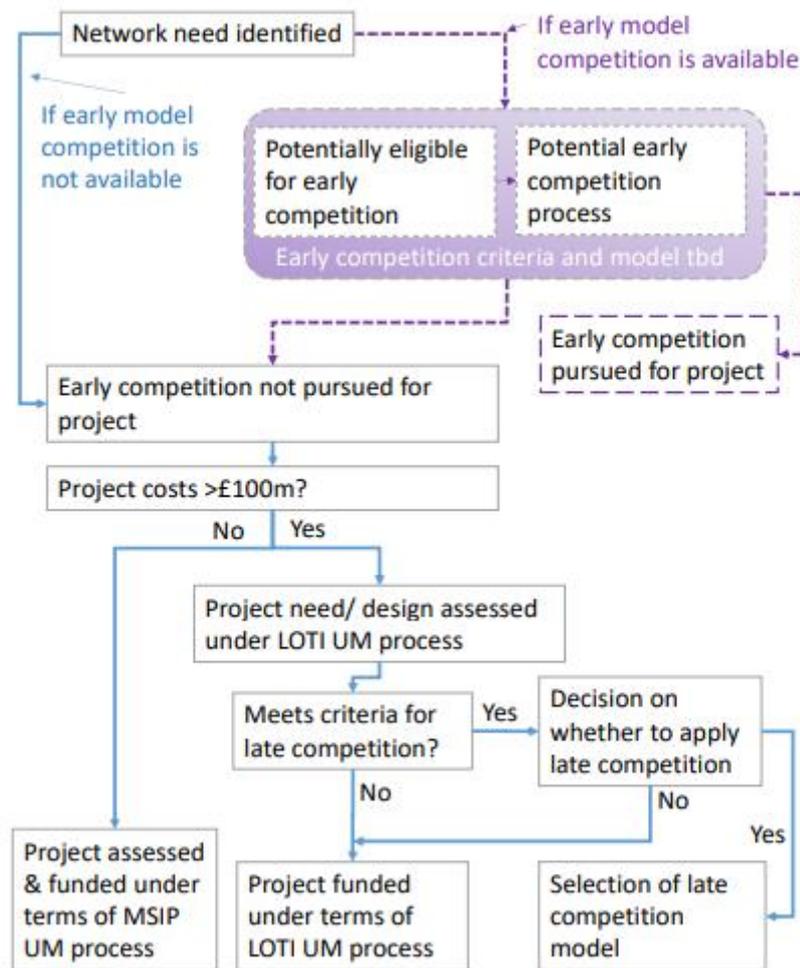
Projects that do not meet the criteria for early competition and that receive a proceed signal would continue to be developed by TOs under their existing regulated network planning arrangements. This may include following the uncertainty mechanism processes set up to deal with medium or large-scale projects.

Some projects may not be suitable for early competition but may be suitable for late competition. For example, there might not be sufficient certainty of the network need at the early point. Such projects would therefore be considered for late competition when they reach that point.

Figure 9 is a process map from Ofgem's final determination which sets out the treatment of projects which are not suitable for early competition. The scope of the ECP is focused entirely on: 1) the identification of the network need; 2) the suitability of projects for early competition; and 3) the

pursuance of early competition. What happens to a need or project if it is not suitable for early competition is outside of the scope of the ECP. If a project is not suitable for early competition, then it is progressed to late competition. We would expect the Network Planning Body, the Procurement Body and Ofgem to work collaboratively during the implementation phase on the interface and coordination of the early and late competition models. For example, there may be some realised benefits of the late model for projects of a particular characteristic which make the late model more suitable than the early model. This may need to be taken into account as part of the early model project identification process.

Figure 9: Ofgem process map for decision-making for late competition



3.4.3 Early competition integration with NOA Pathfinders

The ESO is already beginning to introduce a form of early competition through our NOA Pathfinders. These Pathfinders compete for non-network alternatives to TOs options for voltage, stability and residual constraint services. Once early competition is in place, we anticipate that all forms of network competition will be managed through the early competition process.

However, the full early competition tender process and contractual arrangements set out here may not be appropriate for all tenders. Smaller, or short-term, requirements may be better served by an adapted tender process and/or different contractual arrangements.

We will aim to adopt the same processes and arrangements for early competition and Pathfinders wherever appropriate, in order to provide consistency for bidders. We are still learning from our Pathfinders and so it is too early to say exactly what will be appropriate, but we will progress this

thinking to be ready for the introduction of early competition. We will also establish a process that identifies which tender process should be used for each project. This could, for example, be based on value. However, there may also be other factors to consider in deciding what is appropriate. Again, the ongoing learnings from our Pathfinders will help to inform this decision.

3.4.4 Development of initial solutions for the NOA

The solutions that the annual NOA identifies as optimal will help to set the tender specification for competition. It is important to ensure that the parameters set in the tender specification, which come from the NOA process, do not unduly exclude any solutions which could have been more beneficial to consumers.

As set out in Section 6.2.5, we recommend roles and responsibilities for network planning, and the associated planning processes, in relation to early competition, should be reviewed in the context of Ofgem's review of the system operation. As part of that review, further work is planned to consider the ESO's role in network planning more broadly. To support early competition, we highlight below two key principles which should be reflected within that further work.

Firstly, the processes should enable stakeholder involvement in the initial solution development process for NOA. The Interested Persons Option process, introduced last year, already begins to do this. Stakeholders have provided feedback on the limitations of that process. Building on this feedback, we recommend to further explore with stakeholders how their engagement with initial solution development can best be facilitated in future. Any such processes will need to ensure that stakeholders have an incentive to engage and that their input can be meaningfully utilised in the initial solution development process.

Stakeholder feedback



Four stakeholders supported the principle of stakeholder involvement. However, the challenges of doing so were highlighted. This includes timeframes and processes for doing so and motivation for stakeholders to invest time and resource in this. A Consumer Body stakeholder did not support the continuing development of the Interested Persons Option process. A further stakeholder did not support the Interested Persons Option process or any of the four alternative options presented.

Secondly, to help support that stakeholder involvement, we recommend that the ESO needs to take a strengthened role in network planning. Our recommendation of an enhanced role for the ESO was developed based on stakeholder feedback promoting a more proactive ESO. As a minimum, this should include an enhanced role within the initial solution development process. Increasing our capabilities and capacity, particularly in regard to project delivery, will help put us in a more informed position to challenge the options provided by the TOs and consider whether alternatives might be available. This could include providing a view on timeframes for delivery of projects, the way solutions are packaged together and whether alternative options might be available.

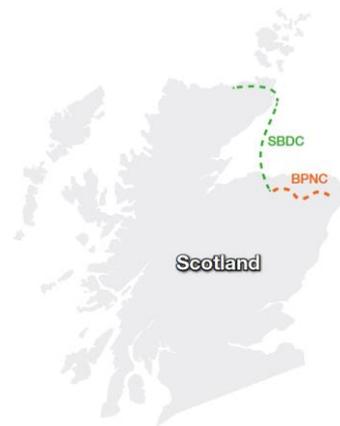
3.4.5 Pipeline

Table 2: 2020/21 NOA projects that could be suitable for early competition

Project	NOA code	Earliest date required	Number of FES scenarios
South Lincolnshire to Rutland reinforcement	LRNC	2032	3
A new 400kV double circuit between Blackhillock and Peterhead	BPNC	2031	4
Spittal – Blackhillock HVDC Reinforcement	SBDC	2031	2
18 new Mechanically Switched Capacitor (MSC) installations – various locations	NEMS; PWMS; NSM1; NIM1; NIM2; NOM1; NOM2; WAM1; WAM2	Various	Various



In our Phase 3 consultation, we set out a list of projects from the NOA 2019/20 that met the early competition criteria. We highlighted that those projects were already in progress and would be unlikely to be competed under early competition. These projects could potentially be considered for late competition. The NOA 2020/21 sets out projects that meet the late model criteria.



Due to the need for legislation, we anticipate that the earliest the first early competition could begin is anytime between 2024 to 2025, concluding between 2026 to 2027. Projects suitable for early competition would be identified nearer that time.



Stakeholder feedback

Several stakeholders highlighted the importance of a clear pipeline of projects in our Phase 2 consultation.



However, for indicative purposes, we have set out in Table 2 some of the projects in the NOA 2020/21 that could have been suitable for early competition. They are projects that have a hold or delay signal and meet the new, separable and certainty criteria. They have a combined value of over £2.6bn. (These specific projects may have passed the point of early competition by the time legislation is in place. We would anticipate other projects to have emerged in forthcoming NOAs.)

This list does not represent a definitive list of projects in the NOA 2020/21 that might be eligible for early competition. It may be possible to reshape other projects to become separable or to review delivery timeframes.

4 Commercial model

This section considers the appropriate commercial model for early competition. In developing the commercial model, we are looking to encourage as wide a range of bidders into the process as possible. This will drive innovation and cost competition to deliver value to consumers.

4.1 Revenue

The mechanism by which the successful bidder recovers their costs will be critical in providing a basis for raising finance and to incentivise bidders to appropriately design, construct, and operate the successful solution.

4.1.1 Revenue model



Recommendation

All bidders should compete on an equitable basis for a Tender Revenue Stream (“TRS”).

Currently, onshore Transmission Owners (“TOs”) receive allowed revenue under a price control framework, calculated to recover costs that are periodically reviewed for efficiency. The large portfolio of assets held by the TO support the use of complex regulatory arrangements.

To maximise the number of new entrants into early competition, it may be the case that a solution provider only ever owns a single asset. A regulatory model has only been applied to single assets in a very limited number of cases (e.g. Thames Tideway), where it was justified by the scale and complexity of the project.

Whilst there could be instances of very large projects, with significant uncertainties, where a regulatory model is relevant, we do not think it is the appropriate default revenue model for early competition.

Experience in the energy sector and the broader infrastructure market suggests several possible alternative revenue models are available. These broadly fall into two categories: market-based and payment-based.

A fully market based (merchant) revenue model would require the successful bidder to earn revenues by charging suppliers and generators fees for using their solution. A cap and floor mechanism could be applied to limit the successful bidder’s exposure to volatility in market revenues, as in the case of, for example, the domestic interconnector regime.

While a market-based model offers some value to consumers, it would require a fundamental restructuring of the current electricity market revenue arrangements. The costs associated with adopting this model could erode a significant portion of the potential value of early competition to consumers.

Under a payment-based revenue model, the successful bidder receives regular payments from a credit worthy payment counterparty. The payments could be subject to achieving certain targets, but crucially the payment is not linked to a market price, meaning less potential revenue volatility for the solution provider and less complexity.

Payment-based revenue model

A payment-based revenue model is used in a number of comparable markets including offshore electricity transmission (where assets are transferred to an Offshore Transmission Owner (“OFTO”)) and Public Private Partnerships (“PPP”). It is currently being introduced into the water sector through Direct Procurement for Customers (“DPC”).

In both OFTO and PPP procurements, bidders bid in the regular payment they require for providing the service based on their costs. In OFTOs the payment is known as the Tender Revenue Stream (“TRS”).

A payment-based revenue model supports the principles of early competition - encouraging innovation, creating a level playing field for competition, and protecting consumers.

Our recommendation for early competition is a payment-based revenue model, with a TRS for the successful bidder based on the following:

- The approach provides for a wide range of companies to participate, both those with an existing portfolio of assets and new consortia established to respond to a particular tender
- Adopting an approach similar to OFTO and PPP projects means the mechanism is well understood by the market. This should assist bidders in putting together their bids and will provide a level of certainty for lenders
- The approach provides for direct comparability between bids and protects consumers by fixing costs for the duration of the electricity transmission licence or contract.



Stakeholder feedback

While stakeholders generally supported our recommended approach, a couple of stakeholders suggested that a regulatory model could be preferable to a payment-based model.

Other considerations

To ensure a level-playing field it is important that all bidders are subject to the same revenue model, including incumbent TOs. Whilst there may be limited instances (for example, very large and complex projects with extended solution delivery periods) where the regulatory model becomes more appropriate, any alternative revenue model would have to be offered to all bidders equally.

We do not think adopting a TRS type revenue model necessarily prevents successful bidders from using their asset to participate in other revenue opportunities. As the detailed arrangements are developed, we would support the model accommodating revenue stacking opportunities, to the extent they are possible.

In later sections of this document, we set out how other features typical of the OFTO/PPP type revenue model would be applicable to early competition, namely:

- **Availability incentives** - in OFTOs and PPPs, the solution provider is incentivised to make the solution available through adjustments to the fixed payment for unavailability. We recommend that similar availability incentives are adopted in the early competition revenue model as set out in Section 5.3.3.
- **Indexation** - payments to OFTOs/PPP are typically linked to inflation. We recommend that the early competition TRS is also linked to inflation, subject to certain parameters. Our recommended approach on indexation is set out in Section 4.1.5.

4.1.2 Start of the revenue period



Recommendation

The TRS should only commence upon commissioning of the works and the successful solution becoming operational.

The successful bidder will be responsible for undertaking the necessary solution delivery works to ensure a timely and quality delivery of the solution. There will be periodic engagement and reporting throughout this period (e.g. with Ofgem and/or the Electricity System Operator (“ESO”)) but the onus will be on the successful bidder to satisfactorily manage their works programme.

We recommend that the TRS only commence upon commissioning of the works and the successful solution becoming operational. This will provide a strong incentive on the successful bidder to complete the works in a timely fashion and to the required standard.

In Section 5.3.2, we set out our recommendations on how a delay in the planned commissioning date is handled.



Stakeholder feedback

Stakeholders were generally supportive of the TRS starting at commissioning as a delivery incentive.

4.1.3 Length of the revenue period

To calculate their required TRS, bidders will need to consider both their costs and the period over which they are able to recover these costs i.e. the revenue period.

There are broadly three options in setting the revenue period:

- **In line with the network need** - forecasts will establish when the network need is expected to start and end. The revenue period could end at the point the network need is forecast to end
- **In line with the asset life** - each solution will have a useful technical asset life before major reinvestment is required. The revenue period could be set to match the useful technical asset life of the successful solution
- **In line with precedents** - lenders and investors typically finance assets of this nature over a construction plus 20 to 25-year period (e.g. PPP and OFTOs). The revenue period could be set to a similar duration to tap into the same finance market where significant liquidity and price competition may be expected.



Recommendation

The revenue period should be based around the forecast length of the network need and capped at a maximum of 45 years.

Our basic recommendation is to set the revenue period equal to the forecast length of the network need. This should provide consumers with the best value as they are: (1) not taking the risk of procuring a replacement solution during the revenue period; and (2) not paying for services beyond the period for which they are required.

We recognise that this approach impacts on solutions with asset lives that do not match the length of the network need and potentially have implications for securing funding. Below we consider this impact and the need for any mitigation.

Revenue period is longer than technical asset life

- For a solution whose asset life is shorter than the network need, the bidder would need to plan on substantial reinvestment at some point during the electricity transmission licence/contract in order to meet the requirements of the tender
- Funders are unlikely to commit upfront to funding such reinvestment given the timeframe involved and the uncertainty over costs against a fixed payment stream
- If the bidder is unable to provide evidence that the required service can be provided for the life of the electricity transmission licence/contract (reflecting the network need) this could mean the solution cannot be considered as part of that tender process.

Revenue period is shorter than technical asset life

- For a solution whose asset life extends beyond the end of the network need there are a number of possible scenarios depending on the nature of the solution
- For a solution that is fully integrated in the network there is unlikely to be an alternative use for that asset. It will be difficult to extract the asset from within the network and there will be limited applications for its reuse. Bidders with such a solution will look to recover their full costs within the revenue period

- For bidders with a solution that is potentially separable from the network such that the asset can be repurposed, the approach may be varied. These bidders will need to decide what risk they are willing to take on the commercial residual value (“RV”) and therefore what costs they need to recover over the life of the electricity transmission licence/contract. The greater the RV risk the bidders are willing to take, the more competitive their bid is likely to be.

Revenue period is longer than precedents

- Where the network need extends beyond a period of circa 20-25 years attracting finance may become more difficult, particularly in the bank market
- It may become necessary for funding to come from other forms of finance, such as public or private bonds.

Revenue period is shorter than precedents

- Where the network need is shorter than a typical OFTO or PPP project, funding should remain available but may be somewhat more expensive as upfront fees are amortised over a shorter period.

The above suggests that it is appropriate to limit the maximum length of the revenue period. We therefore recommend that the tender process should allow for this period to be adjusted by the Network Planning Body (ESO) with guidance from the Procurement Body e.g. in relation to market soundings, on a case-by-case basis. This is subject to the default position that the revenue is set equal to the length of the network need.

Evidence that may lead to an adjustment to the length of the revenue period could include:

- Evidence that there was no appropriate technical solution for the length of the need
- Evidence that debt or equity finance would not be available on reasonable terms
- Evidence that technological innovation may render any proposed solutions obsolete.

We also recommend that, in any event, a maximum length for the revenue period is set. An appropriate maximum length for the revenue period may be 45 years, in line with RIIO-2.

The early competition model should be reviewed and updated where regulatory policy changes in price controls and other competitive regimes. This is in relation to this point and other areas where the early competition model is based on current regulatory treatment under RIIO-2.

Stakeholder feedback



Stakeholders were broadly supportive of setting the revenue period equal to the length of the need. Some stakeholders highlighted the importance of setting the period in a way that enables bidders to secure competitive financing or for technical reasons. Our recommendation that the period is capped, and that the Procurement Body can adjust the length where necessary, aims to address those potential concerns.

We will need to further engage with Ofgem to explore what evidence will be required to determine an appropriate revenue period for a given network need. This is also relevant for the cost-benefit analysis to allow them to make an informed decision as the Approver in respect of the various Stage Gates. Further information can be found in Section 5.1.

4.1.4 End of the revenue period

In addition to knowing the length of the revenue period they are bidding for, bidders will also require clarity as to what will happen at the end of the revenue period. This will allow them to understand if there is any potential remaining value that could be used to enhance the competitiveness of their bids.



Recommendation

The electricity transmission licence or contract should provide for potential extension via a permitted extension on pre-agreed terms. There may still be some elements which are via a negotiated process.

As part of an updated network planning process, we expect the Network Planning Body (ESO) will include in its modelling the removal of existing solutions at the end of their revenue periods. As the end of the revenue period approaches, the modelling will indicate whether the same or a similar need currently met by the solution continues beyond the original end date.

Having set the revenue period equal to the length of the need (perhaps with some adjustment, as set out above) there is the possibility that at the original end date the existing solution will have some remaining technical asset life.

In such circumstances, it may be of value to consumers to delay the decommissioning or (potentially) redeployment of the existing solution with a permitted extension.

Assuming it is permissible under prevailing procurement legislation (and noting we assume there will be new procurement regulations for early competition) we looked at three alternative options for the form a permitted extension may take:

- Retendering of the need with the existing solution provider having the option to bid into the process
- Permitted extension of the existing contract/licence on terms negotiated at the end of the initial revenue period
- Extension of the existing contract/licence on pre-agreed terms.

Below we consider which option provides the best value to consumers.

Retendering

Retendering the need would allow for the consideration of new technologies and developments since the original tender. In addition, where the extension in the forecast need is for longer than the remaining technical/asset life of the existing solution, it could identify a solution that fills the full length of the extended need.

This should be balanced against the potential benefit the existing solution provider may have when bidding into the tender with a depreciated asset. The existing solution provider is likely to have a lower cost base than other bidders. It could therefore make excess profits over and above its costs by pricing just below the estimated TRS of the next lowest cost bidder.

The possibility of being undercut by the existing solution provider may well deter bidders from competing in any re-tendering. With no competition, the extension process via retendering would be similar to a negotiated extension.

Negotiated extension

The negotiated extension process would, as with retendering, mean that the existing solution provider could set a price just below the cost of an undepreciated new solution. This would not be good value for consumers as they have already paid for some or all the capital cost element of the solution.

Pre-agreed extension

Given the above, we recommend that the original contract (or policy with regards to the licence) sets out the general basis on which an extension would take place. This would include agreement on the basis for calculating the new TRS for the extension period.

Relevant costs in calculating the TRS for an extension period may include (but are not limited to):

- Reasonable refurbishment expenditure
- Reasonable operating and maintenance costs
- A reasonable margin.

Given that the focus of a tender is to provide a solution for the forecast length of the need, in most cases we do not think it is appropriate to make it mandatory for the successful bidder to accept a requested extension.

We are not proposing to include any 'asset health' requirements for the end of the original revenue period and the ability to extend the revenue period does not form part of the evaluation criteria.



Stakeholder feedback

Stakeholders were supportive of a mechanism to potentially extend the revenue period where there was an ongoing need. Stakeholders were also broadly supportive of the extension being based on pre-agreed principles.

If the existing solution provider turned down a permitted extension request based on the contractual provisions, a new tender process would have to be run for the extended need. In such circumstances, to prevent potential gaming of such a situation, we recommend the exclusion of the existing solution provider from bidding into the new tender with the existing solution. Further consideration is required in relation to the means of exclusion.

4.1.5 Revenue indexation

As mentioned above, the revenue stream for OFTO and PPP projects are typically linked to inflation. Below we set out recommendations for early competition in this area.



Recommendation

The TRS should be linked to CPIH.

Index

Historically, for regulated electricity transmission companies, their allowed revenue has been updated in line with the Retail Price Index ("RPI"). For RIIO-2, Ofgem has revisited the use of RPI as it is "no longer seen as a credible measure of inflation" in its [RIIO-2 Sector Specific Methodology](#)

[Decision](#) (see page 106). Ofgem notes that the Office for National Statistics ("ONS") has now adopted the Consumer Price Index including owner occupiers' housing costs ("CPIH") as the lead measure of inflation for household costs. In its [RIIO-2 Draft Determinations](#) (see page 43), Ofgem use CPIH as the basis for indexing price control allowances.

Similarly, for OFTOs, their TRS has historically been indexed by RPI. For Tender Round 6 ("TR6"), Ofgem considered whether the index should be changed as noted in its [previous decision](#) (see page 26). Ofgem received limited stakeholder feedback when consulting on the issue. There was little pressure to move to Consumer Price Index ("CPI")/CPIH. There was a concern expressed by one potential OFTO bidder that moving from RPI would potentially lead to a mismatch in revenue and costs and that there was a lack of liquidity in the CPI/CPIH swap market. Ofgem concluded that the TRS would continue to be indexed by RPI for TR6. However, they noted for future tender rounds CPI/CPIH would be considered.

Given that early competition is a new market and there is a general move in electricity regulation towards CPIH in indexing revenues, our current preferred approach is to adopt CPIH as the index for the TRS. We would keep this under review during the implementation phase, ahead of the first tender, and closely follow the Ofgem decision on indexation for future OFTO tender rounds which was being consulted upon between November 2020 and January 2021 [here](#).



Stakeholder feedback

Stakeholders broadly agreed with CPIH as the revenue index. Some noted the index should be kept under review to ensure it remains in line with the wider market.

Proportion of TRS subject to indexation

For a successful bidder to be able to service their project costs they need matching revenues in each period. A project will have a mix of costs where some do, and some do not, increase with inflation.

Operating and maintenance costs ("O&M") would normally be subject to inflation, but debt service may or may not be index linked. Usually there is a greater availability of unindexed debt in the market so typically debt service costs are not linked to inflation. Whether equity returns are subject to inflation or not will depend on the requirements of a particular investor.

Figure 10 shows two scenarios for costs and revenues. In the first scenario, the TRS is fully indexed i.e. increased for 100% of the inflation rate in each year. This is likely to mean that, in early years, the project cash flow is insufficient to cover costs. Conversely, in later years, the project cash flow is likely to exceed costs. In addition, a movement in the inflation rate will have a larger impact on revenue than on costs, exposing the project to risk.



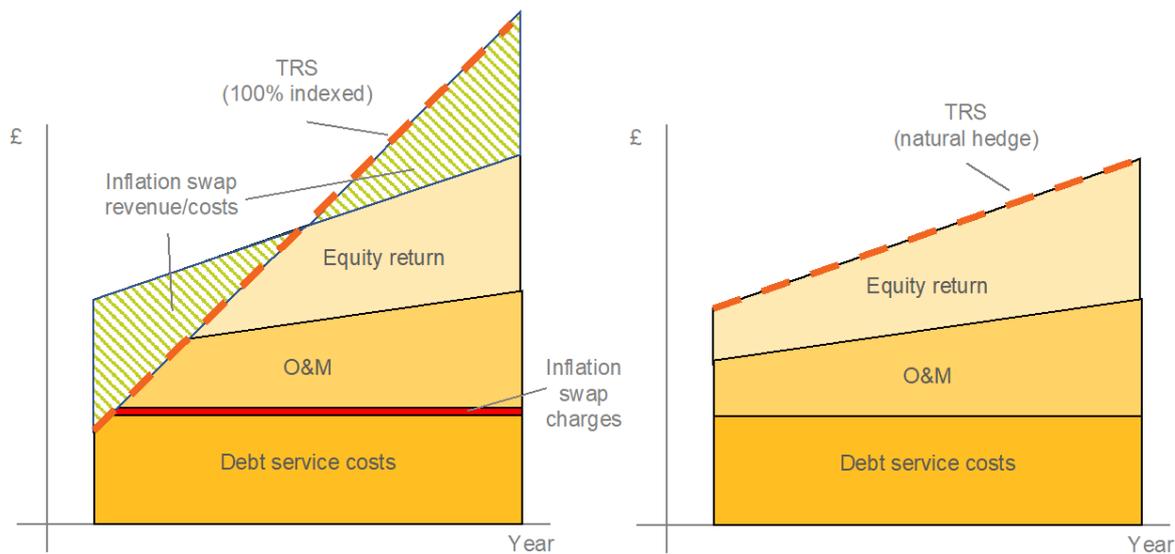
Recommendation

The TRS should only be partially indexed to try and achieve a natural hedge.

Where a fully indexed revenue stream has been adopted in certain PPP or OFTO projects, these issues are often addressed (at least partially) by purchasing an inflation swap. The inflation swap fixes a proportion of the TRS but introduces an additional cost into the project through inflation swap charges.

In the second scenario, the TRS is only partially indexed i.e. only a percentage of the TRS is updated each year for inflation. If the percentage of TRS that is updated for inflation is set such that the revenue profile equals the profile of costs this is a 'natural hedge'.

Figure 10: Illustrative diagram of costs and TRS indexation



This removes the need for additional financial instruments (and their associated cost) to reprofile the cash flow and remove the inflation risk.

Treasury guidance on indexation for project finance contracts (similar to the TRS revenue model for early competition) is that it is value for money to try and achieve a 'natural hedge' i.e. match the revenue profile to the profile of costs.

For early competition we recommend partially indexing the TRS to try and achieve a natural hedge. How this proportion could be set in practice is discussed in Section 4.2.2.

Stakeholder feedback



Stakeholders generally agreed with partially indexing the TRS, subject to details of how the proportion is established. Some stakeholders suggested that bidders should set their own level of indexation, allowing them to reflect their particular funding solution. Our recommended mechanism set out in Section 4.2.2 looks to address this potential concern while achieving a natural hedge.

4.1.6 Pre-commissioning revenue

While focusing on the main revenue stream, the TRS, we also consider the potential for other forms of revenue to address certain concerns around achieving a level playing field amongst bidders.

We note that where pre-commissioning revenues are provided, there should naturally be a commensurate reduction in the TRS.



Recommendation

There should be provision for some revenue during the preliminary works period.

During preliminary works

There was strong support amongst stakeholders for revenue during the preliminary works period to help encourage participation in early competition. There was a concern that, prior to Financial Close, some bidders may have limited access to funding. Revenue during this period could help reduce the barriers to entry.

On this basis, we recommend some form of revenue for the successful bidder during the preliminary works period.

We recommend that this revenue be in the form of payments at set points during the preliminary works period i.e. upon the delivery of key milestones, such as submitting planning applications, etc.

To avoid distortion to the tender process, we further recommend that the size of these payments is independent of a bidder's costs and instead determined by the Procurement Body for each tender. To ensure bidders are not receiving more revenue than required, they should be capped at the lesser of the fixed amount and evidence of actual costs.

This cap would likely need to be identified via bidder forecast costs provided during the tender process with a reconciliation following the preliminary works.

During solution delivery

Some stakeholders suggested that some form of revenue during the solution delivery period would help in securing finance as payments could be made to debt providers and equity investors.

Based on the experience in the PPP market, payments during the solution delivery period are generally not necessary to help secure finance. Further, any payments during the period could undermine the strength of the incentive created by our recommendation for revenue to start at commissioning.

We do recognise that where there is a long solution delivery programme (e.g. longer than 3-4 years) and/or high solution delivery costs there may be a need or consumer benefit in exploring the opportunity for some milestone payments to help ensure that a lack of cash flow to capital providers over a longer period of time does not reduce the attractiveness of the model.

Stakeholder feedback



Stakeholders generally supported revenue during the preliminary works phase as a way of encouraging new entrants. Some stakeholders suggested payments during solution delivery may be appropriate, but others thought this would dilute the completion incentive.

We recommend that any revenue during the solution delivery period is considered non-standard and as such any such payments would be considered on a case-by-case basis as part of the preparatory work for each tender process.

We also note that an early completion incentive or bonus payment would not be appropriate. This is because the tender preparation process will identify the completion date required for any given need, with that completion date being the date that is believed to be in the best interest of consumers. Therefore, an earlier completion would not likely provide additional value to consumers.

4.2 Cost uncertainty

As set out in Section 4.1.1, our recommendation is for a successful bidder to receive a TRS as its primary source of revenue. This would be a fixed amount based on the costs of the successful solution subject to indexation, certain incentives and potential reopeners.

Given the nature of early competition, the final cost of the successful solution (and therefore the final TRS) is inherently uncertain at the tender stage prior to consenting and detailed design.

This section considers how the final TRS is established and how the risk of changes in costs between the tender submission and the start of solution delivery is shared between consumers and the successful bidder.

4.2.1 Approach to fixing the TRS

We considered when it was appropriate for the successful bidder to commit to costs. We identified three key points in the early competition process:

- The final bid submitted by a bidder in the tender process (Invitation to Tender (“ITT” (stage 2))
- Preliminary works completion (i.e. after detailed design and consents, etc)
- Solution delivery completion.

We also identified four different categories of costs to consider:

- Underlying construction and operating costs (i.e. input costs – labour and materials, etc)
- Overheads/margins (i.e. profit margin, risk allowance and project management, etc)
- Equity costs (Internal Rate of Return (“IRR”))
- Debt costs (base rate, margins and fees) and gearing.



Recommendation

Bidders should be required to commit to margins / overheads on construction and operating costs in their final bids, along with an underwritten equity commitment. Other costs would be updated, as necessary, following the preliminary works.

Underlying costs

Without a detailed design, completed ground investigations or consents we would be unable to ask bidders to efficiently commit to underlying costs in their final bids. For example, as further design work is done, routes may change, and solutions evolve. This would lead to changes in the quantities of labour and materials required for a proposed solution. Requiring bidders to provide committed costs for this cost category can lead to inclusion of significant risk premiums to cover the underlying uncertainties.

Our recommendation is that only indicative underlying costs are requested in the final bids. The successful bidder would become committed to their underlying costs once preliminary works are completed.

The method for finalising underlying costs once preliminary works is completed is an important issue and discussed in Section 4.2.2 in respect of a Post-Preliminary Works Cost Assessment (“PPWCA”). It must ensure consumers are not exposed to the risk of an uncapped increase in construction or operating costs. A robust cost assessment process will be required to ensure only permissible changes are included.



Stakeholder feedback

Stakeholders broadly supported using indicative underlying costs, subject to the details of how they would be updated. Some stakeholders noted the importance of incentivising bidders to provide accurate cost information in their bids.

Margins and overheads

While it is appropriate to delay a bidder’s cost commitment for underlying costs, we also consider it important that some element of cost certainty is obtained on construction and operating costs before the preferred bidder is appointed.

Our recommendation is therefore to request committed overheads and margins in the final bid that can reasonably be expected not to depend on the outcome of the preliminary works. These may include:

- **Risk margin or contingency** - Bidders should be able to specify the risk margin or contingency needed on top of the underlying construction or operating costs. This is most likely to be specified as a percentage of underlying costs, which can be applied to the updated costs established through the PPWCA process
- **Overheads** - Detailed solution design will only be completed during preliminary works. However, we expect that the solution should not change substantially e.g. in terms of the type or scale of the solution. Overheads, such as project management and mobilisation, could therefore be fixed at ITT (stage 2)
- **Profit margin** - As part of negotiations with their supply chain, bidders should look to set a fixed profit margin with each of their contractors. This may be in the form of a percentage of underlying costs, which can be applied to the costs established through the PPWCA process
- **Development costs** - Bidders may look to recover development costs, potentially including a margin, via the TRS. Any such amounts would be fixed at ITT (stage 2).



Stakeholder feedback

While broadly supportive, some stakeholders thought that margins and overheads may be impacted during preliminary works and require adjusting. Some stakeholders also noted that members of the supply chain may be reluctant to share such information. Allowing margins and overheads to be confidential or to be updated post preliminary works is viable but would transfer more risk on to the consumer.

Debt

Ensuring the solutions proposed by bidders are financeable is a critical part of the early competition model. The model therefore seeks to encourage each bidder to engage early on with potential lenders and investors in order to understand the financing costs and address important areas of risk.

To lock in costs for the consumer as early as possible (and thereby reduce risk), it is appropriate to reach Financial Close on any third-party debt as soon as possible within the process. However, with underlying costs only confirmed once consents are in place and detailed design work has been completed. This point will be after the preliminary works phase.

Given the potential length of the preliminary works, it is not appropriate to require any debt funding to be fully committed in the final bid.

For debt costs and gearing, we therefore recommend that assumptions provided by the Procurement Body are used in the final bids. Then, once the preliminary works are completed, and costs are fixed, we recommend that a debt funding competition is run to establish actual values that are then locked in at Financial Close. In this way, competitive tension is maintained when securing funding.

We note that some bidders may be able to offer balance sheet funding of a solution. To ensure the best value to consumers we recommend that any bidder offering balance sheet funding participates in the debt competition. Appropriate ringfencing of the team providing debt terms would need to be established to provide comfort to other potential lenders of a level playing field.

Our recommended approach to setting debt assumptions and running a debt funding competition is discussed in Section 4.2.2.

Stakeholder feedback



Stakeholders generally agreed that debt would not commit to terms ahead of preliminary works being completed and costs fixed. Some stakeholders noted that some bidders may potentially have access to debt on preferential terms, for example through on balance sheet funding or through export credit agencies. As this debt is unlikely to be committed, taking it into consideration would transfer risk to the consumer, and would make it difficult to compare bids on a like for like basis.

Equity

With debt not committed until after the preliminary works are completed it becomes very important that equity is committed in final bids. We recommend requiring each bidder to provide letters of commitment from investors for an appropriate amount, stating their IRR requirement.

This would demonstrate the robustness of their proposed solution and ensure appropriate consideration is given to financial risk mitigation and allocation.

Equity costs

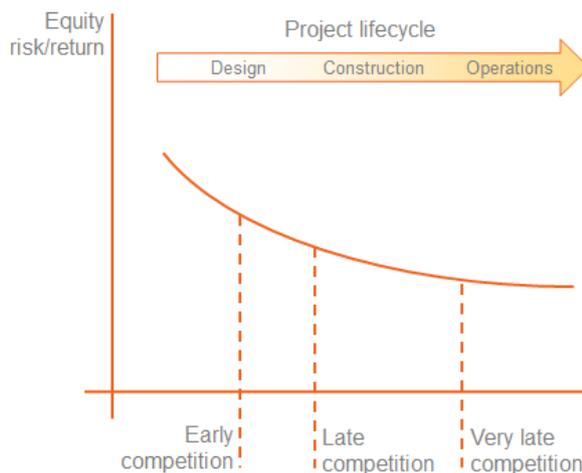
Our recommended approach is consistent with the objectives for early competition set out by Ofgem.

In their open letter in March 2020, Ofgem noted that design-only competitions were best pursued outside of early competition. Early competition is therefore focused on developing a model for "design and delivery" as noted in Ofgem's earlier letter to the ESO.

For a successful early competition, it is important that design and delivery are fully aligned. All the risks associated with a solution need to be considered at the beginning of the process. We think this is best achieved by requiring equity investors to fix their return requirements at the bid stage based on a thorough assessment of the risks.

As shown in Figure 11, we recognise that this may lead to higher equity return requirements in early competition than those seen in versions of late competition (e.g. PPPs) or very late competition (e.g. OFTOs). This would reflect the fact that under early competition risk is being transferred from consumers to the bidder at an earlier stage in the project lifecycle.

Figure 11: Illustrative diagram of risk through the project lifecycle



Size of equity commitment

When fixing the equity IRR at ITT (stage 2), bidders will need to commit to the amount of equity that can be provided at that price.

With bids being submitted based on costs and debt assumptions that may be updated following preliminary works, the actual amount of equity needed may change before Financial Close.

If equity commitments only covered the necessary amount estimated in the bids, and this were to rise, there could be a funding shortfall.

To help prevent this, we recommend asking bidders to provide equity commitments larger than that indicated by the bid financial model. The Procurement Body would need to specify the amount of oversizing in the tender, but may take into account:

- The level of any cap set for the post preliminary works cost assessment
- A minimum level of gearing via market soundings.

Equity sales

During our consultations the question of when equity sales may be permitted was raised. Stakeholders identified that different types of investors may be looking to invest at different stages of the project lifecycle, for example at the operations or construction phase.

While recognising the potential value in investors being able to recycle capital to invest in subsequent projects, we also recognise that a change in ownership can be disruptive to solution delivery. This is particularly challenging during the design and construction periods when the project is at its most complex and consistency and stability may be considered the most important.

It is therefore our recommendation to permit equity sales only once the solution has been successfully commissioned.



Stakeholder feedback

Some stakeholders disagree and feel that equity sales should be permitted at an earlier stage.

We are not recommending an equity gain share mechanism at this stage as we think bidders will reflect the potential gain from an equity sale in the IRR fixed at ITT (stage 2). Therefore, any gain share could lead to a higher initial IRR and may not be value for money for consumers. However, without an equity gain share mechanism in place we are concerned that there may be potential for windfall gains in future. At this stage we are aware of two potential windfall gain areas and where we

think further consideration is required in the decision-making process as follows.

- **Equity Sale Profit** – As is described in the above paragraph, bidders may profit from operational equity sales and without any corresponding reduction in the cost of equity within the Tender Revenue Stream
- **Land Sales** – Where the successful bidder has bought land (rather than leased or having prior ownership) there may be a windfall gain upon sale of some or all of that land in future.

(There is a third potential area in respect of debt refinancing and we have set out our recommendations on this in Section 4.2.2.)

The Contract or Licence Counterparty, as appropriate, will want oversight of any equity sales process. They may look to place restrictions on the identity of potential buyers e.g. for strategic or operational reasons.

Stakeholder feedback



Stakeholders generally agreed that asking investors to commit to an IRR at the tender stage may lead to higher equity costs. Ofgem may want to consider a post-preliminary work equity competition as a potential alternative to our recommendations, but this could potentially weaken the deliverability of bids and lead to consumers taking additional risk.

Summary

Our recommendations, summarised in Table 3, provide the best balance between achieving:

1. A simple model that can be applied to a wide range of network needs, solutions and funding approaches
2. Sufficient data at the final bid stage to make a meaningful and comparative evaluation of the bids
3. Incentives for cost efficiency and timely completion throughout the end-to-end process.

Table 3: Preferred option in respect of the commercial model

	Final bid	Post preliminary work	Post solution delivery completion
Post-prelims cost assessment with debt competition			
1. Underlying costs	I	X	
2. Overheads/margins	X		
3. Debt costs and gearing	A	X (FC)	
4. Equity costs	X		

Key:

I – stage at which bidder provides indicative cost

A – stage at which procuring authority provides an assumption

X – stage at which bidder is committed to a cost item

(FC) – financial close for any third party debt

4.2.2 Process for updating the TRS following the preliminary works



Recommendation

For underlying costs, a PPWCA process would undertake an 'economic and efficient' review of permissible changes, with a cap on upward adjustment.

As set out above, at the point where final bids are submitted underlying construction and operating costs would be indicative. Debt costs and gearing are based on a set of assumptions provided to bidders. In addition, with costs being uncertain, the proportion of TRS linked to inflation cannot be determined.

Below we set out our recommendations for how these indicative amounts and assumption are fixed following the preliminary works and used to determine the final TRS amount.

Underlying costs

For underlying costs, our recommendation is that a PPWCA process is established to consider changes in construction or operating costs identified during the preliminary works.

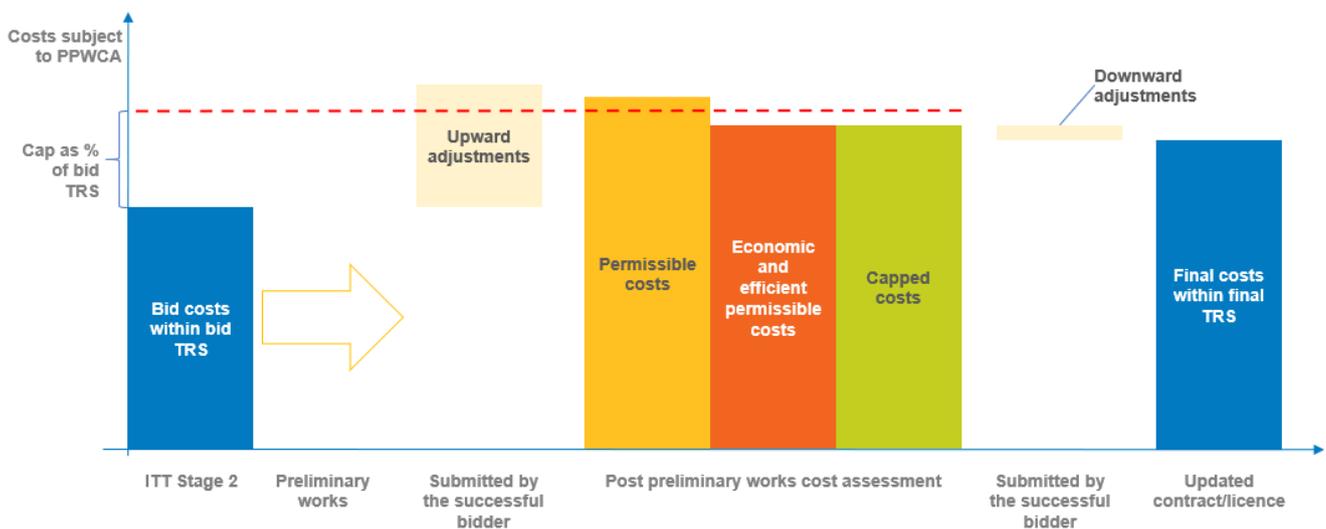
The process would look to protect consumers from unwarranted increases in costs and incentivise bidders to carry out thorough due diligence in arriving at their indicative values.

To achieve this, we recommend that the PPWCA follows a three-stage process whereby all underlying costs within the scope of the cost assessment, irrespective of whether costs increase or decreases, are considered on a case-by-case basis. This three-stage process is as follows:

- A test to see whether the cost (and so TRS) adjustment is permissible. For example, is it a cost which falls into scope of the PPWCA and was the cost change for a reason which could not have reasonably been foreseen by a competent bidder following good industry practice?
- Where a cost change is permissible an 'economic and efficient' review would be undertaken on the cost (and so TRS) adjustment. For example, can any of the cost be recovered from elsewhere such as through subcontractors or insurance, or was the cost impact reduced through any reasonable mitigating actions?
- Where the economic and efficient value of a cost change is allowed (including as a result of disallowance) there will be a test in relation to the cumulative impact of those changes. Any cumulative costs which exceed the set TRS adjustment cap (likely set as a % of bid TRS) will not be considered and so will not result in further upward adjustment to the TRS.

This process will be triggered on a given date towards the end of the preliminary works stage – there is no minimum trigger threshold recommended for the PPWCA.

Figure 12: Illustrative diagram of the PPWCA process



The successful bidder will have an obligation to provide details to the cost assessor in relation to any cost changes within the scope of the PPWCA, including any supporting information. We recommend the Licence Counterparty leading on the PPWCA for network solutions and the Contract Counterparty leading on the PPWCA for non-network solutions.

The Procurement Body and Network Planning Body (ESO) will also have a role in the PPWCA supporting the relevant counterparty (licence or contract). Information exchanged prior to and during the tender process could have an influence on whether a cost change is classified as permissible and the economic and efficient value of the cost change. For example, if bidders were explicitly informed that they would be taking a given risk in full and should bid on that basis then it would not be permissible.

There was a suggestion from a couple of stakeholders that the PPWCA process and principles should be the same as the onshore arrangements (e.g. for Large Onshore Transmission Investment (“LOTI”)) and this is something we think could also be further explored when further developing the PPWCA. For example, views on what ‘economic and efficient’ preliminary works would be are likely to be similar (but not necessarily the same due to differences between processes and the overall commercial model) whether delivered under the early competition model or RIIO-2 arrangements.

Prior to a tender being launched it will need to be clear how such a process would work so that this could be factored into a bidder’s TRS. We therefore recommend that the Contract and Licence Counterparties develop a common methodology to publish within common guidance which would be available to potential bidders in advance of the start of a tender process.

Whilst such a methodology/guidance will not be able to provide a mechanistic view on all possible outcomes it should provide bidders with some of the key principles by which the review process would be undertaken by the relevant party or parties.

Therefore, as part of the decision-making process and any subsequent implementation phase it will be important to consult upon more detailed PPWCA guidance, including the recommended cap, to ensure as much clarity is provided as possible prior to a tender process. We expect this will go some way to addressing some of the concerns raised by stakeholders in relation to the uncertainty on how underlying costs (and changes to those costs) will be treated by the recommended PPWCA process.

We think a further consistency control is the need for a dispute resolution mechanism related to the PPWCA for non-network solutions. Therefore, disputes between the Contract Counterparty and the non-network solution provider in relation to the cost assessment could be referred to Ofgem for determination in the event the dispute cannot be resolved.

Upward adjustments

As set out above, we are recommending a cap to upward adjustments resulting from the PPWCA. We further recommend that this is a common cap for all bidders, set by the Procurement Body as a percentage of any TRS amount bid, so as to allow for the direct comparison of bids. We recognise that different potential solutions will have inherently different levels of uncertainty around their underlying costs, but we think it is of benefit to consumers to push that risk back on to the bidders as they are best placed to manage it.



Stakeholder feedback

During our consultations some potential bidders expressed concerns with the introduction of a cap on upwards adjustments.

We think it is important that there is a cap to make sure bids are as robust as they can be and that there is backstop consumer protection against significant cost increases. However, the concerns highlight the importance in setting the right level for cap and trying to find the right balance between adequate consumer protection and potential market attractiveness.

When the value of a cap is being considered it would be prudent to consider whether the cap should be a higher percentage value for the first tender round(s) and potentially tightened as the early competition market matures.

It is also worth noting that there could be certain exceptional circumstances where it could be appropriate to disapply this adjustment cap. Further consideration will be required on where this might be appropriate, but we would expect that it would be for circumstances which could be of a similar potential scale to unforeseeable change in law and/or Force Majeure.

Downward adjustments

We are recommending a cap but not a collar on cost adjustments as we consider it appropriate that any (within scope) savings identified during preliminary works are for the benefit of consumers.

This raises the question on how any downward cost (and so TRS) adjustments are accounted for in the PPWCA. We recommend that the same process is followed as above but with downwards adjustments being recorded separately to upward adjustments.

This prevents any downward adjustments being netted off against any upwards adjustments, and in effect providing greater headroom – potentially reducing the effectiveness of the cap as a tool to drive robust bids.

Overall, bidders will have to decide what uncertain cost items (because their design has not been finalised) they need to include in their bid. For higher risk solutions, these uncertain costs might be expected to be larger than for lower risk solutions, helping identify the higher risk solution by reducing the competitiveness of their bid.

Following the selection of the successful bidder, and after completing preliminary works, the PPWCA process described above will identify any in-scope cost items that turn out to not be needed. These items can be reduced or removed to lower the final TRS to the benefit of consumers.

Stakeholder feedback



Stakeholders generally supported a cost assessment process, but some were concerned with the level of risk potentially involved. Some stakeholders were concerned that it would not be clear what a ‘permissible’ cost increase was and that a cap could potentially deter bidders. We agree that the cost assessment is a very important area, both for potential bidders and in protecting consumers. Ahead of a tender, guidance on the methodology needs to be published and careful consideration given to the appropriate level of cap.

If bidders are uncomfortable with the TRS adjustment cap set for the tender but wish to bid, they can adjust their risk margin (or contingency) and cost of equity. Both of which are fixed and are not within the scope of the PPWCA.

A bidder could set the cost of equity and/or risk margin values applicable to construction and operations to allow for an additional allowance for remaining uncertainty during the preliminary works period. The impact of this would, however, be a higher TRS and so this approach could make such bids relatively less competitive than other similar bids.

Recommendation



Debt assumptions should be provided by the Procurement Body for use in bids and updated following a debt competition run by the successful bidder. Any positive or negative impact on the TRS should be passed to consumers.

Debt costs and gearing

As set out in Section 4.2.1, our recommendation for debt costs and gearing is for the Procurement Body to provide assumptions to all bidders at ITT (stage 2). We further recommended that a debt competition is run following the PPWCA ahead of Financial Close.

Debt assumptions

Table 4 sets out some of the key terms the Procurement Body would need to provide to bidders at ITT (stage 2). Market soundings ahead of a tender could be used to establish appropriate terms based on those available in the market at the time. The Procurement Body would need to determine the

appropriate level of market soundings it needs to undertake based on the size and nature of the network need.

The Procurement Body will require reassurance that bidders will be able to secure debt on terms substantially similar to the assumptions provided. We therefore recommend that it is a requirement for each bidder, as part of their ITT (stage 2) submission, to include letters of support from several credible lenders.

Table 4: ITT (stage 2) key debt assumptions for bidders

Term	Considerations
Type of debt	The Procurement Body would need to identify the most likely form of long-term debt (e.g. bank or bond) available to fund projects at the time. Any assessment would need to consider the available liquidity in different markets for, amongst other things, the length of the revenue period specified in the tender. In addition to long term debt, there may be a market for equity bridge loans that could further enhance bids and reduce the TRS.
Base rate	Based on market rates at the time for assumed average life, as below.
Margins	<p>Long term debt: based on market soundings for the construction and operating period, including potential step-ups.</p> <p>Equity bridge: based on market soundings, a range based on type and rating of security a bidder is proposing to provide, as below.</p>
Security	<p>Equity bridge: bidders will need to specify the type and rating they are providing.</p> <p>Solution delivery performance bond: the size and type of security that contractors will need to provide. Considerations may include the longstop date in the contract or licence, estimated costs of replacing a contractor, etc. A minimum rating may need to be specified.</p> <p>The cost of providing the specified security needs to be included in the bidder's financial model.</p>
Tenor/tail	Based on market sounding.
Average life	Based on market sounding.
Insurance	Based on market soundings, the minimum insurance requirements of lenders (together with any additional requirements from the Contract or Licence Counterparty) need to be specified. The cost of providing the specified insurance needs to be included in the bidder's financial model.
Reserves	<p>These may include:</p> <p>Debt service - based on market soundings.</p>

Term	Considerations
Cover ratio/gearing	<p>Change in law - based on the recommended sharing arrangements in the contract or electricity transmission licence.</p> <p>Major maintenance - based on market soundings.</p> <p>For any solution, the level of gearing will largely be determined by 1) the tenor of the debt (see above) and 2) the debt service cover ratio applied to the cashflows available for debt service. A cover ratio would be set by lenders to reflect the potential volatility in revenues and O&M costs.</p> <p>While different solutions may have different levels of O&M, O&M costs are (in most cases) only a small proportion of total revenues. As all bidders receive a fixed TRS and are subject to the same incentive mechanisms, the volatility in revenues will be substantially the same.</p> <p>We would therefore expect the cover ratio for different solutions to be substantially the same. This suggests a common gearing assumption, provided to all bidders to be appropriate. Allowing bidders to set their own level of gearing could lead to potential gaming of assumptions and distortions when comparing bids.</p> <p>The Procurement Body could either set a standard cover ratio suitable for a TRS based project, a maximum gearing amount, or specify the minimum of the two.</p>

Debt competition

As set out in Section 4.2.1, the debt competition has an important role in ensuring value for money for consumers in early competition.

While we would expect the successful bidder to take the lead role in organising the debt competition, the Procurement Body will have a critical oversight role representing the interest of consumers.

Ahead of any tender, the Procurement Body will need to set out their expectations for how a debt competition will be run. [Guidance](#) produced by the Treasury in relation to preferred bidder debt competitions may provide a useful basis for setting these expectations.

Key areas requiring guidance from the Procurement Body will include:

- Agreeing a long-list of potential lenders
- Agreeing the information package provided to potential lenders
- Defining what is being competed and the form of response expected
- Evaluation and selection criteria.



Stakeholder feedback

During our consultations, there were suggestions from some potential bidders that they should be incentivised to run an efficient debt competition by sharing any reduction in TRS between the bid stage and Financial Close as a result of an improvement in debt terms.

Given the potentially long time period between bids being submitted and Financial Close it would be extremely difficult to determine what improvement was due to the bidder's initiative and what was general market movements. As such, any incentive is weakened, and the successful bidder could end up benefiting unduly to the detriment of consumers.

Our recommendation is therefore to pass any benefit from a reduction in the TRS from an improvement in debt terms through to consumers. Equally, we would expect consumers to take the risk of an increased TRS as the result of worse debt terms than assumed at ITT (stage 2).

However, in relation to the aforementioned feedback from potential bidders, whilst we continue to think it is challenging to demonstrate and reward debt competition outperformance in a mechanistic fashion, we think that this stakeholder feedback should be further explored in the decision-making process.

For example, might it be possible to create an evaluative reward framework on the quality of (rather than outcome from) the debt competition? If so, this could provide an additional incentive (above the expected obligation) to maximise value for consumers via the debt competition in spite of the fact that consumers are proposed to take the full risk and reward in respect of changes to the cost of debt via the debt competition.

The debt competition will identify which lenders will help finance the delivery of the solution. As part of this, the lenders may look to agree certain arrangements with the Contract or Licence Counterparty through a Direct Agreement. We think that how and when the relevant Contract or Licence Counterparty is brought into the process, ahead of Financial Close, would need to be considered further during the implementation phase for early competition.

Refinancing

We would not expect debt to be refinanced during the construction period as this could potentially be destabilising to the project. In the event debt is refinanced during the operating period any gain would largely be reflective of changes in the market and consumers should expect to benefit.

Bidders should be incentivised to undertake debt refinancing, so our recommendation is for a debt refinancing gain share mechanism. For consistency, the sharing percentages should reflect those in comparable markets (e.g. OFTOs, late competition) at the time.



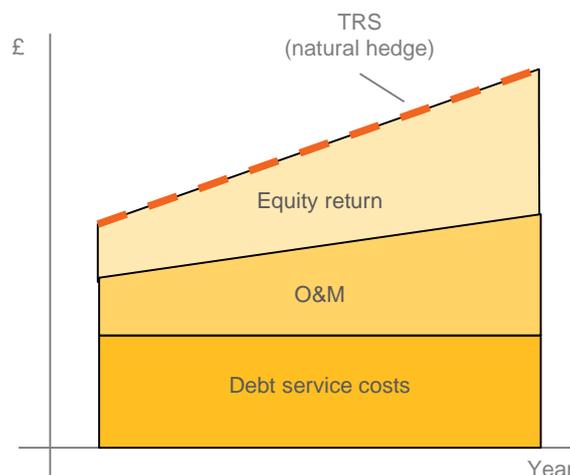
Recommendation

The proportion of TRS linked to inflation should be determined by sensitivities run on bidder financial models to demonstrate a natural hedge is achieved.

Indexation

As set out in Section 4.1.5, we recommend that the TRS is only partially indexed. The proportion of TRS linked to inflation would be set such that the revenue profile would match the profile of costs (including debt service costs, O&M and the equity return) during the revenue period - providing a 'natural hedge' against inflation as shown in Figure 13.

Figure 13: Partial indexation (illustrative)



As set out above, final costs and therefore the proportion of costs subject to inflation will only be known at Financial Close following the PPWCA and debt competition. This raises the following questions:

- What proportion of the TRS should be assumed to be indexed when bids are evaluated?
- How should that proportion be updated following the debt competition?
- How should any pain/gain between the above two bullets be shared?

Below we set out our recommendations in each of these areas.

ITT (stage 2)

One option for ITT (stage 2) is that the proportion of inflation linked TRS is set by the Procurement Body as a standard bid assumption. This would also be consistent with the recommendation of the Procurement Body providing assumptions on debt costs and gearing.

However, with bidders each having different cost profiles, specifying the proportion of TRS subject to indexation as a fixed percentage of the total TRS could favour some bidders over others. Bidders would have to artificially fit their costs to the assumed revenue profile, creating distortions when evaluating solutions.

To avoid this, it is our recommendation that bidders determine for themselves (using their financial model) what level of indexation provides a natural hedge.

The Procurement Body would need to define what is an acceptable level of natural hedge. This could be done by setting out in the tender documentation certain inflation sensitivities that the financial model should demonstrate. For example, one sensitivity may be that the real equity return is within certain limits in a specified high and low inflation scenario.

Fixed TRS

Following the debt funding competition, the same inflation sensitivities used to determine the proportion of TRS to be indexed in ITT (stage 2) could be run to set the proportion of the updated TRS that is indexed.

As the natural hedge is value for money for consumers, we recommend that any resulting change (positive or negative) in TRS be passed through to consumers. This is also consistent with our recommendation on debt costs and gearing.



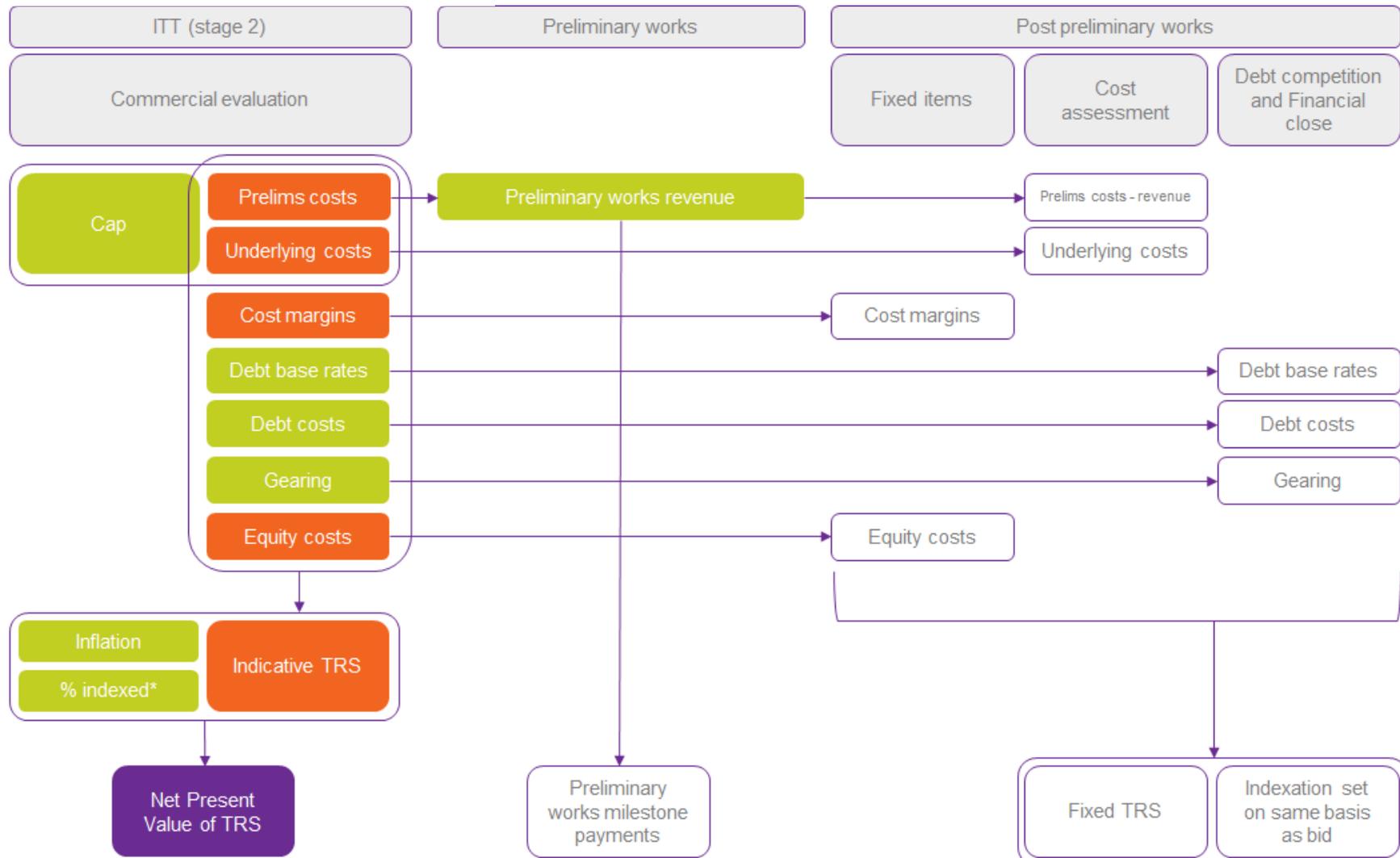
Stakeholder feedback

Stakeholders broadly supported using sensitivity analysis to establish the level of partial indexation. Some stakeholders noted that it should allow for the use of index-linked debt and equity where appropriate.

Summary

Figure 14 summarises our recommended process for updating the TRS following the completion of the preliminary works. See Section 6 for more information on the roles and responsibilities.

Figure 14: Process map for setting the fixed TRS



*Not set as a given %, but by reference to meeting inflation sensitivities (tbd) demonstrating a natural hedge

Key Bid assumptions Bidder submission Bid appraisal Post bid determination

4.2.3 Security requirements



Recommendation

The successful bidder should post a performance bond (or equivalent form of acceptable security) to support the PPWCA.

Under our recommended approach for adjusting the TRS as set out in Section 4.2.2, and with some revenue during the preliminary works period as set out in Section 4.1.6, there may be little incentive on the successful bidder to accept what they may see as an adverse outcome from the PPWCA.

We previously recommended and consulted on our views that the preferred bidder should post a performance bond (or an equivalent form of acceptable security) at the point they are made the successful bidder to remain in place up until Financial Close. This is to ensure the successful bidder is fully committed to proceed with construction / solution delivery following what may be an extended preliminary works period. We also recommended similar arrangements should be in place from that point until successful commissioning.

We continue to have concerns about the low likelihood (high impact) risk that a successful bidder does not deliver their solution. One mitigation to this is to ensure a robust tender process is undertaken and that the successful bidder and the successful solution are credible and deliverable. Another mitigation is a performance bond (or equivalent form of acceptable security) being in place for the preliminary works stage and the construction / solution delivery stage i.e. so there is a cost to the successful bidder of non-delivery which reduces the cost of non-delivery to consumers. However, the costs of providing security are likely to be included in the bid-TRS so any security requested will put upward pressure on costs which may not be in the interests of consumers.



Stakeholder feedback

Stakeholders expressed some concerns about post-award security requirements.

In light of this feedback we have further developed our thoughts on this topic for the preliminary works and construction / solution delivery stages as follows.

- We think that the risk of non-delivery decreases as the project moves closer to commissioning and is at its highest throughout the preliminary works stage, especially in relation to the outcome of the PPWCA. The reason is that there is a strong natural incentive to commission to obtain the TRS and the cost of non-delivery increases as the project moves closer to its commissioning date i.e. due to the increasing non-recoverable sunk costs
- We therefore think some form of security value tapering could be appropriate i.e. the value of the security is highest in the preliminary works stage and decreases towards the commissioning date. This tapering could potentially be linked to time or project spend as is the case for Contracts for Difference e.g. a low spend milestone shortly after Financial Close and a larger spend milestone mid-delivery to protect against abandonment risks. These milestones would complement the suggested longstop date (which would be after the planned commissioning date as per Appendix 2, Heads of Terms) and in all cases we assume that the required processes would have been followed prior to contract termination or licence revocation to allow the security value to be properly claimed e.g. having provided an opportunity to remedy any default
- We remain uncertain on what an appropriate value for such security might be both in the preliminary works and construction / solutions delivery stages, although anecdotally we now think that the 20% value codified in relation to the offshore regime arrangements is likely to be too high, especially as a project moves closer to its commissioning date. This is supported by feedback from stakeholders

- We think that an acceptable form of security would be a (potentially conditional) letter of credit or performance bond (albeit related to payment rather than performance) from an institution with an acceptable credit rating or cash in escrow with each being claimable in the event of contract termination or electricity transmission licence revocation for a prescribed reason e.g. non-delivery due to abandonment, etc. This obligation would still apply where the successful bidder themselves 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 provides a more level playing field for all bidders in respect of post-award security obligations.

The detailed form(s) of the security and the value of the security required would need to be developed in detail and agreed within the pre-tender stages i.e. between Stage Gate 1 and Stage Gate 2.

For the avoidance of doubt, non-delivery in the above context refers to non-delivery as a result of default or omission rather than in relation to non-delivery for reasons outside of the control of the successful bidder e.g. any termination or revocation by the relevant counterparty due to disappearance of the network need, etc. Potential arrangements in the event of non-delivery are discussed in Section 5.4.

4.2.4 Post-PPWCA TRS adjustments

Once the PPWCA has concluded there will be limited circumstances which could or would result in further adjustments to the TRS as follows:



- Income Adjusting Events ("IAEs")
- Pass-Through Costs e.g. Licence Fees
- Late Delivery Penalties
- Refinancing Gainshare Mechanism
- Indexation
- Incentive Performance.

For IAEs, we recommend that trigger thresholds should be of similar scale to those which exist for OFTOs. These range from £0.5m for projects with a transfer value below £100m to £4m for projects with a transfer value which exceeds £1bn. A value other than the offshore asset transfer value would be needed for early competition, as there is no directly comparable concept for early competition. For example, the capital costs set through the PPWCA could be utilised as the reference by which the IAE trigger threshold is set for the remainder of the revenue period.

The reason we have recommended such values is that these lower trigger values are likely to be more appropriate where the solution is not (such as for Strategic Wider Works) part of a wider portfolio of assets and where the TRS is the primary or sole source of revenue.

4.3 Other commercial considerations

Below we set out our recommendations on two other issues relevant to the commercial model:

- How the relationship with the successful bidder is governed through an electricity transmission licence/contract and codes
- What would happen in the event network needs subsequently materially changed or disappeared.

4.3.1 Electricity Transmission Licence/contract and codes

Recommendation



A successful network solution would require an Electricity Transmission Licence and a successful non-network solution would enter into a contract. The terms/conditions in each would need to be aligned but would not necessarily be fully harmonised.

As the principle means of governing the relationship with the successful bidder, our consultation with industry stakeholders strongly suggested that an electricity transmission licence would be most straightforward for network solutions, whereas a commercial contract would be more suitable for non-network solutions.

Our recommendation is therefore that successful network solutions are provided with an Electricity Transmission Licence³ and successful non-network solutions would enter into a commercial contract with a Contract Counterparty.

We note that successful non-network bidders might also have or require some other form of licence (e.g. generation).

Licensing assumptions



Our recommendations in our Early Competition Plan (“ECP”) assume that Ofgem will be able to classify solutions proposed via early competition within the existing licensing framework (once it includes CATO licences) and the rights and obligations within the industry codes will follow accordingly i.e. network solutions will accede to STC whereas non-network solutions will not do so, etc. We also assume bidders will be able to reasonably understand how the licensing regime (including any relevant exemptions) will likely apply to their proposed solutions.

However, as we have found through our NOA Pathfinders programme, classification of assets is sometimes not straightforward e.g. where an asset historically owned by one type of licensee is to be owned by another type of licensee. It is possible that this can be resolved by Ofgem providing clarity, as and where required, on which licensable activity is applicable (if any) for each proposed solution at the appropriate point in time.

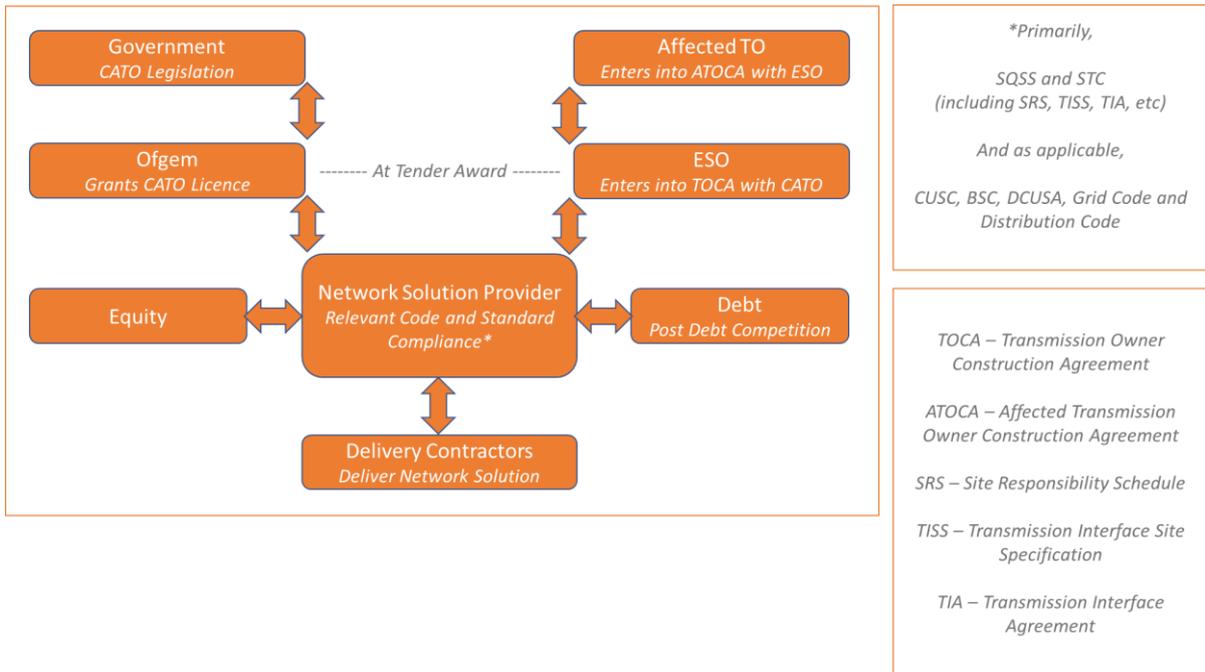
Whether an electricity transmission licence or a contract is awarded will, in turn, determine which industry codes they are subject to and this will then inform their codified rights and obligations.

Network solutions

We expect the network solution provider to be granted a Competitively Appointed TO (“CATO”) licence by Ofgem (once relevant legislation is in place) at point of tender award and they would accede to the System Operator Transmission Owner Code (“STC”) in parallel. The CATO would also enter into a Transmission Owner Construction Agreement with the ESO and this would also trigger further obligations under the STC, such as in relation to the CATO entering into a Transmission Interface Agreement with the incumbent TO, for example.

³ If existing TOs were successful in an early competition, there is then a question on whether a new licence or a licence amendment would be most appropriate.

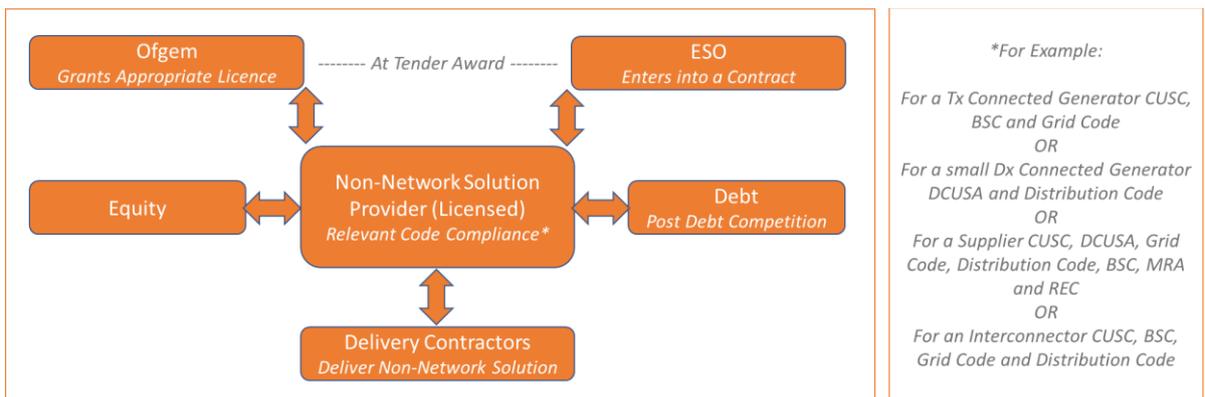
Figure 15: Licences and Contracts for Network Solutions



Non-network solution provider (licenced)

We expect a non-network solution that does not require a Transmission Licence may instead require another form of licence for a non-network solution e.g. a generation licence. The successful bidder may therefore still need a licence from Ofgem but would not accede to the STC. They would instead need to accede to other relevant codes depending on their licence type, and in respect of the solution service would enter into a contract with a contract counterparty e.g. the ESO. If the successful bidder does not already have a right to connect to or use the relevant system, they will need to separately follow the relevant connection process.

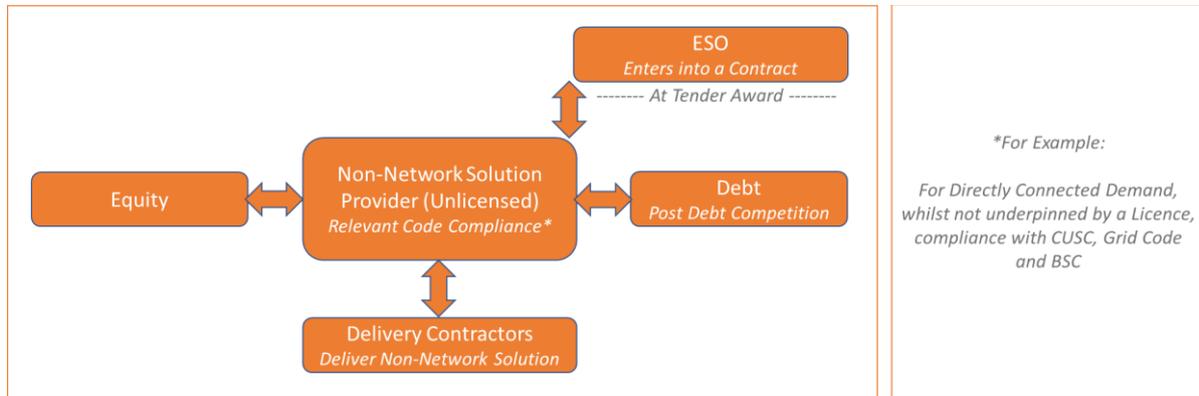
Figure 16: Licences and Contracts for Non-network Solutions (Licenced)



Non-network solution provider (unlicensed)

A non-network solution that does not require a Transmission Licence, or another form of licence, for a non-network solution will enter into a contract with a Contract Counterparty e.g. the ESO. If they do not already have a right to connect to or use the relevant system, they will likely also need to separately follow the relevant connection process. This would require them to accede to the relevant connection codes.

Figure 17: Licences and Contracts for Network Solutions (Unlicensed)



Level playing field

To ensure a level playing field, the commercial terms of the electricity transmission licence and the contract (including the rights and obligations set out in the applicable codes) need to be aligned. However, we do not recommend fully harmonising arrangements.

In some cases, it is appropriate for non-network solutions to have different rights and obligations under contract and code than network solutions have under electricity transmission licence and code. For example, in relation to the facilitation of new connections as is further discussed in Section 5.3.3.

We acknowledge that inadvertent consequences need to be avoided through utilisation of non-network solutions. In most cases these can be avoided with suitable code changes and contract design but in some cases, there may be residual concerns which require further consideration.

Stakeholder feedback



It has been suggested by some stakeholders that further work is required on industry code changes associated with early competition (both content and process) with mixed views on the extent that this should take place prior to an Ofgem decision on early competition.

There was also feedback from some stakeholders on a lack of detail related to code change. Without an in-depth review of the codes (which we do not believe should be undertaken until after policy decisions have been made) it was/is not possible to answer in detail some of the code-related questions from stakeholders.

We agree further work is required and within Section 7.1.3 we have recommended what we think would be efficient to undertake prior to a decision on early competition.



Stakeholder feedback

Some stakeholders challenged us on the focus of our analysis to date being on facilitation of early competition rather than on the impact on incumbent TOs, and the ESO, of the introduction of early competition.

We note this comment and expect Ofgem to undertake a full impact assessment as part of the next phase.

Whilst the primary focus of the high-level review undertaken in our Phase 3 consultation was on facilitative change, we also highlighted areas where change relates to (or mitigates impacts on) the incumbent TOs and ESO. By way of an example, there can be a requirement for a CATO and TO Transmission Interface Agreement or the potential extension onshore of the Transmission Interface Site Specification requirements. These documents (as per the STC) could set out the specifications and arrangements for the relevant TO and CATO assets at the interface between their respective transmission systems including in relation to the impact of each system on the other system at the interface, whether that be electrically or physically. For example, the Transmission Interface Agreement would set out rights of access where one party had assets on land owned by the other party and the Transmission Interface Site Specification would set out any relevant specific technical, design and operational criteria in relation to the interface.

Most concerns related to early competition and industry codes can be addressed by appropriate industry code change processes.

Stakeholder feedback

There are two interlinked areas where we feel legitimate concerns have been raised (primarily by the incumbent TOs) which are unlikely to be resolved via changes to the industry codes. When compared to the status quo the concerns are as follows:



- 1) The additional risk to both future compliance and consumers that is associated with non-delivery i.e. due to the inherent additional risks associated with competition. The licence and contract arrangements, as well as the industry codes, are likely to be able to be designed to partly address this concern but this risk will need to be considered in the decision-making process
- 2) The additional complexity in relation to design specifications and standards, including interaction with the existing network to ensure continued safety and reliability, etc. Industry code derived processes are likely to be able to be extended or adapted to partly address this concern but there are also links to the tender process and what is specified as part of any early competition.

These areas will require further consideration in the early competition decision-making process. During the implementation stage when developing the detailed contract and electricity transmission licence drafts for consultation, as well as the detailed code change proposals based upon any policy decisions and/or legislation.

Heads of Terms and code changes

In Appendix 2, Heads of Terms, we set out our high-level views on both network solutions and non-network solutions and in Appendix 1, Industry Codes, we set out our high-level views for industry code changes.

It is worth noting that in some cases our recommended early competition model looks to the offshore regime as a comparison and in others the onshore regime. For the STC our recommendation is that a CATO will be an onshore TO and so in most cases the rights and obligations applicable to onshore TOs will be applicable for CATOs, rather than the rights and obligations applicable to OFTOs.

There may be some exceptions to this where the OFTO arrangements (or other arrangements) are most suitable for a CATO but the starting point should be the onshore provisions. New connections are a relevant example where we are proposing that CATO obligations under an electricity transmission licence and STC will be substantially similar to the arrangements in place for onshore TOs, rather than being similar to OFTO arrangements. See section 5.3.3 for more information.

The content of these appendices will need to be further developed with wider industry prior to electricity transmission licence/contract development and code modification activities. The information will also need to be reviewed in detail and updated based upon whatever early competition model (if any) is decided upon and implemented in future.

It is worth noting that Appendix 2, Heads of Terms is mostly the same as what we consulted upon via our Phase 3 consultation. However, we have made amendments where necessary to reflect any related amendments made within the ECP e.g. in relation to performance bonds.

The development of a standard form contract (and CATO licence) will need to go through a detailed development and consultation process in future once any policy decisions have been taken by Ofgem on early competition.

Our recommendations are a good start point from which to consider the appropriate content of a standard form contract (and CATO licence) at the appropriate time in future. It is highly likely that some of the content of the Appendix 2, Heads of Terms will be amended and evolve.

European Legislation and European Network Codes

It is also important to note that the above focuses on domestic industry codes - there are also a suite of European Network Codes and above those codes sets of Regulations and Directives which apply directly or indirectly to electricity market participants. In addition, due to EU Exit and ongoing considerations about future energy arrangements, there are additional uncertainties. At this point in time, we have not fully considered the potential interactions between European legislation, European Network Codes, EU Exit and early competition. Our initial research suggests there will be some interaction but none which will be a material issue.

A handful of examples which will require consideration for early competition as the future energy arrangement discussions progress are as follows.

Procurement Timescales and Network Needs

In some instances, there are stipulations for procurement and contracting approaches (e.g. via the Clean Energy Package) in relation to certain network needs (such as in relation to balancing) which may need to be taken into account when considering what can be competed via early competition. At this point in time we do not think that any of the network needs foreseen in Section 4 would be restricted by the European legislation and codes, but this requires more detailed consideration in future.

Unbundling Provisions

There are unbundling provisions which will interact with the early competition model. Licensees will need to consider unbundling provisions when developing their bid to make sure that their proposals would be delivered in a compliant manner. For example, a licenced TO would be likely to be restricted from bidding and providing a non-network solution which is classified as licensable generation as at present they are unable to hold both a Transmission Licence and a Generation Licence.

Assignment of Responsibilities

In respect of some of the European Network Codes responsibilities have been assigned amongst relevant parties including TOs. An exercise will be needed to consider whether it is appropriate for CATOs to fall into the TO classification and therefore be assigned the same responsibilities as the incumbent TOs.

European Network of Transmission System Operators - Electricity ("ENTSO-E")

In respect of ENTSO-E (and associated processes such as supporting Ten-Year Network Development Plan processes) an exercise will be needed to determine the appropriate relationship between CATOs and ENTSO-E, or any replacement arrangements.

4.3.2 Needs change or disappearance



Recommendation

The risk of a change in network need is entirely outside the control of the successful bidder and so the risk should largely sit with consumers.

As set out in Section 3, an early competition will only be launched once sufficient certainty of the network need has been established. However, there may be circumstances where, following launch of a tender, the need changes significantly or disappears entirely. While such circumstances are expected to be rare it is appropriate to have a policy to cover the eventuality.

As the risk of a change in need is entirely outside the control of the successful bidder, we recommend that the risk should largely sit with consumers. Below we consider how the risk may be allocated by the licence or contract at each stage of the project.

During the tender process

In the event of a material needs change or disappearance after the tender was launched but before an electricity transmission licence or contract was awarded, the Procurement Body may wish to cancel the competition or relaunch the tender (or potentially revert to and continue from an earlier stage of the tender process) after updating the network need.

We recommend that in such circumstance's bidders would have to absorb their own bid costs. The potential for the competition to be cancelled or relaunched during this period is small, and is a risk that bidders entering a competitive process are typically asked to carry. If it becomes apparent in future that this position is a material deterrent to participation in an early competition alternative options will then need to be further explored.

Preliminary works period

As set out in Section 3, the network need will be kept under review through network planning processes. In addition, the project, including the underlying network need, would be reviewed by the Approver prior to Financial Close.

If (at any point) it is identified that the need had materially changed or disappeared, the Approver may decide to act via the counterparty. Actions could include initiating a change process with the successful bidder, terminating the project, or allowing the project to proceed and looking for mitigations elsewhere, such as launching a new tender for new capacity if the change were in relation to increased scope.

The change process would allow the Contract or Licence Counterparty, on the direction of the Approver, to ask the successful bidder to price a change in scope or timetable.

The Contract or Licence Counterparty could then either accept the successful bidder's proposal for accommodating the change, reject the proposal and allow the project to continue unchanged, or decide to terminate the relevant contract or electricity transmission licence. Again, this assumes such a change is permissible via the prevailing procurement legislation but noting that we assume there will be new procurement regulations for early competition so there may be flexibility regarding post-award change.

In the event of a termination in such circumstances, or an agreed needs change, we recommend that the successful bidder receive a reimbursement of project costs economically and efficiently incurred (including those efficiently committed but not yet incurred) in the preliminary works period. This could potentially include reasonable margin, but this requires further consideration.

Solution delivery period

While no formal check points are recommended for reassessing the network need during solution delivery, the ongoing network planning process (and/or associated processes) may flag a material change in (or disappearance of) the network need.

With Approver direction, the Contract or Licence Counterparty could then look to change or cancel the project.

In this event the relevant contract or electricity transmission licence provisions would apply, as set out in Appendix 2, Heads of Terms. These may be the initiation of the change process or a termination, including the relevant compensation provisions.

Operating period

As during the construction period, there are no formal check points recommended for reassessing the network need during operations. It is worth noting that the TRS is not based on utilisation.

If the network need changes for an operational project this will be considered via the change process, including in relation to new investment requirements, which is discussed in Section 5.

It is possible (but extremely unlikely) that the underlying network need could disappear entirely in the revenue term. If there is no potential for reuse, with Approver direction, the Contract or Licence Counterparty could then (in theory) potentially look to discontinue an operational project. As above, the relevant contractual or electricity transmission licence provisions would apply, including in respect of compensation payments, as set out in Appendix 2, Heads of Terms.

4.4 Summary of risk allocation

Table 5 summarises (at a high-level) where risk might sit as standard and so which risks are potentially sharable between bidders and consumers.

Risk allocation may need to be adapted depending on the network need and/or solution in question and so we expect that risk allocation will need to be reviewed on a case-by-case basis as part of pre-tender planning and in respect of each tender process.

Table 5: Risk allocation

Risk	Preliminary Works	Solution Delivery	Operations	Explanatory Notes
Consents	Shared	Bidder	Bidder	Consenting will be undertaken as part of preliminary works before a consented design is known and before final solution costs and the TRS are fixed via the PPWCA. From this point the TRS will no longer be adjustable other than for prescribed reasons e.g. IAEs, including for the delivery of planning conditions.
Land Rights	Shared	Bidder	Bidder	Land rights will be obtained as part of preliminary works before final solution costs and the TRS are fixed via the PPWCA. From this point the TRS will no longer be adjustable other than for prescribed reasons e.g. IAEs.
Design	Shared	Bidder	Bidder	Detailed design work will be undertaken during preliminary works before final solution costs and the TRS are fixed via the PPWCA. From this point the TRS will no longer be adjustable other than for prescribed reasons e.g. IAEs.
Ground Conditions	Shared	Bidder	Bidder	Ground condition surveys will be undertaken during preliminary works before final solution costs and the TRS are fixed via the PPWCA. From this point the TRS will no longer be adjustable

Risk	Preliminary Works	Solution Delivery	Operations	Explanatory Notes
				other than for prescribed reasons e.g. IAEs.
Construction Cost	Shared	Bidder	Bidder	Construction costs will be refined during preliminary works before final solution costs and the TRS are fixed via the PPWCA. From this point the TRS will no longer be adjustable other than for prescribed reasons e.g. IAEs.
Programme	Bidder	Bidder	N/A	Bidders are best placed to manage the programme risk as they have control over that process. There may be limited exceptions e.g. in respect of force majeure and/or as a result of 'acceptable delays' as considered in Section 5.
Contractor Performance	Bidder	Bidder	Bidder	Bidders are responsible for vetting, selecting and managing sub-contractors.
Long-Term Asset Condition	N/A	N/A	Bidder	Bidders are expected to maintain their assets to a satisfactory level to allow them to meet availability performance targets.
Equity	Bidder	Bidder	Bidder	The cost of equity is fixed at the time of award – as a result the bidder takes positive and negative cost of equity risks.
Debt	Bidder	Consumers	N/A	A debt competition would be run after preliminary works and cost of debt and gearing would be fixed at that point. Consumers would take cost of debt risk via the debt competition i.e. for any changes to assumptions provided by the Procurement Body.
Commissioning	N/A	Bidder	N/A	Bidders are best placed to manage risks associated with solution commissioning costs and timescales except in limited circumstances.
Decommissioning	N/A	N/A	Shared	Bidders are best placed to manage risks associated with solution decommissioning costs and timescales except in limited circumstances. There will be an element of risk sharing through the IAE recommended in relation to decommissioning obligations.
Change in Need	Consumers	Consumers	Consumers	Except where stipulated otherwise (e.g. if the tender requested such variability), consumers would take the risk for need change or disappearance rather than the bidder, as this risk is entirely outside of the control of the bidder.

Risk	Preliminary Works	Solution Delivery	Operations	Explanatory Notes
Bidder Default	Shared	Shared	Consumers	Throughout preliminary works and delivery this risk is shared via a form of security being in place (e.g. a performance bond, or equivalent form of acceptable security) but the remainder sits with consumers.
Force Majeure	Shared	Shared	Shared	By their nature force majeure events are outside the control of bidders and consumers. The means of this risk being shared require further consideration, but it could either be through some form of relief where it has occurred (such as for late project delivery) or via an adjustment to costs as a result of the occurrence, whether that be via the PPWCA or an IAE.
Refinancing	N/A	N/A	Shared	Any refinancing gain is to be shared between the bidder and consumers via a refinancing gain share mechanism. We have recommended that refinancing would only be possible in the operational period and not prior to that time.
Change in Law	Shared	Shared	Shared	Change in law (where not reasonably foreseeable) is outside the control of both the bidder and consumers. We are proposing a change in law IAE whereby the bidder would take the risk up to a given value and consumers beyond that trigger threshold.
Network Charge Bad Debt	N/A	N/A	Consumers	Bidders will be protected from this risk with the Payment Counterparty responsible for paying the TRS subject to permitted adjustments e.g. via incentives.
Grid Connection	Bidder	Bidder	Bidder	Whilst this risk could be mitigated by aligning the tender process with the connections process we expect cost and time risk related to grid connection and system access to sit with bidders for both network solutions (even if provided by the incumbent TO) and non-network solutions.
Network Compliance	Bidder	Bidder	Bidder	Bidders will be responsible for ensuring compliant design and operation of their solution in accordance with relevant codes, standards and specifications.
Need Specification and Assessment	Procurement Body	Procurement Body	Procurement Body	The Procurement Body will be responsible for ensuring that the need is correctly specified and assessed. They may rely on relevant third parties to do

Risk	Preliminary Works	Solution Delivery	Operations	Explanatory Notes
				so. The Approver may take some residual risk here depending on their role in respect of specifying and assessing any relevant network needs.
Third Party Interface	Bidder	Bidder	Bidder	The bidder will be responsible for third party interfaces, including under network codes with the ESO and incumbent TOs.
Licence and Code Change	Bidder	Bidder	Bidder	Bidders will take the risk for compliance with any licence or code changes.
Uninsurable Risk	Shared	Shared	Shared	Via an IAE the cost (above a trigger threshold) associated with uninsurable risk would sit with consumers whereas any other costs would sit with the bidder.
Residual Asset Value	Bidder	Bidder	Bidder	Any assumptions made by bidders in relation to revenue stacking and/or residual asset value will remain with bidders.

5 End-to-end process

This section presents the end-to-end model for early competition from the point at which a project is identified (see Section 3.4) to the end of the revenue period.

5.1 Summary project timeline

Figure 18 on the next page, is an illustrative diagram of the entire process from when a project is selected as being suitable for early competition to the end of the revenue period. The timescales are arbitrary and for illustrative purposes. For example, pre-tender activities happening in year three could happen immediately after a project being identified in the Network Options Assessment (“NOA”) process. Tender stage lengths, preliminary works and solution delivery will vary depending on the scale and complexity of the project.

The pre-tender activities commence at Stage Gate 1 (see Section 6.2.4) where Ofgem approves the need as being suitable for early competition. This point in the process happens at the beginning of year three on the illustrative diagram in Figure 18. Following the need being approved by Ofgem as suitable for early competition the Procurement Body undertakes pre-tender activities. Following this the tender is launched and we progress through the four-stage process: Pre-Qualification (“PQ”), Invitation to Tender (“ITT”) (stage 1), ITT (stage 2) and the Preferred Bidder (“PB”) stage.

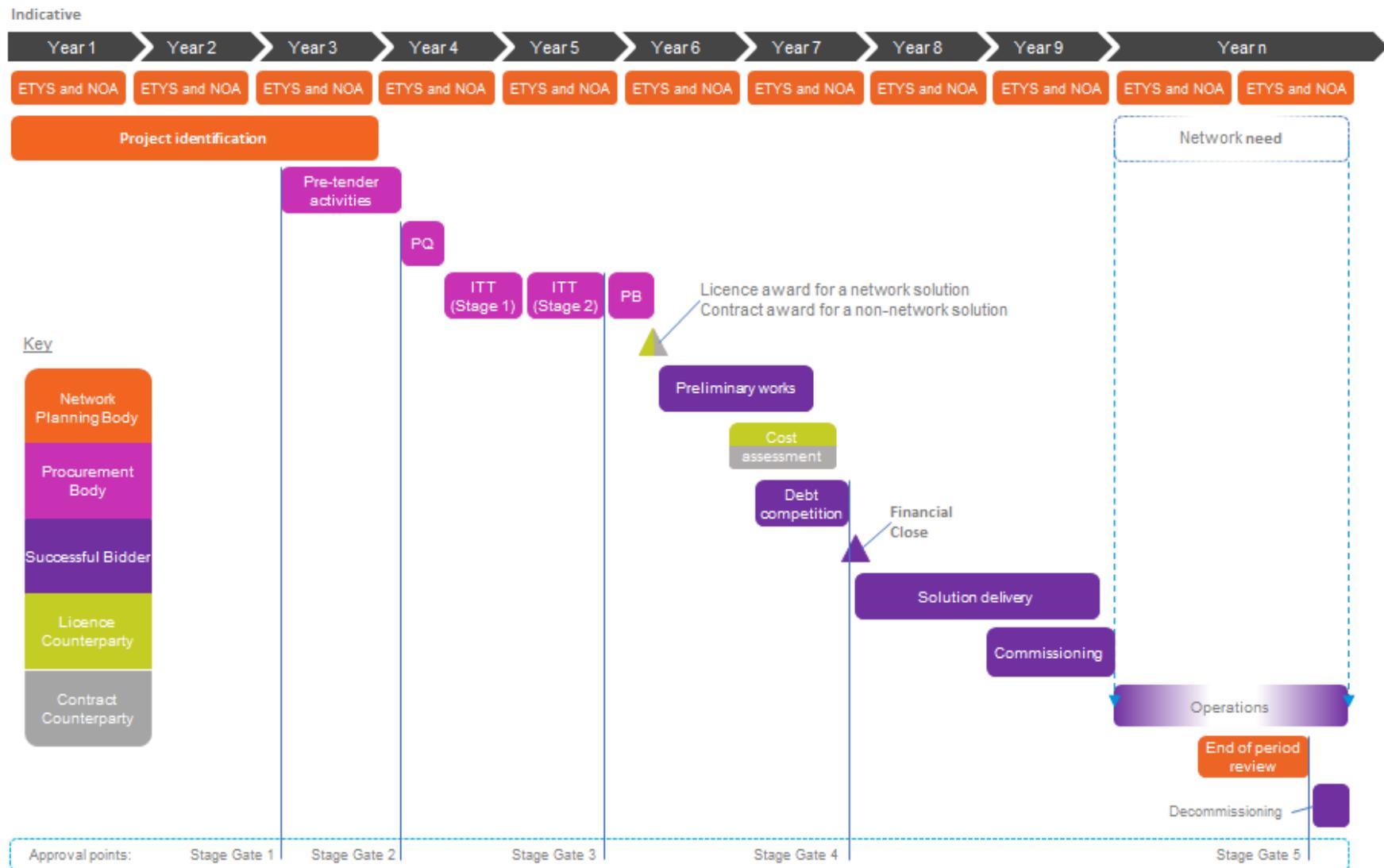
Following the electricity transmission licence or contract being awarded, the successful bidder begins the preliminary works. The Post-Preliminary Works Cost Assessment (“PPWCA”) is undertaken by the Contract or Licence Counterparty (depending on successful solution) to determine the adjustments to the Tender Revenue Stream (“TRS”) for the revenue period. The successful bidder undertakes a debt competition which is overseen by the Procurement Body and this is followed by financial close.

The successful solution is then constructed and commissioned by the successful bidder. Once commissioned the revenue period commences and operations continue for the pre-defined length of time for that need. Near the end of the revenue period an end of period review is undertaken to determine what happens following the end of revenue period.

If required, the successful bidder will decommission the asset. There may also be an extension to the revenue period or retendering following that period.

The remainder of Section 5 includes a timeline to show the reader where they are in the end-to-end process.

Figure 18: Project timeline under early competition



Note: Timescales are illustrative based on comparable precedents and are likely to vary between projects.

5.1.1 Stage Gate Process

Throughout the end-to-end process we are recommending a series of Stage Gates which give Ofgem, as the Approver, oversight and some control over the process to ensure consumers are protected. The Stage Gate Process we have recommended for the end-to-end process can be seen in Figure 18. See Section 6.2.4 for more information on the Approver role.

Stage Gate 1

At Stage Gate 1 the Network Planning Body (Electricity System Operator (“ESO”)) will make a recommendation to the Approver that the need is suitable for competition and should be progressed to the pre-tender stage.

The Network Planning Body (ESO) will support its recommendation based on the criteria for early competition (see Section 3.1). Once the Approver has provided its consent the Procurement Body can begin pre-tender activities.

Stage Gate 2

At Stage Gate 2 the Procurement Body will submit the tender documents and the contract/licence to the Approver. The Approver must give their consent for the tender process to commence.

During the pre-tender stage the following activities will be undertaken to support the submission to the Approver:

- The Licence Counterparty and Contract Counterparty will develop the PPWCA methodology and guidance
- The Procurement Body will develop tender documentation (with support from the Licence Counterparty and Contract Counterparty)
- The Procurement Body will undertake further market engagement to test whether there is sufficient market appetite
- The Network Planning Body (ESO) may also need to review whether there have been any changes to the need. One factor that may impact whether the need is reviewed is the length of the pre-tender period
- The Procurement Body will compile all of this information and submit this to the Approver at Stage Gate 2.

The Approver should consider this information in the round to determine whether a tender should go ahead. See Section 5.2.1 for more information on the pre-tender period.

Stage Gate 3

At Stage Gate 3, the Procurement Body will submit a recommendation to the Approver as to which bidder should be made the preferred bidder. The recommendation would be based on the Procurement Body’s assessment of final bids against the bid evaluation framework.

As part of the approval process, the Approver gives its consent that the preferred bidder can be awarded a contract or an electricity transmission licence, once any preferred bidder requirements are met. As we are recommending that Ofgem are both the Approver and Licence Counterparty, the Approver will naturally have control of who can be awarded an electricity transmission licence through the licence application process. Their approval of the contract as well provides a single process for both network and non-network solutions, helping ensure a level playing field.

Examples of other Stage Gates processes

The Stage Gates we are recommending is equivalent to the approval stages [Ofgem put in place](#) for interconnectors who are applying for the cap and floor regime.

For interconnectors, Stage 1 is Initial Project Assessment (“IPA”), stage 2 is Final Project Assessment (“FPA”) and the Post-Construction Review (“PCR”). A key difference, however, is that early competition is a tender process whereas the cap and floor regime is a process for applying to the cap and floor regime.

Another example of a staged process for a large project in the infrastructure space is the control point process [Ofwat put in place](#) for Direct Procurement for Customers (“DPC”).

Stage Gate 4

This Stage Gate occurs at the end of the Preliminary Works stage and will represent the approval to proceed with solution delivery once all final information is available. This information would be provided by the Network Planning Body (ESO) and supported by the relevant Counterparty, where information from bidders will be required. This forms part of the final project needs case and will be submitted to the Approver. This information includes output from NOA and conclusion of the PPWCA and debt competition. All of this information will inform the Approver's decision on whether the solution is still needed and is in the best interest of the consumer.

If this is not approved at this stage, Ofgem itself would instruct the relevant Counterparty to exercise the termination provisions set out in the relevant contract or an electricity transmission licence. For more information on this process, see Appendix 2, Heads of Terms.

Stage Gate 5

Stage Gate 5 is towards the end of the original revenue period, where the end of the revenue period options are assessed. We are proposing four options at this stage; extension, expiry, re-tendering or decommissioning (see Section 5.3.5). Once these options have been considered, a recommendation will be made to the Approver, who will approve or reject the option presented.

We have not yet finalised which roles will be involved in each end of life option. This will need to be developed further but will include a Network Planning Body (ESO) assessment of network needs at the time.

Disputes

Our recommendations on the Stage Gates assumes that the Approver makes the final decision at each of the Stage Gates. The Approver may make a decision which is different to the recommendation provided by the Network Planning Body or Procurement Body at a Stage Gate. We recognise that in practice this will depend on Ofgem's decisions on the split of risks and liabilities between roles under competition. It will also depend on the information provided and the processes that underly the Approver's decision. We recommend that differing views between the Network Planning Body or Procurement Body and the Approver is an area that Ofgem considers as part of its consultation on roles in competition.



5.2 Tender process

This section presents our recommendations for the tender process for early competition.

5.2.1 Pre-tender activities



Recommendations

Project information events would be run by the Procurement Body.

Procurement support events and services will be run by the Procurement Body.

Our recommendation is that both project information and procurement support are key activities to be undertaken during the pre-tender period. In Figure 18 the pre-tender period is shown as 1 year for illustrative purposes. Our recommendation is that the timeline for the pre-tender period and a proposal for the tender timeline would be part of the Stage Gate 1 submission to Ofgem. These would be reflective of and proportionate to the scale and complexity of the

need being tendered. The pre-tender period should be set to a period of time which aims to maximise value to consumers. This should also take account of the time required by the Approver to progress through the Stage Gates. It is worth noting that identification of projects for early competition will take into account whether there is sufficient time to run a competition.



Stakeholder feedback

Stakeholders were broadly supportive of our recommendations for pre-tender activities.

Project information

The purpose of project information events and services would be to inform the potential bidders about the need specification details and technical requirements, the initial solution from the NOA process and to provide potential bidders with an opportunity to ask questions. Further details can be found in Appendix 4, ECP System Needs and Technical Specification.

The Procurement Body, with support of the Network Planning Body (ESO), would present all the technical details of the need specification. This would include, for example, system requirements, length of the need, geographic boundaries and any other relevant technical requirements.

Information which could be provided would include solutions submitted as part of the NOA process and substation and land information from the Transmission Owners (“TOs”) where applicable.



Stakeholder feedback

A potential equity investor asked for more visibility of the expectations of TOs at this stage in the process. There is limited expectation for input from the TOs during the pre-tender period and we expect the Procurement Body to work closely with the TOs to ensure they have timely visibility of any information requests.

All information shared at this stage would be limited to what can be made publicly available. See Section 5.2.2 for more information on provision of information during the revenue period.



Procurement support

The purpose of procurement support events and services would be to ensure that bidders were appropriately prepared to develop their bids and enter the procurement process.

These events and supplementary information would set out in detail the procurement process, evaluation criteria, the commercial model, the contractual or electricity transmission licence documents and the submission interactions. Bidders and their advisers can ask specific questions of the procurement team about any of the previously mentioned topics.

For both project information and procurement support we considered that the costs of running such events would be relatively low as the Procurement Body, Contract and Licence Counterparties and Network Planning Body (ESO) would have the capabilities to undertake other activities and so we would expect the marginal cost to be low. The experience of other large infrastructure procurement (e.g. Offshore Transmission Owners ("OFTOs")) is that procurement support helps to attract new investors and potential bidders and can reduce the number of clarification questions.

Procurement and commercial model adjustments

Our recommendation is that there is a need to flex the bid evaluation framework and commercial model. The Early Competition Plan ("ECP") presents a standardised approach to the commercial model and bid evaluation framework which should be reviewed on a case-by-case basis. The rationale for this recommendation is that the range of needs and projects under early competition will be very wide in terms of scale, time sensitivity and geography. To ensure that early competition delivers value for consumers it is important that the tender process and commercial arrangements are proportional and reflective of the underlying need. Although we also want to ensure that there is standardisation within the framework to ensure repeatability and facilitate learning by all involved stakeholders. Standardisation of such a framework will be key to driving benefits. A UK example highlighting the importance of standardisation of commercial models is the standardisation of Private Finance 2 ("PF2") contracts as a recommendation following a review of Private Finance Initiative ("PFI") contracts.⁴

Recommendation



Adjustments to the bid evaluation framework and commercial arrangements would need to be done on the principles of: maximising consumer value, reducing inefficiencies, minimising transaction costs, minimisation of deviation and ensuring a level playing field.

Our recommendation is that the Procurement Body, Network Planning Body (ESO) and Licence/Contract Counterparties work collaboratively during the pre-tender period to review and adjust the standard bid evaluation framework, weightings of the 'Technical Adjusted TRS' and commercial arrangements. We do not envisage any role for the TOs in adjustments to the commercial model or tender arrangements.

The commercial model and end-to-end process set out in this document is the base case to which any project specific adjustments are made.

We recommend that the process to review and adjust the bid evaluation framework and commercial arrangements should be:

- Network Planning Body (ESO) identifies a need suitable for early competition
- Approver agrees that the project is suitable for early competition
- Procurement Body reviews the need and identifies whether any of the features of the need are unique, so that the standard commercial model and bid evaluation framework are not appropriate
- The Procurement Body undertakes market soundings to identify appropriate debt terms for providing the debt assumptions in the ITT (stage 2) assessment

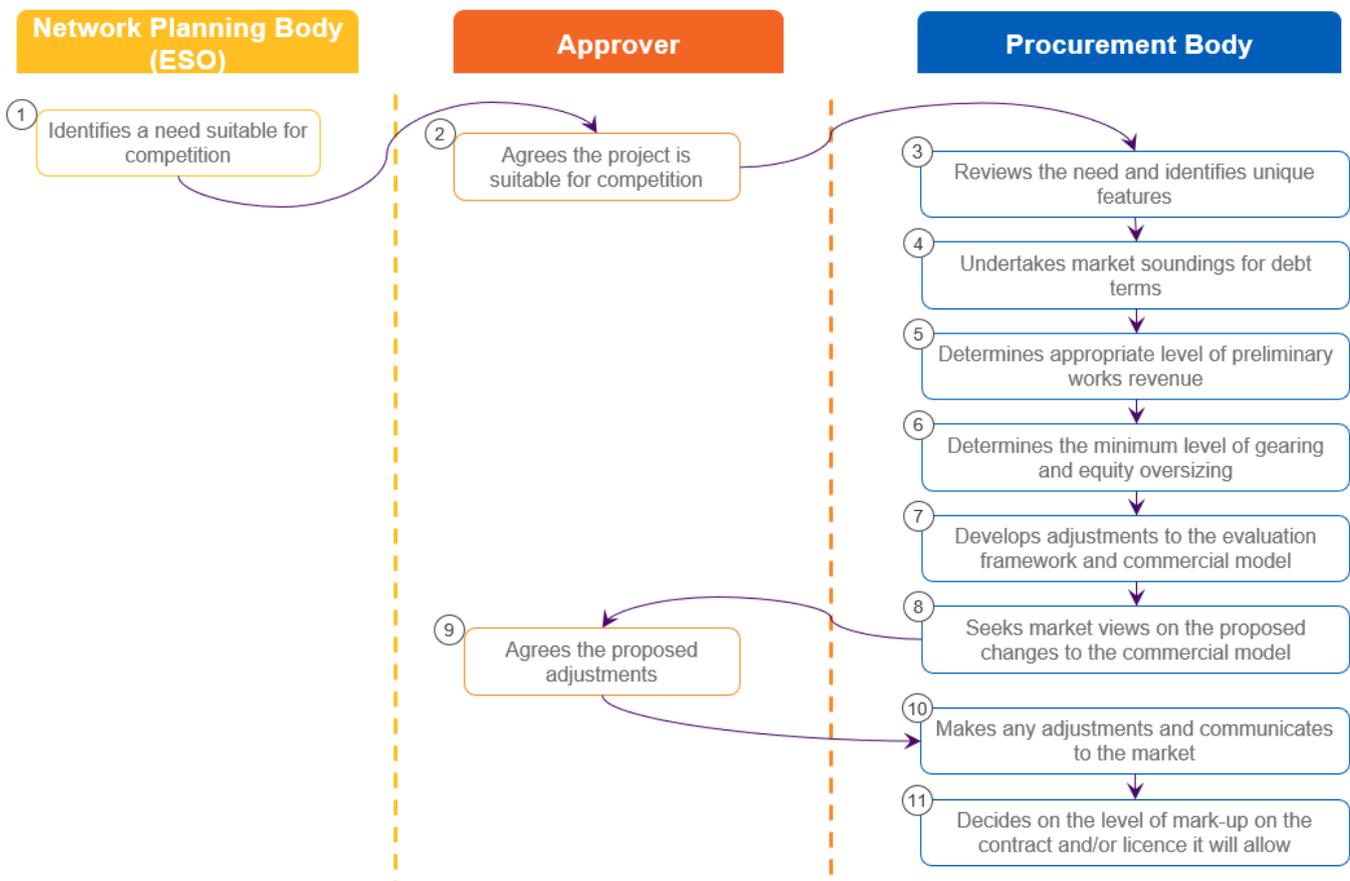
⁴ HMT (2012) Standardisation of PF2 Contracts [online] available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/207383/infrastructure_standardisation_of_contracts_051212.PDF



- The Procurement Body determines what level of preliminary works revenue is appropriate
- The Procurement Body determines the minimum level of gearing and equity oversizing
- The Procurement Body develops adjustments to the bid evaluation framework and commercial model
- The Procurement Body seeks market views on the proposed changes to the commercial model
- Approver agree the proposed adjustments
- The Procurement Body makes any adjustments to the bid evaluation framework/weightings or the commercial model itself and communicates to the market
- The Procurement Body will also decide on the level of mark-up on the contract and/or licence it will allow from bidders and at what stages during the tender process.

This process is illustrated in Figure 19.

Figure 19: Review and adjustment process



We would expect the Procurement Body to determine whether the project specific elements of the contract or electricity transmission licence were suitable to allow bidders to propose 'mark-up' to the contract or electricity transmission licence and how this should be proposed, and the contract and electricity transmission licence updated during the procurement process. It is important that bidders are all bidding into the same contract and electricity transmission licence so adjustments would need to be undertaken during the process.

Any adjustments to the standard bid evaluation framework or commercial model would be developed



by the Procurement Body and assessed by the Approver based on the following principles:

- Maximising consumer value
- Reducing inefficiencies
- Minimising transaction costs
- Only deviate from the standard model where necessary
- Maintain a level playing field
- Before the PQ stage can commence the Approver must sign-off on the tender documents and contract as part of Stage Gate 2.

5.2.2 Provision of information

Our key principle is that all qualified bidders should have access to the same information as is available to a ring-fenced incumbent TO taking part in the competition in line with procurement legislation. Through workshops, webinars and our Phase 2 and 3 consultations we have developed our position that the network related information used today by the ESO and TOs to develop initial desktop solutions should be available to qualified bidders.

This approach is also consistent with the [Energy Data Task Force](#) (“EDTF”) recommendations which Ofgem asked the ESO to consider as part of this work as set out in our Phase 1 update (see EDTF page 5). EDTF Recommendation 2 “Maximising the value of data” sets out a principle of ‘presumed open’ (see EDTF page 24) which supports our position that the current information should be made available. However, it should be noted that there is a recommended spectrum. We are working on the assumption that ‘Shared’ (see EDTF page 25) is the appropriate categorisation for the purpose of network information to support early competition, and this will influence our final position.

Network related information

Our recommendation is that bidders should initially receive the information in Table 6 to support the development of their proposal. This will form part of the ITT (stage 1), which will also specify all the relevant standards and obligations the bidders’ proposals will need to confirm to.

Table 6: Information provision to bidders

Type	Description
System Requirement Form Part A	Sets out required and expected boundary transfer capability needs over the next 10 years, indicating where reinforcement or management solutions are required.
Electricity Ten Year Statement (“ETYS”) models	Circuit information including electrical and physical properties, and changes across ETYS study years.
Study guidelines	The assumptions to be used for network modelling.
Land	Current information held by TOs on relevant land ownership, access rights and existing surveys.
Cost benefit analysis (“CBA”) tool	A tool that allows TOs to run their own indicative cost benefit analysis of options.



Network Impact Studies



Recommendations

The Procurement Body will commission network impact studies on bidders' proposals.

Access to appropriate models for network planning should be made available to qualified bidders.

We are recommending that the Procurement Body will, where necessary, commission network impact studies from the relevant Network Planning Body (TO/Distribution Network Operator ("DNO")) on bidders' proposals in ITT (stage 1). The outputs of the studies will be provided to the bidders to enable them to improve their proposal in ITT (stage 2). This should support an improved indication of the robustness of costs and potential technical risks of the proposed solution.

We have also considered, with subject matter experts from a range of stakeholders, whether the additional studies could be organised and conducted without the involvement of the Network Planning Body (TO/DNO). Our conclusion is that the studies will need to be commissioned with the relevant Network Planning Body (TO/DNO) as no meaningful level of separation can be achieved. This is because the studies will be looking at issues that materially impact the wider network, and the Network Planning Body (TO/DNO) is accountable for the safety and performance of the network under their Licence. They therefore require ownership of the studies and ultimately approval of the study conclusions.

Stakeholder feedback



As a principle, nearly all stakeholders who have expressed a view have agreed with our recommendation on network impact studies. A potential equity investor expressed a preference for bidders to effectively have unlimited access to all network data to allow bidders to self-assess overall network impact. However, based on our rationale outlined above, we do not currently regard this as a practical option. The stakeholder did go on to acknowledge our recommendation is a potentially workable alternative. Some of the TOs, while agreeing with the principle of our position, have requested a level of detail that we would look to develop with them as part of implementation.

Some important areas to investigate will be:

- How the iterative nature of studies currently conducted by network owners on their own proposals can be replicated for bidders
- The resource level required to conduct studies in relation to the potential number of bidders
- The most appropriate mechanism for cost recovery of studies
- Appropriate allocation of risk and liability for study outputs becoming invalid. This could be created by the nature of a live network evolving throughout the life of the tender event, or by bidders providing inaccurate/incorrect information.

At this point we do not see any of these areas being obstacles that cannot be resolved, although we recognise that the solutions may require a new level of flexibility and service from network owners.

Access to network models

The ability for bidders to have access to the same network modelling data is a key principle of our recommendation. However, it could be a challenging area to implement given the sensitive detailed network, generation and demand data involved.

Our preferred option remains to develop a process to provide qualified bidders direct access to the ETYS models currently used by the ESO and TOs for initial network planning. This would replicate the level and type of information used by the TOs to develop their initial network solutions as part of the NOA process.



However, the current framework of codes and licence conditions associated with sharing detailed network information focusses on sharing information between regulated businesses. The introduction of bidders who may not have Licences or be party to codes introduces challenges, particularly in relation to potentially supplying 3rd Party data and intellectual property. Therefore, code and Licence changes may be required which will require more engagement and discussion with data owners. Non-disclosure agreements and encryption of sensitive data alone may not be enough to provide such a level access, as has been previously recommended.

Ultimately, we may conclude that access for unlicensed parties is not the correct approach to take due to data sensitivity. Alternative options that we will continue to evaluate in parallel are:

- Simplified models using publicly available information
- The ESO providing a model and study service to bidders
- Supervised restricted access or “War Room” for bidders.

We are proposing that the work to fully understand the potential impact of sharing more detailed data as part of model access continues as part of the implementation phase.



Stakeholder feedback

The recommendation to release models to bidders has received widespread support from stakeholders, and the TOs have actively engaged and supported work in this area.

It should also be noted that to provide a level playing field for information, we recommend that a TO’s bid team would be restricted to using the same modelling provision as all other qualified bidders. This should form part of the recommended ring-fencing arrangements. However, it should be noted by Ofgem that TOs have highlighted several concerns that we intend to address as part of the implementation process. The concerns can be summarised as follows:

- How to ensure bidders are subject to equivalent standards on data quality and security as created by the regulatory regime, including equivalent sanctions for breaches, when bidders are not subject to Licence and Code obligations
- TO funding to provide the level of additional activity and support they envisage will be required to provide extra information to the market and bidders, over and above their current network planning obligations
- How liability and risk associated with inaccurate and/or changing information created by a live network will be treated and allocated
- Whether all bidders will be tied to a specific modelling platform.

Some of the concerns outlined are partially addressed with our preferred position on Non-Disclosure Agreements (“NDAs”) and information updates during tender, however we also recognise these are high level principles at this stage and the TOs are keen for greater levels of certainty.

Finally, a concern was raised regarding the accuracy of the ETYS models if supplied. Historically they go through an iterative process of refinement to resolve discrepancies during the NOA process. We do not currently see this as a concern, because the current recommendation would see bidders using the model after the NOA process has concluded. Therefore, any issues should have been resolved.

Non-Disclosure Agreements

NDAs will form part of the ITT process and will need to be designed to set a minimum standard on the care required by bidders when holding and using supplied information. This standard should be equivalent to that applied to TOs under the regulatory regime. We will continue to assess options for



how sanctions for breach of NDA could be made legally robust, so that they act as an effective deterrent.

Information updates during tender

We recognise that the network will be evolving during the life of the tender process. We will expect all bidders to take a due diligence approach to the use of supplied information and will develop more detail on allocation of liability and risk during implementation.

We would expect all parties involved in supplying information that goes into creating the ITT to inform the Procurement Body of material changes that affect information published within the ITT. This will allow the Procurement Body to take appropriate corrective action to update bidders of changes they may need to consider. For example, changes to assets on the network or the status of property and land should be notified to the Procurement Body so that updates can be issued to bidders.



Stakeholder feedback

Some of the TOs have expressed concern about the workload burden and cost of providing updated information during the tender process.

We would look to investigate the likely scale, complexity and cost of such updates as part of implementation. However, because changes could affect bidders' proposals (including the TOs own proposal) it would be reasonable to include obligations to update the Procurement Body of changes affecting a tender into the scope of future licence and code changes. Again, we would develop more detailed recommendations for Ofgem as part of any implementation phase.

Post Award arrangements

For the detailed design process needed after the conclusion of the tender process, the winner will either hold a Competitively Appointed Transmission Owner ("CATO") Licence and have signed up to the System Operator Transmission Owner Code ("STC"), or will hold a commercial contract and have signed up to the Connection and Use of System Code ("CUSC") and Grid Code. They will also hold the relevant agreements in respect of their interface with the existing system e.g. via the relevant connection application process. We would expect existing electricity transmission licence, contract and code mechanisms to manage the detailed design and data exchange process.

5.2.3 Pre-Qualification (PQ stage)

Once Stage Gate 2 has been approved the Pre-Qualification ("PQ") stage can commence. See Section 5.1 for more information on Stage Gates. This section presents our recommendations for the PQ stage of the tender process.



Stakeholder feedback

Stakeholders were broadly supportive of our recommendations for PQ assessment areas.

Evaluation criteria

Legal standing



Recommendation

Bidders are assessed on their legal standing as part of PQ.

Our recommendation is that bidders are still assessed on their legal standing as part of the PQ. Each member of the bidder group would be expected to provide information on company specific information as set out in Table 7. For consortia the lead bidder will be asked to provide information on the consortia.



Table 7: Legal evaluation criteria

Area	Information	Bidder
Company details	<ul style="list-style-type: none"> Name of bidder Company registration Date of registration in country of establishment Place of incorporation Trading status 	All
Group Details	<ul style="list-style-type: none"> Immediate parent company details Ultimate parent company details 	All
Shares, advisors and licences	<ul style="list-style-type: none"> Details of directors of bidding entities Significant shareholders of bidder members Legal, financial, technical adviser details Other licences held by the bidder 	All
Details of grounds for exclusion	<ul style="list-style-type: none"> Any individuals with the bidders who have the conviction of criminal activity, corruption, fraud, terrorism, money laundering or child labour Breach of tax obligations, environmental obligations, social obligations and labour law obligations Bankruptcy or insolvency Distortion of competition/role in the procurement process Deficiencies in performance in a prior contract Subject to UK/EU sanctions Previous breach of an NDA by any company in the group 	All
Consortia	<ul style="list-style-type: none"> Bidder group organisational structure Organisation which will hold the electricity transmission licence/contract Relationship between each bidder group member Key contractual relationships 	Lead bidder



Recommendation

Sole bidders or consortia would be asked to provide evidence that they have the financial capacity to finance the reference design.

Financial capacity

Our recommendation is that sole bidders or consortia would be asked to provide evidence that they have the financial capacity to finance the reference design from the NOA⁵ process. Sole bidders or consortia will be asked to provide evidence of the following areas:

- Demonstrate that they have financial capacity to secure financing solutions that are equal to or more than the equity value of the reference design in the NOA⁵ using the assumed level of gearing⁶. This is in line with the requirements for the OFTO regime
- If corporate finance, then demonstration of ability to raise the equity value through net assets

⁵ This approach is a proxy for the bidder’s solution as we would not expect them to put forward cost estimates at this stage

⁶ See Section 4.2.2 for more information on how gearing is set in the debt competition



- If project finance then proven track record in raising equity, proven track record in investing or financial institute letter of comfort in relation to the equity value
- 3 years of audited statutory accounts (if a Special Purpose Vehicle (“SPV”) then parent)
- Declaration of any contingent liability
- Chairman’s half-yearly statement.



Stakeholder feedback

A potential equity investor questioned our approach for asking for corporate and project finance equity raising experience as the debt competition (see Section 4.2.2) may lead bidders towards a project finance approach rather than corporate.

Bidders may compete in the debt competition to provide corporate finance. The rationale for asking bidders for their project or corporate finance experience is that we recognise that bidders will have different experience and approaches to financing. We ask for evidence of experience raising equity under either approach to ensure we are not unduly excluding any valid experience in the PQ stage.

Technical

Our recommendation is that sole bidders or consortia would be asked to provide evidence that they have the technical capacity to deliver a solution of comparable scale and complexity to the reference design. Sole bidders or consortia will be asked to provide evidence of the following areas:

- Experience of preliminary works of projects of comparable scale and complexity to the reference design
- Experience of construction works of comparable scale and complexity to the reference design
- Experience of maintaining and operating works of comparable scale and complexity to the reference design.



Recommendation

Sole bidders or consortia would be asked to provide evidence that they have the technical capacity to deliver the reference design.



Stakeholder feedback

A potential equity investor noted that complexity is not always proportionate with the scale of projects.

We agree with this observation and confirm that the technical assessment will not simply be reflective of the scale of the project but will reflect more technical considerations related to the need. This also highlights the incentive on bidders to engage with the NOA process during project identification. Potential bidders may have solutions which are significantly less complex and smaller scale which would meet the same need as the incumbent TO solution. If they do not engage with the ESO then the only reference point for assessing capability is the reference design.



Recommendation

Bidders would be required to adhere to corporate standards in the contract/licence.

Corporate standards

Corporate standard requirements will be set in the contract/ electricity transmission licence. The successful bidder is expected to adhere to these standards which will go beyond legal obligations. These standards will be determined as part of implementation and the pre-tender period.



Corporate standard requirements will set standards that successful bidders must adhere to as part of the contract or licence.

For example, we would expect that the successful bidder should be signed up to an internationally recognised Green House Gas (“GHG”) emission and environmental reporting standard such as Certified Emissions Measurement and Reduction Scheme (“CEMARS”).

Passporting

As discussed in Section 3.4.5, the pipeline for early competition is not yet known. For passporting to be applied efficiently further visibility of the potential pipeline is required.

In general, we are of the view that passporting should be applied where there are tenders run for projects of similar scale and complexity within a close timeframe. This is an area that should be kept under review by the Procurement Body as early competition develops. This should also be considered during the implementation phase when there is greater visibility of the pipeline.



Recommendation
The Procurement Body should seek opportunities to implement passporting when there is a suitably comparable pipeline of projects.

Changing consortia over time



Recommendation
Bidders can change consortia members at the discretion of the Procurement Body.

Our recommendation is to allow bidders to make a request to change consortia. In Public Private Partnerships (“PPP”) style procurements if a consortia member wanted to switch a member following the PQ process this could be negotiated with the procuring authority on the grounds it is a like for like switch. This is typically done on an

ad hoc basis and the burden of proof sits with the consortia.

There are some risks associated with this process in terms of other bidders disputing the process on the grounds of equal treatment and transparency. This is dependent on the dispute process and the tender regulations in place.

Consortia can make the case to the Procurement Body that the switch is a like for like. The Procurement Body would assess this on a case-by-case basis and would have full discretion over the decision-making process.

Assessment process



Recommendation
PQ should be assessed on a pass/fail threshold where insufficient information on any of the detailed areas would lead to a fail.

Our recommendation for the assessment of bidders' PQ submissions is that they are done on a pass/fail threshold. Bidders are expected to provide a response or evidence, where appropriate, for each of the points set out above in the legal, financial and technical areas. If the bidder’s evidence for any of the required areas is insufficient or the bidder is not able to provide

evidence or an appropriate response, then they will receive a fail. A bidder must receive a pass across all assessment areas to progress to ITT (stage 1).

Alignment to the Ofgem licencing process

Our recommendation is that the licence application process is aligned with the tender process where most efficient and as much as possible.

The ESO has been discussing the potential legislative, regulatory and licencing arrangements with BEIS and Ofgem but these are still at a relatively early stage of development. No applicants have progressed through the TO licence process



Recommendation
Licence application process is aligned to the tender process.



since privatisation. Although the OFTO regime has awarded licences during this period which provides a good basis from which to consider the approach for licencing for early competition. Ofgem will develop a new licencing process for CATO which will need to be aligned to the tender process (See Section 7).

We want to avoid speculative and inefficient licence applications as this will incur cost on behalf of the bidder and Ofgem which will erode the benefits of competition. We would expect there to be elements of the licence application assessment embedded within the PQ, ITT (stage 1), ITT (stage 2) and PB stages where appropriate.

Once Ofgem has developed the licencing regime for CATOs we would expect the Procurement Body to work with Ofgem in aligning and streamlining the tender and licence processes together as much as possible. In developing the requirements for PQ we have reviewed the various [Procedural requirements](#), [Application Regulation](#) and [Application guidance](#). This is in relation to an electricity transmission licence award rather than contract award.



Recommendation

The aim of ITT (stage 1) is to realise the innovation benefits of early competition.

We would also want all bidders who are proposing network solutions to demonstrate that they are compliant with unbundling rules.

Ofgem expects the formal licence grant process including the consultation and decision to occur during the PB stage.

5.2.4 ITT (stage 1)

ITT (stage 1) is an initial tender stage for early competition. The aim of ITT (stage 1) is to facilitate innovation in the market by minimising bid costs and to down-select the number of bidders which progress to ITT (stage 2). At ITT (stage 1) bidders will submit an initial solution design which needs to demonstrate it meets the need and is a suitable technology. Initial solution designs at ITT (stage 1) can be undertaken at a relatively low cost in comparison with what is expected as part of ITT (stage 2). As mentioned above the timescales for ITT (stage 1) will vary depending on the project and will be agreed with the Approver at Stage Gate 2.

Stakeholder feedback



There was general support from stakeholders on ITT (stage 1) recommendations. Some stakeholders had concerns about the potential number of bidders progressing to ITT (stage 2) and noted that some assessment areas will require further work for how it will be in practice. In particular, the potential conflict of interest between the role of the TO in bid assessment and as a bidder.

Information provided

The ITT pack will be a full suite of all the information bidders will require in order to participate in the tender process, understand the need being tendered, build their proposal and submit their offer. We expect that the ITT pack will consist of 3 core sections:

Tender Instruction

This section will set out the event, timescales and explain the requirements and processes involved in participation of the event.

Tender Information

This section will set out all the information the bidder will need to develop their offer. This will include aspects such as the evaluation and award process, supporting information relevant to technical and commercial proposal development and the contracts or licence information.

Tender Submission

This section will focus on all the information bidders will need to submit for evaluation and award decision, including how, when and in what format information must be supplied



A skeleton of this pack can be found in Appendix 3, ITT skeleton.

Evaluation criteria



Recommendation
 In ITT (stage 1) bidders will need to demonstrate their solution meets the tender specification of the need.

Meeting the need

Our recommendation for this criterion for ITT (stage 1) would be for bidders to submit potential capacity, Earliest In Service Date ("EISD") and output on their own service provision feasibility studies. Bidders would need to demonstrate that they could meet the need as specified in the tender documents, by the date it was required and in the correct geographical location.

To do so bidders would need to undertake their own studies and for the ESO to conduct shadow studies to verify these results. The bidder's studies should establish how much capacity and/or voltage/stability support the initial solution designs provide. This information would be provided to the Procurement Body. The level of information we are proposing bidders provide would be equivalent to the System Requirements Form ("SRF") part B returns. See [Appendix B in the July 2020 NOA](#) methodology for a description of the SRF sections A-F. The ESO would then support the Procurement Body by undertaking shadow studies which are comparable to the studies undertaken currently by the TOs.

In order to support bidders to develop their solutions and conduct their own studies, we recommend that equivalent network models are made available (subject to signing a NDA).

In relation to variant bids, we recommend that the Procurement Body does not place any restrictions on the solution other than that it meets the remaining evaluation criteria.

A separate point on meeting the need which is worth noting here relates to the incentive for the market to propose solutions during the network planning process.



Stakeholder feedback
 Some stakeholders are of the view that there are currently no incentives on bidders to propose solutions during the project identification process.

We are of the view that there is an incentive for bidders to engage with the market engagement network development process during project identification to shape the tender specification to ensure that their innovative solutions meet the need being tendered. If they do not engage with the Network Planning Body (ESO) during this period, a project deemed suitable for competition will be based entirely on the reference design submitted by the TO.

Risk to network reliability

Our recommendation is that the risk to network reliability is an area we should assess as part of ITT (stage 1). Ensuring the confidence in the security of the network is key for assessing the concept solutions at ITT (stage 1).



Recommendation
 In ITT (stage 1) bidders' solutions will be assessed on their risk to network reliability.

We would expect all solutions to have a technology readiness level of at least 8 (the technology is undergoing active commissioning). If technology readiness levels are not available, then we may use a similar approach used in Pathfinders for voltage or stability. For voltage we have a defined list of technologies with established definitions of that technology. For stability, bidders are required to undertake a feasibility study to demonstrate that their solution can provide the stability support required.



We would also ask bidders to submit enough information so that a TO could run a connections feasibility study. We would expect TOs to be compensated for all services they provide to facilitate early competition under the regulatory framework. We do not recommend or consider the mechanism or approach as this is an area for Ofgem to consider.

This study would be equivalent to the connections review under NOA Pathfinders or the optional feasibility study under the connections process (i.e. [STCP17-1](#)). The scope of studies relates to connecting to and using the system and will include, for example, fault level assessments, power flows and voltage assessments including voltage step changes for each proposed solution. These assessments would be equivalent to those which would usually be conducted as part of the optional pre-application submission stage of the connections process.

Whilst we have recommended that connection related agreements should all be concluded prior to the conclusion of the tender process (with a connection agreement not being a requirement within the PQ stage) and that grid connection risk remains with bidders, we are aware that the practicalities relating to better alignment of the tender process and the connections process requires further detailed consideration. We expect to further consider this in greater detail in the implementation phase and in doing so we expect to learn from our Pathfinders where some of the more detailed considerations in relation to feasibility studies and connections (including the queue for access rights) are currently being explored in relation to those tender processes.

In addition, we will expect bidders to submit evidence to demonstrate that they will be able to meet any relevant standards, including relevant TO standards based on the interface point for their network solution or the connection point for their non-network solution. The tender documents will include or refer to all the relevant information on any standards that bidders will need to adhere to, including any relevant TO standards in respect of the interface/connection point requirements. Further consideration is required in the implementation period / tender planning stages in respect of setting any design and tender specifications.



Stakeholder feedback

A TO noted that the connection assessments undertaken by TOs are at a point in time and that the actual costs of connection may change between ITT (stage 1) and the actual connection application.

We agree that there is a risk of costs related to connections may change between tender and construction. We have recommended that any changes to cost estimates (or timescales) between feasibility study stage and connection application (or via any connection agreement terms) would remain with bidders. We have also received stakeholder feedback that this risk should not sit with bidders as it is not within their direct control. There might be potential to consider whether certain cost changes related to grid connection could be considered as part of the PPWCA and/or whether certain timescale changes related to grid connection could be considered as an 'acceptable reason' for delay – either would transfer some of the grid connection risk from bidders (where we have recommended it sits to date) to consumers.



Stakeholder feedback

It is worth noting that the connections feasibility study to be undertaken by the TOs is a significant conflict of interest concern to a number of stakeholders. We discuss the role of the TO and conflict of interest mitigations arrangements in Section 6.1.



The potential conflict of interest needs to be considered in light of Ofgem’s recent [Review of GB energy system operation](#), which proposes a new and enhanced ESO functions in network planning.

Deliverability

We recommend that the Procurement Body will need to assess whether there are deliverability issues with the initial solution design which undermine the EISD capacity or location provided by the bidder.

Recommendation



We recommend that further work should be undertaken during the implementation stage to consider roles and responsibilities for network planning for early competition.



Recommendation

In ITT (stage 1) bidders’ solutions will be assessed on their proposed solution is deliverable.

The Procurement Body would require some technical, design, planning and operational expertise to identify solutions which have clear and obvious failings. For example, whether the solution will not progress through the planning process in the time required for the EISD. ITT (stage 2) will explore the delivery plans of bidders in greater



Stakeholder feedback

A TO noted a concern that bidders would submit unrealistic assumptions. The purpose of this element of the assessment is to determine whether the plans and assumptions made by the bidders are realistic.

levels of detail. This criterion, as part of ITT (stage 1), is to identify clear and obvious areas where the solution will not deliver the requirement set out in the tender specification.

Environmental and social impacts

Our recommendation is that the bidder’s solutions are assessed for environmental and social impacts. We would expect these to be set collaboratively BEIS, Ofgem and the Procurement Body.

This is a key area for early competition, and we would expect the social or environmental minimum standards to be detailed in the tender specification. For example, similar to the technical requirements of the needs the Procurement Body could set the tender specifications so that bidders had to develop solutions which could demonstrate that they were below a specified level of carbon intensity or had a net zero ecological impact.

We would expect that the details of these could be set in collaboration between BEIS, Ofgem and the Procurement Body depending on the policy aims at the time of the tender development during the pre-tender stage.



Recommendation

In ITT (stage 1) bidders solutions will be assessed on their environmental and social impacts based on policy steers.

Cost estimates

We recommend that bidders should not be asked to provide cost estimates at ITT (stage 1) as this would either lead to an increase in bidder costs or the tender process could be gamed.



Recommendation

ITT (stage 1) bidders will not be required to submit cost estimates.

If we were to ask bidders for cost estimates in ITT (stage 1) and did not hold them to these costs, then bidders would be incentivised to submit unrealistically low costs.

If we were to hold bidders to cost estimates at ITT (stage 1) then bidders would be incentivised to



undertake more detailed feasibility and planning studies which would lead to significant increases in bid costs.

The purpose of ITT (stage 1) is to foster innovation and optionality of solutions by not restricting total bidder numbers and keeping bidder costs low. Holding bidders to their costs would increase bid costs and likely reduce the level of innovation in the market.



Stakeholder feedback

Some stakeholders noted a concern with the omission of cost information at ITT (stage 1) as the purpose of early competition is to drive consumer benefit through largely cost.

We do not disagree with the sentiment of the stakeholder feedback that purpose of early competition is to deliver consumer value. We are of the view that bidder down-selection on factors which do not include commercial offers are commonplace in project finance procurements. For example, the OFTO regime down-selects to a competitive number of bidders based on the PQ process.

Bid assessment



Recommendations

Bids will be assessed at ITT (stage 1) based on a pass/fail approach.

The Procurement Body will also ensure that bidder numbers are limited to stage 2.

Our recommendation is a pass / fail approach to ITT (stage 1) based on a minimum threshold score for each of the four criteria set out above.

This will be based on a mixture of feasibility studies (in terms of meeting the need/ESO shadow study and a connections feasibility study), expert review and feedback and evidence provided by the bidders.

For the reasons set out in this section, we do not consider that it is appropriate to ask bidders for cost estimates at this stage in the process. The level of uncertainty regarding the project details at this stage does not make cost alone a sufficiently robust criteria to assess bids against. Our approach takes account of a range of factors which project developers would consider at the initial solution design stage of the process.

The pass/fail approach ensures that all solutions which meet the tender technical requirements progress to ITT (stage 2). This mitigates the risk that a significantly cheaper solution is down selected at ITT (stage 1) because it did not score as highly across the other criteria.

We note that the pass/fail approach does not place a limit on the number of bidders who could progress to ITT (stage 2).



Stakeholder feedback

Stakeholders commented that if there are too many bidders in ITT (stage 2) then bidders will not want to incur the costs associated with developing more detailed plans.

We recommend that the Procurement Body and the Network Planning Body (ESO) take account of the market interest during the pre-tender stage and any previous early or late competitions. If there is a very high level of interest in the tender, then relative scoring could be used at ITT (stage 1) to reduce the number of bidders progressing to ITT (stage 2). It is important that the Approver, Procurement Body and Network Planning Body (ESO) have discretion over this element of the process.

This is a key area for the Procurement Body in terms of delivering the benefits to consumer of early competition. It is imperative that the market appetite is not dampened by the risk of overcrowding at



ITT (stage 2). We also recommend that the Procurement Body has discretion over how it assesses bids at ITT (stage 1) to ensure that bidder numbers in ITT (stage 2) are kept at a level which maintains competitive tension. This number may vary depending on the project and will need to be tested with the market on a project by project basis.



Stakeholder feedback

Most stakeholders agreed with this approach as it reflects large Design, Build, Finance, Maintain and Operate (“DBFMO”) procurements but ensuring market confidence in the process and that each bidder has a reasonable chance of success is critical to maintaining competitive pressure.

This is particularly important as bidders are expected to incur significant costs at stage 2.

Partial solutions

Our recommendation is that the parameters of the tender are set as part of the project identification process and that bids are assessed on their ability to meet the entire need. Therefore, variant bids which do not meet the entire need will not progress to ITT (stage 2).

The main rationale for this is that the entire need capacity is required so if a bidder proposed a solution which met 50% of the need another bidder would need to also propose a solution which met the other 50%. If the combined two bids were cheaper than a bidder’s solution which met the entire need then this would be greater value for consumers. In reality, two bidders proposing two separate and uncoordinated solutions which met exactly 100% of the need and which do not geographically overlap or negatively interact in anyway is highly unlikely.

If interested parties have proposals for more efficient ways of addressing part of the need rather than the entire need this should be fed back by the market during the NOA process or during the pre-tender engagement. This would then be considered by the Procurement Body when defining the tender specifications. The Procurement Body may consider lotting the tender requirement into smaller chunk to enable bidders to propose solutions for part of the need. This could be spatial lotting (e.g. breaking the need up into smaller requirements) or over time (e.g. having a procurement for a short-term need and a separate one for the longer-term need).

The Network Planning Body (ESO) and the Procurement Body will work together to ensure that the tender specifications and the parameters of the needs will result in the best value solutions for consumers. It is not for the procurement process to compare partial solutions.

5.2.5 ITT (stage 2)



Recommendations

Bidders will submit more detailed solutions for stage 2.

ITT (stage 2) assesses bidders technically and commercially.

To support the commercial assessment bidders must submit a financial model.

ITT (stage 2) is the final assessment stage of the tender process for early competition. It aims to select a single preferred bidder to progress to Preferred Bidder stage. If a preferred bidder is not able to be identified, then a Best and Final Offer (“BAFO”) stage may be required. It is a detailed forward-looking assessment of the solutions bidders have developed, their plans for implementation and their commercial proposals.



Stakeholder feedback

For ITT (stage 2) there was support from most stakeholders on our recommended approach. A non-regulated utility stakeholder noted that a threshold approach may be simpler and more attractive to the market.

Commercial assessment

Our recommendation is for bidders to submit a financial model they have developed calculating the indicative TRS. This will be based on two sets of inputs.

- **Bid assumptions** - which will be specified in the tender by the Procurement Body
- **Bidder submission** - which are determined by each bidder for their proposed solution.

See Section 4.2.2 and Figure 14 for more information on the process for setting and updating the TRS and for discussion on each of the various inputs.

At award the TRS will be inserted into the contract or electricity transmission licence. The PPWCA can update the TRS for permitted changes as detailed in Section 4.2.4.

Financial model

The financial model submitted by bidders to calculate the TRS, would need to meet certain criteria:

- Based on Microsoft Excel
- Clearly laid out with appropriate labelling of rows and columns
- No locked cells or hidden sheets – all calculations must be traceable to clearly sourced assumptions
- Capable of running a range of sensitivities including inflation, availability, interest rate etc
- The model should be accompanied by a document setting out the steps for i) solving the model; and ii) running sensitivities.

Technical assessment



Recommendation

Technical assessment of bidders' solutions will be on the basis of seven key technical areas.

Our recommendation is that the technical evaluation is an integrated approach which covers a wide range of factors and supports the commercial evaluation. For each of the technical elements that bidders are asked to provide evidence, they are awarded a score between 0 and 5 depending on the level and quality of evidence provided, as set out in Table 8. The Procurement

Body will require the support of specialist commercial, legal, planning and financial advisers to undertake this assessment.

Table 8: Technical evaluation scoring

Technical Element	Score
No evidence	0
Very poor evidence	1
Poor evidence	2
Satisfactory evidence	3



Technical Element	Score
Good evidence	4
High quality evidence	5

We would expect the Procurement Body and Network Planning Body (ESO and TO/DNOs) to provide bidders with all information which they are legally permitted to share in order to develop bids during this stage and do not anticipate that bidders will need to undertake additional surveys.

Our recommendation for a scoring as opposed to a pass/fail threshold as ITT stage 1 is based on several factors. First that the commercial offer bidders submit is inherently uncertain due to the early stage of development the project is in. A higher technical score gives more confidence that the bidder will deliver a project which offers the value for money that the commercial offer proposes. If this were a late competition model, then this factor would not need to be accounted for as bidder costs would be certain enough to hold them to. Secondly it accounts for consumer value where it is not directly related to the cost. For example, a lower environmental impact or lower likelihood of delay due to a robust consenting strategy.

Bidders would be scored in the following areas. Details of expectations in each area are set out in Appendix 3, ITT skeleton.

- Deliverability and delivery plan
- Supply chain strategy
- Contract engineering, procurement and construction ("EPC") and, operating and maintenance ("O&M")
- Financing strategy
- Planning and consenting strategy
- Environmental impact
- Approach to costing
- Bid assessment.

Technical adjusted TRS



Recommendation
 Bids will be assessed based on both the technical and commercial element using a predefined methodology and set of weightings.

Our recommendation is to integrate the technical scores bidders receive based on the plans they submit and the TRS. This will result in a single 'Technical Adjusted TRS'. The bidder with the lowest Technical Adjusted TRS is selected as the preferred bidder and will progress to the Preferred Bidder stage.

- The technical evaluation will assess the plans and based on the level of evidence provided give each technical element a Technical Score between 1 and 5
- These scores will be weighted (Technical Element Weighting) based on pre-determined levels which the Procurement Body will set during the pre-tender process when developing the contract and evaluation framework. The total weighting of each of the technical elements will add up to 100%
- These weightings will be applied to the technical scores to provide a total weighted score of between 1 and 5 (see Table 8)



- The Procurement Body will also set what proportion of the TRS submissions can be adjusted based on the technical assessment (Technical Weighting)
- The Technical Element Weighting and the Technical Weighting will be adjusted based on learnings from previous tenders and directions from Ofgem/Government
- The TRS payment forecast in each year will be discounted using the Green Book discount rate to calculate a Net Present Value of the total payments to the bidder over the revenue period
- $\text{Max adjustment to the TRS (£)} = \text{TRS (£)} \times \text{Technical Weighting (\%)}$
- A conversion factor is used to turn the weighted scores into a Weighted TRS Adjustment
- $\text{Conversion Factor} = \text{Max adjustment to the TRS (£)} \times \text{maximum Technical Score (5)}$
- The weighted score for each technical element is multiplied by the conversion factor to calculate a Weighted TRS Adjustment
- $\text{Technical Adjusted TRS} = \text{TRS} - \text{total Technical TRS Adjustment}$
- The bidder with the lowest Technical Adjusted TRS is selected as the Successful Bidder - subject to the potential BAFO.

A potential risk of any bid evaluation framework is that bidders will try to game the evaluation framework. If the bid evaluation framework was based entirely on the commercial offer bidders may try to game by submitting a low TRS but have severe deficiencies in terms of deliverability. This would lead to sub-optimal outcomes for consumers. As shown by the example in the box to the right, if the weightings are properly calibrated by the Procurement Body, this bidder will not have the lowest overall TRS. Other bidders with well thought through and robust plans will benefit from larger technical adjustments to the TRS.

It is worth reiterating that the TRS submitted by the bidders is written into the contract/licence and is adjusted following the post-preliminary works assessment and debt competition. The Technical Adjusted TRS is only for the purposes of the ITT bid evaluation and is not used to determine the allowed revenue under the contract or electricity transmission licence.

Example of a bid submission

This section sets out the example of 2 bidders being compared at ITT (stage 2) using the framework set out in the text. This assumes that the technical element of the bid is weighted at 40% and commercial is 60%. The weighting of the different technical elements places planning and consenting higher than financing or contracts.

Bidder 1 Net Present Value ("NPV") TRS is 450 which is lower than bidder 2 who has submitted an NPV TRS of 500. So purely in terms of cost to consumers based on the TRS bidder 1 is preferable.

However, bidder 2 has developed proposals based on a solution which has been awarded consenting for a comparable project in a similar area and has obtained third party assurance on its cost estimates. Whereas Bidder 1 is proposing a more novel (but cheaper) route and has self-assured its commercial offer. Bidder 1's technical scores add up to 22 which equates to a total adjustment to the TRS of 104. Bidder 2 overall has a total technical score of 33 which results in an overall TRS adjustment of 192.

The Technical Adjusted TRS for bidder 2 is 308 which is significantly better value to consumers than bidder 1 which is 346.



If there are two bidders within a certain threshold, which is pre-defined by the Procurement Body during the pre-tender activities, of the Technical Adjusted TRS the BAFO stage will be undertaken. The two lowest bidders will be asked to resubmit their bid submissions in relation to their TRS only and the evaluation.

Stakeholder feedback



Stakeholders were broadly supportive of our approach to ITT (stage 2) as it reflects approaches taken in the marketplace and the requirements placed on TOs. One stakeholder questioned whether a simpler approach using a threshold pass/fail to the technical assessment would be preferable. They also were concerned that the bid evaluation framework was too subjective and that a threshold may be more objective.

The technical element of the ITT (stage 2) assessment is to effectively gauge the certainty or the potential variance of the commercial proposals during the PPWCA. A threshold pass/fail approach would only gauge whether we thought that bidders' commercial offers were viable or not. It would not provide the Procurement Body with any view of how close the final cost to consumers of the solution would be to the commercial offer i.e. the likelihood of material cost changes. We recognise that in the generic terms presented in the ECP it is difficult to ascertain exactly how bids would be assessed but this is to give flexibility to the Procurement Body for each need being tendered. Our recommendation is that the Procurement Body clearly publishes its bid evaluation framework and discusses the approach taken clearly and transparently with the market so the bid assessment framework is not a 'black box' and bidders are clearly incentivised to develop solutions which deliver value for consumers. In addition, a threshold approach would 1) incentivise bidders to submit as low a commercial bid as possible whilst remaining compliant with the threshold, 2) is still a subjective assessment against an arbitrary threshold set by the Procurement Body.

5.2.6 Preferred Bidder (PB stage)

The PB stage is when a single bidder has been selected as the PB but there are several steps which must be undertaken to finalise the contract and/or electricity transmission licence prior to the conclusion of the tender process.



Recommendation

Procurement Body should clearly publish its bid evaluation framework and discusses the approach taken clearly and transparently with the market

The scope of activities at this stage will partly be driven by the relevant procurement rules.

Stage Gate 3

For a successful bidder to become the PB the Procurement Body makes a recommendation to the Approver which makes the final decision on the procurement process. Please see Section 5.1 for more information on the Approver and the Stage Gate process.



Electricity Transmission Licence / contract award

Period following approval/announcement



Recommendation
A period following the PB announcement is required.

Our recommendation is that following the approval of the PB by the Approver, the Procurement Body would notify all bidders of the appointed PB in accordance with the procurement rules and would also provide feedback to all unsuccessful bidders on their scores and their bids.



Stakeholder feedback
Stakeholders informed us that transparency and sharing of information and feedback plays a key part in minimising and mitigating the risk of legal challenge by unsuccessful bidders. It also supports bidders in the development of bids in the future and can lead to a reduction in bid costs.

The standstill period for the award of a contract or an electricity transmission licence gives the unsuccessful bidders an opportunity to challenge the outcome of a tender before the PB enters into a contract or is awarded an electricity transmission licence.

Contract/electricity transmission licence award



Recommendation
Following the standstill/licence consultation period the contract or electricity transmission licence is awarded to the PB.

For an electricity transmission licence Ofgem would consult for a minimum of 28 days. During which time third parties can raise objections and comment on the licence grant and any proposed modifications. There is then a standstill period of at least 10 days before a licence is granted. Following the award of a licence a party can raise a judicial review within a three-month window. For an

electricity transmission licence award, we expect arrangements to be set out in legislation which will align with the current judicial review period which is three months following the decision.

For the award of a contract our recommendation would be that there is a standstill period, set in line with industry standards to give unsuccessful bidders a reasonable period to challenge the process before a contract is awarded. Unsuccessful bidders may challenge the process following contract award, but reversal of contract award is more complex and costly.

Our recommendation is that during the PB stage the PB would be awarded an electricity transmission licence or contract and that prior to that point they would post a performance bond (or equivalent form of acceptable security) and would accede to the relevant codes and apply for a connection to the relevant system, if required.

It may be deemed appropriate during the pre-tender period to allow some further contract/licence negotiation during the PB stage.

The adjustments to the contract or electricity transmission licence for the project begin during the pre-tender phase. The Contract Counterparty or Licence Counterparty would work with the Procurement Body in drafting the amendments. The tender process is being designed to align with the licence award process so that bidders are assessed on areas relevant to the licence during the tender process. Both of these activities minimise the amount of time a PB will have to spend entering the licence granting process as part of the PB stage.



Connection agreement application



Recommendation

Bidders must submit a connection agreement application during the standstill period if they do not already have one.

As per Section 5.2.4, bidders are expected to provide enough information for the relevant network owner to undertake connections feasibility studies during ITT (stage 1).

If the PB is a non-network solution which will be connected to or using the Transmission System then once it has been notified and approved by the Approver it is obliged to submit a formal connection

agreement application alongside the standstill period. This is only required if they do not already have a connection agreement in place. This is the formal process which is set out in the relevant licences, CUSC and STC. The ESO has 3 months to provide a formal response to this application and this relies on the TO first providing an offer to the ESO in prescribed timescales. This process is a joint process between the ESO and TOs but the majority of assessment work is undertaken by TOs based on information from the ESO and applicant to allow them to undertake their studies.

If the PB is a non-network solution which instead needs to apply for a distribution connection, they will instead (or additionally if impacting the Transmission System) need to go through the distribution connection application process at this stage, if they have not already done so.

If the PB is a network solution they will need to go through the party entry process in the STC, which will include the relevant connection processes in respect of expanding the existing transmission system. As per our high-level assessment of the impact of early competition on the industry codes the party entry process in the STC will first need to be amended to introduce the concept of a CATO and set out the CATO party entry process.

We would expect the above processes to be undertaken concurrently with the electricity transmission licence award process with Ofgem (as the Licence Counterparty) or contract award process with the Contract Counterparty.

If a significant issue is raised by the relevant connection application process (although we would ordinarily expect the feasibility study stage to highlight any such issues in advance) the Procurement Body and Approver could decide that the PB is no longer suitable. They could then approach the bidder with the second lowest Technical Adjusted TRS to become the PB. Bidders would be notified of this at the point the original PB is selected.

Performance bond (or equivalent form of acceptable security)

As detailed further within Section 4.2.3, the PB will place a performance bond (or equivalent form of acceptable security) as a condition of entering into the licence or contract and becoming the Successful Bidder.

5.2.7 Dispute process during the tender process



Recommendation

Unsuccessful bidders are able to escalate disputes during the tender process to an independent expert and via legal challenge.

The early competition tender process will need to be run in a manner compliant with the tender regulations governing early competition. This subsection focusses on a recommended process where a bidder believes that the Procurement Body is not running, or has not run, the event in a compliant way.

The advantage of having a defined challenge process is that it should help to resolve the potential issue as soon as possible, minimising the risk of disruption and additional cost being incurred.

This process is not intended to cover disputes between the successful bidder and Contract or Licence Counterparty - this can be found in Appendix 2, Heads of Terms. Neither is this process intended to cover a challenge of an Ofgem decision to award a CATO Licence. In this latter scenario we would



expect the challenger to use the existing route of challenging an Ofgem decision through judicial review.

Our recommendation is a three-stage escalation process with defined timescales. We recommend that bidders would agree to follow the escalation process as part of the Pre-Qualification stage.

Stages

Stage 1

Procurement Body Senior Management review

Stage 2

Review by independent expert

Stage 3

Legal challenge brought by party making the challenge

Timescales

Timescales for raising a challenge will be stipulated in the tender documents and will be compliant with relevant legislation. There will be a focus on ensuring that a challenge is formally communicated to the Procurement Body very soon after a challenger could reasonably be expected to have identified grounds for a challenge. This will support timely resolution and prevent missing opportunities to take appropriate corrective action as early as possible if the challenge is legitimate. Timescales for conducting ITT (stage 1) and ITT (stage 2) will also be clearly defined to ensure that the tender is not unnecessarily delayed or continued at increasing risk.

5.3 Post tender award process

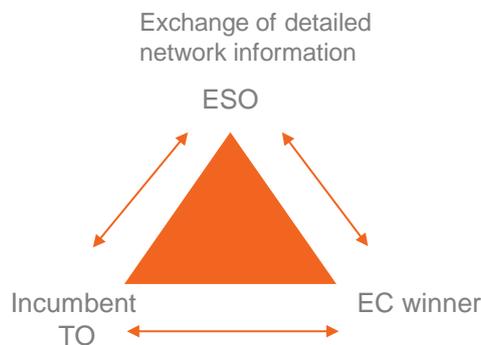
Under an electricity transmission licence or a contract (as appropriate) the successful bidder will undertake the preliminary works followed by solution delivery, commissioning, operations and maintenance, and decommissioning at the appropriate point in time.

We envisage the post tender award stage will have some similarity and alignment with the late competition model being developed by Ofgem.

Post award data exchange

The successful bidder will need to move from a desktop proposal into detailed design and delivery and this will require the sharing of more detailed information. The potential flows of information are represented in Figure 20.

Figure 20: Key relationships post-award



Our recommendation is that the relationships will be managed utilising existing mechanisms already in place (see Table 9), rather than developing new processes. However, it is likely modifications to the existing industry codes will be needed. Work to develop the required code changes will form part of the implementation programme and is expected to focus on ensuring that CATOs are recognised.



Table 9: The competition outcome options and relevant mechanisms

EC outcome	Mechanism setting out obligations		
	ESO to TO	ESO to EC winner	EC winner to TO
Incumbent TO wins	STC	N/A	N/A
Bidder (not incumbent TO) wins with a network solution, receives a TO Licence and signs up to STC (CATO Licence)	STC	STC	STC
Bidder (not incumbent TO) wins with a non-network solution and enters into a service contract with the ESO	STC	Licence Grid Code CUSC	Via ESO through Connection Agreement

5.3.1 Preliminary works

The nature of the preliminary works will be dependent upon the type of solution which was successful and what is required to facilitate its delivery. They are likely to include:

- **Consents** - Obtaining the required consents (e.g. a development consent application to the Planning Inspectorate, or a Section 37 application to the Scottish Government) to allow solution delivery to commence. This will be a significant undertaking for the successful bidder and will involve extensive preparatory activities, including robust stakeholder engagement and consultation
- **Site Surveys** - Obtaining consents will require various site surveys to be undertaken e.g. in relation to any necessary Environmental Impact Assessments. Site surveys may be required to inform the detailed design process such as in respect of ground conditions
- **Land Rights** - Obtaining consents will require the appropriate land rights to be in place. This will include access to land to undertake site surveys, rights over land to allow construction and operation, as well as any necessary wayleaves and/or easements. The successful bidder will therefore need to negotiate with landowners to obtain any required land rights
- **Detailed Design** - The successful solution design will continue to evolve throughout the preliminary works process stage as the consent process is undertaken and further engagement with the supply chain occurs. The successful bidder will take their solution design to the stage at which it is sufficiently detailed to enable construction to commence
- **Supply Chain Engagement and Procurement** - The successful bidder (whilst likely having undertaken some supply chain engagement at tender stage) will need to continue to engage with their supply chain and place the required contracts to deliver their solution. Depending on the supply chain and the delivery programme there might be a need to enter into some contracts prior to solution delivery commencement
- **Incumbent TO Engagement** - If the solution requires connecting to, or relying on the transmission system, the successful bidder will need to engage the incumbent TOs (as well as the ESO) in relation to any expected future interfaces. This can include any co-ordinated stakeholder engagement related activities and/or any future system site or system interfaces. The successful bidder will also need to engage with any other relevant parties, such as the Distribution Network Operator/Distribution System Operator if the solution is to connect to, impact or use the distribution system, for example.



As a result of each of the above activities there could be changes required to the design, costs and programme. For example, these could be in relation to any planning conditions placed on the successful bidder as part of consent being granted, or due to site surveys resulting in adjustments to a route corridor.

Once preliminary works have concluded, the successful bidder will need to complete the cost assessment process, as set out below. They will also need to undertake a debt funding competition to achieve Financial Close (as described in Section 4.2.2) to allow them to subsequently commence solution delivery.

Where construction is not required (e.g. if there are no new assets) for solution delivery, this stage of the process will include any activities required to prepare the successful solution for commissioning. This may include, for example, utilisation of permitted development and changes to control systems where an existing asset is being adjusted to provide a service.

Post-Preliminary Works Cost Assessment

This process step would occur towards the end of the preliminary works stage with the aim of fixing underlying costs prior to solution delivery i.e. when preliminary works are substantially complete so that the process can be undertaken without impacting the delivery programme. The output of this process should feed into a review of the needs case as considered in detail in Section 3.2.4.

As set out in Section 4.2.2 our view is that the relevant counterparty should lead the PPWCA process with the support of both the Procurement Body and the Network Planning Body (ESO). This ensures continuity and co-ordination between the tender process and the PPWCA process, whilst making sure the lead party is the party holding the contract or the electricity transmission licence.

Debt competition



Recommendation
Based on the outcome of the cost assessment process, the successful bidder will run a debt competition before Stage Gate 4 approvals.

This process step would occur towards the end of the preliminary works stage. The output of this process step should feed into the outcome of the PPWCA process as well as a review of the needs case. This is considered further in Section 4.2.2.

The successful bidder should undertake the debt competition but with oversight from the Procurement Body. To ensure an effective process is run by the bidder we also expect the licence/contract to include suitable provisions setting out bidder obligations in respect of the debt competition.

Stage Gate 4 and Financial Close

The results of the cost assessment and debt competition will be used to update the TRS. The updated TRS would be part of the information required for the Stage Gate 4 approvals, as set out in Section 5.1.

Following approval, the project would move to Financial Close. The debt base rate would be fixed in the interest rate swap market; any financing agreements would be signed; and the financial model would be re-run to calculate the final TRS. The relevant contract or electricity transmission licence would then be updated to incorporate the final TRS, subject only to those further adjustments as considered in Section 4.2.4.

Stakeholder engagement report



Stakeholder feedback
Based on concerns raised by some stakeholders during engagement, we recommend that a reputational stakeholder engagement incentive is introduced.



The successful bidder will be obligated by electricity transmission licence or contract (as appropriate) to publish a stakeholder engagement report within three months of the conclusion of the preliminary works stage.

In this report, the successful bidder will set out best practices and lessons learned in respect of the preliminary works stage. This information could then be considered in future tender processes and will support the identification of potential deficiencies in the stakeholder engagement process.



Stakeholder feedback

Further stakeholder feedback has been that more detail is required for the stakeholder incentive and that it could potentially be made financial.

We agree with these points and note that this will need further consideration in the decision-making process and/or the implementation programme. At present we have recommended the impact of underperformance in stakeholder engagement would simply be reputational, although this could impact future participation.

5.3.2 Solution delivery and commissioning

Following Financial Close, the successful bidder will deliver and commission their solution.

Solution delivery security requirements

We recommend requiring appropriate security throughout the solution delivery period. This is further discussed in Section 4.2.3.

Solution delivery



Recommendation

The potential loss of revenue will heavily incentivise successful bidders to avoid delays in delivering their solution.

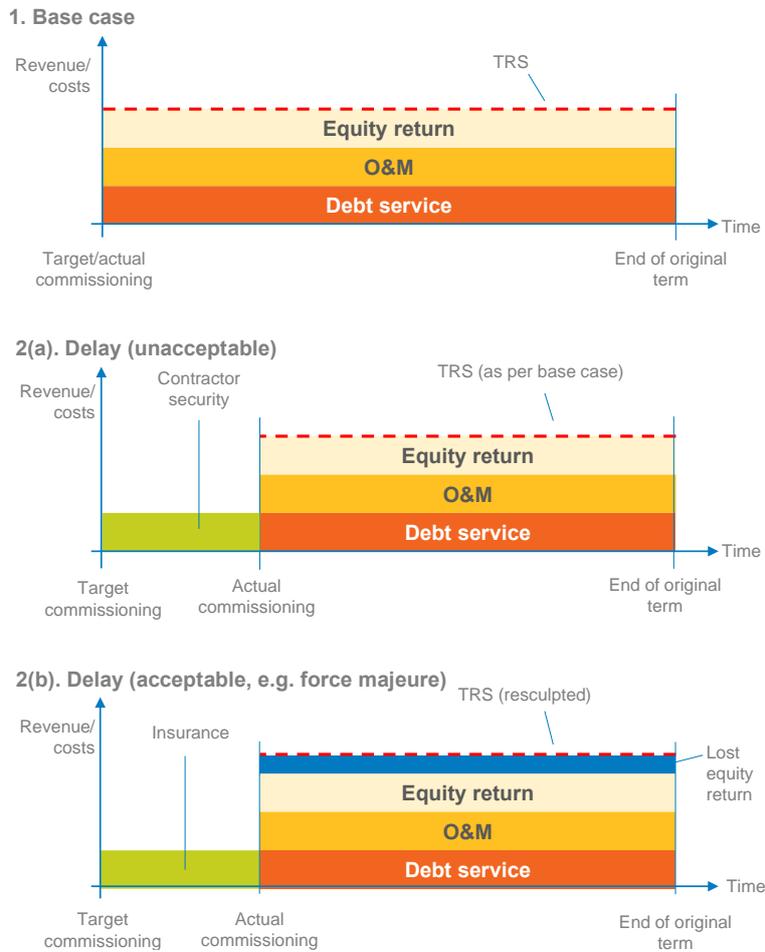
With a fixed TRS (as may have been adjusted through the PPWCA) only starting at commissioning, the successful bidder is strongly incentivised to deliver their solution on time and within budget.

Where there is a delay to commissioning, we recommend applying some form of reprofiling to the TRS across the remaining revenue period. The

nature of the reprofiling should depend on the reason for the delay – an acceptable or unacceptable reason.



Figure 21: Late delivery revenue for the full revenue period



Our recommendations for late delivery are illustrated in Figure 21.

The ‘base case’ shows where the revenue starts on the planned date and runs for the full revenue period.

Where there is a delay for an unacceptable reason (as in ‘2a’) the TRS adjustment would make sure the successful bidder is not held whole for their lost equity return and that they do not benefit from the delay as per the ‘base case’ example. We considered whether the debt service costs could be held whole in this situation, but we felt it may be more appropriate for bidders to take this risk and to mitigate via their arrangements with relevant contractors i.e. where the cause of the delay is likely to reside.

Where there is a delay for an acceptable reason (as in ‘2b’) the TRS adjustment would make sure the successful bidder is held whole for their lost equity return but that they do not benefit from the delay. For example, to ensure they do not receive revenue in relation to operation and maintenance costs which would not have been incurred and would not be incurred in future.

Again, we considered whether the debt service costs could also be held whole in this situation, but we feel it may be more appropriate for bidders to take this risk and mitigate via insurance.

In the event that insurance is not available at an efficient cost then we will consider whether debt service costs could instead be covered via a form of pre-commissioning payment arrangements. Further investigation of the insurance market and whether the foreseen role of insurance in relation to delay is efficient and practical is required during the implementation phase.



The classification of an acceptable and unacceptable reason would be determined in accordance with the contract or licence, as appropriate. This will need to be further considered when developing the standard contract and licence terms during implementation.



Stakeholder feedback

It has been suggested by some stakeholders that the definitions of what constitutes an ‘acceptable’ and ‘unacceptable’ reason needs to be clarified: It may be challenging to classify the reasons behind a delay as acceptable or unacceptable and a dispute mechanism may be required.

On this basis, we recommend an early competition-specific approach to late project delivery, whilst we agree and note that these points will need further consideration in the decision-making process and/or the implementation programme.

The recommended approach set out above ensures a strong incentive for timely delivery, as there is a proportionate financial impact on bidders where the cause of the delay is suitably within their control.

Commissioning

The successful bidder will have to demonstrate that arrangements are in place to deliver the specified outputs before their solution is commissioned.

Our recommendation is that the process for commissioning both network and non-network solutions should be aligned with and underpinned by the provisions outlined within existing industry codes. Modifications may be required to account for CATOs as a new type of transmission licensee.



Recommendation

The commissioning process for both network and non-network solutions should be aligned with the existing industry codes.

guidance would be included in their contract, depending on the type of system need and type of successful solution.

We anticipate that, as per the provisions established in the existing industry codes, the successful bidder would demonstrate compliance largely through a process of self-certification. As per the existing arrangements, the ESO may review the compliance related documentation and undertake witness testing or checks on the successful bidder’s equipment, in order to ensure compliance obligations have been met as part of the commissioning process. Affected TOs may also make reasonable requests to review compliance testing and witness testing of the successful bidder’s equipment.

RIIO-2 and late delivery

In the RIIO-2 Final Determinations Ofgem provided options for late project delivery for large projects which would be set on a project-by-project basis. There are potentially similarities between our preferred position and the ‘reprofiling of allowance’ option presented within the Final Determinations.

However, a key difference is that the Large Project Delivery mechanisms are only proposed to apply to projects over £100m. Another key difference is that early competition is looking to encourage solutions from a wide range of bidders including single asset owners who cannot spread risk across multiple assets as assumed under RIIO-2 arrangements.

Therefore, on this basis we recommend an early competition specific approach to late project delivery whilst continuing to be mindful of the corresponding RIIO-2 proposals.

However, it has been suggested by some stakeholders that the same late delivery arrangements should be adopted as under RIIO-2. This is something Ofgem may wish to further consider as a potential alternate for late delivery to those early competition specific arrangements we have recommended.

Electricity transmission licensees are required to accede to the STC and therefore follow the relevant STC procedures in relation to commissioning processes. Our recommendation is that successful bidders without a CATO licence, but with another form of licence, would be required to accede to other relevant industry codes. Where applicable, any additional service compliance



Aligning commissioning arrangements with the provisions within the existing electricity codes is preferred as existing provisions are established and generally accepted by market participants. In addition, under the existing arrangements, incumbent TOs are familiar with their role and legal obligations when interfacing with other TOs or system users. We expect these roles and obligations would remain broadly the same under early competition.

Under certain circumstances, additional or alternative compliance activities (as required) could be stipulated via the successful bidder's electricity transmission licence or contract. This would be in instances where the successful bidder is delivering a solution using innovative technologies not currently covered under existing industry codes, or is meeting a system need that is not currently covered by the existing codes. For example, for our Pathfinders, we issued service compliance guidance notes to the successful bidders following a tender process. This required the service providers to submit compliance testing reports before the commissioning date.



Stakeholder feedback

Some stakeholders raised a concern that the role of the incumbent TOs in the commissioning of early competition solutions could lead to delays in the successful solution getting commissioned.

To mitigate this concern, it is our recommendation that the existing provisions and processes established in the industry codes can (subject to minor adaptations) adequately outline the role and obligations of the TOs in relation to the testing and commissioning of the successful solution.

5.3.3 Operation

Once the solution is commissioned, the successful bidder will be responsible for operating and maintaining their solution appropriately, to ensure that it is made available to the network to meet the specified need.

Availability incentive



Recommendation

An availability incentive, based upon the OFTO regime, will help ensure the solution is made available to the network.

We recommend an availability incentive is applied to the TRS to ensure the solution is available to the network in line with the agreed levels. The early competition availability incentive mechanism should be based on the current offshore availability regime due to similarities between the regimes, with any necessary adaptations.



Stakeholder feedback

This view is generally supported by most stakeholders. This is both to reflect the fact that (unlike in the offshore regime) there is potential for non-network solutions and integrated solutions, as well as there being potential differences in the underlying network needs and the reason for the procurement process.



In Table 10 we set out some of the core components of an availability incentive. It provides a high-level overview of the offshore regime arrangements and sets out our thinking where adaptations may be needed when designing an availability incentive for early competition.

Table 10: Availability incentive considerations

Topic	Offshore Tender Round 6 (“TR6”) position	Early competition narrative
Structure	98% Target Performance.	The concept of target performance should be retained for early competition. The target performance needs further consideration and may need to be set on a case-by-case basis.
Range	90-105% revenue potential per annum <i>(The annual revenue reduction can be as low as 50% but if this occurs the revenue impact is rolled into up to 5 future years with the cumulative exposure over the total revenue period being no more than 10%.).</i>	The concept of an asymmetric range should be retained for early competition. The range needs further consideration and may need to be set on a case-by-case basis.
Weighting	Seasonal and Capacity.	The concept of seasonal and capacity weighting should be retained for early competition. Each will likely need to be set on a case-by-case basis.
Exclusions	Exceptional Events.	The concept of an Exceptional Event should be retained for early competition.
Timing	Annual adjustment applies to future year(s).	A suitable future period adjustment should be retained for early competition. This should be aligned with appropriate charge setting processes.
Data Provision and Reporting	Periodic data provision and performance reporting plus ad-hoc reporting for extended service reductions and/or for significant underperformance.	Similar data provision and reporting requirements should be in place for early competition.
Termination	Availability underperformance would be non-compliance and could result in Enforcement Action with the ultimate sanction potentially being licence revocation if availability issues cannot be resolved.	Similar contract termination and (where necessary) licence revocation provisions should exist for early competition.
Security	No less than 50% of annual base revenue to be secured each year for the final five years of the revenue period – security to be called for incentive underperformance.	Similar security requirements should be in place for early competition. Further consideration is needed on this security in the event the initial revenue period is extended.
Potential Enhancements	N/A	There is merit in further exploring whether: i) exclusions can and should



Topic	Offshore Tender Round 6 (“TR6”) position	Early competition narrative
		be extended to cover situations where underperformance is as a result of outage co-ordination and ii) whether any other factors could and should be weighted within the calculations.

We recommend that specific parameters associated with this incentive (including maximum reward and penalty) would be further developed in any implementation period. We note that certain elements of the incentive structure may need to be further adapted on a case-by-case basis in advance of (or as a result of) each tender, depending on the underlying network need and/or the successful solution. For example, not all network needs require MWs so a MWh calculation might not be appropriate in all cases, or an integrated network solution might require an amended calculation if it is not electrically contiguous.

Towards the end of the revenue period, we recommend that the successful bidder post security to support the availability incentive. This would be to ensure there are sufficient performance assurance measures in relation to availability (and so asset health) towards the end of the initial revenue period.

To illustrate some of the above considerations, if the services are unavailable for an extended period of time due to an unplanned outage, key questions will relate to the underlying cause of the outage and whether or not it is classified as an exceptional event. If it is an exceptional event, then the asset owner may be protected from the revenue impact associated with that outage. If not then the impact of the outage will affect revenue, potentially down to the lower threshold associated with the availability incentive. In addition, depending on the specific circumstances, in the most serious instances this could (in theory) also potentially result in contract termination or enforcement action and/or licence revocation.

Other incentives



Recommendation

Additional environmental and timely connections incentives which would be limited and proportionate.

In addition to the availability incentive, we recommend that the successful bidder is subject to an environmental incentive and a timely new connections incentive. We further set out our more detailed views on the recommended incentive regime below.



Stakeholder feedback

Some stakeholders generally support our recommendations (for environmental and timely new connections incentives), whilst others support more alignment with RIIO-2 with respect to the suite of “other incentives”.

These additional incentives for environmental and timely new connections could potentially replicate those applied in RIIO-2. However, the full suite of RIIO-2 incentives (e.g. asset health) are not needed for early competition due to inherent differences between the RIIO-2 arrangements and our early competition model recommendations.

Timely new connections incentive

We recommend a discretionary penalty of up to 0.5% of annual base revenues for relevant process failures on the facilitation of new connections, on a comparable basis to incumbent TOs. These relevant process failures would be linked to the expected obligations under licence and code (for network solutions) in relation to making competent connection offers in designated timescales. This



incentive would only apply to network solutions, since new connection obligations will not apply to non-network solutions.

Environmental incentives

We recommend an environment incentive similar to the one in the RIIO-2 package but adjusted for proportionality; i.e., an obligation to provide an Environmental Action Plan as part of the tender process and an obligation to produce an Annual Environmental Report.

Therefore, we expect bidders to set out their environmental plans and commitments (e.g. in relation to losses, carbon footprint, energy efficiency, biodiversity, etc.) in their Environmental Action Plan and then report progress against these on an annual basis. We would expect these plans/commitments to be licence/contract obligations. This concept could also be extended to cover other elements of corporate social responsibility.

Whilst not being recommended at this time, we note that a financial element may also be introduced to this incentive (such as a discretionary penalty in the event that plans and commitments are not met as per the Environmental Action Plan).

There would likely be a stronger case for such amendment in the event that plans (and commitments) have costs that are included within the TRS (i.e. if being paid for by consumers, it is important that the successful bidder delivers on those plans and commitments).

In addition, for successful solutions that include relevant gases (e.g. SF6), an incentive is appropriate. This can mostly replicate the RIIO-2 proposals once incentive parameters have been set for early competition, e.g. in respect of a baseline and targets.

We recommend that the specific parameters associated with this incentive (including maximum reward and penalty) would be further developed by Ofgem (including updating any associated guidance) in any implementation period.

New investment approach



Recommendation

Network solution providers would be responsible for new investment but could benefit from financing support in some cases.

We recommend that successful network solution providers are responsible for all relevant new capital investment on their network. The exception would be where the criteria for competition on that new investment is met, and where there is then another competition for that new network need. We expect CATOs will generally have the same obligations in respect of connections as incumbent TOs.

We acknowledge further thought and definition will be needed as part of electricity transmission licence drafting in respect of how this obligation is enacted and on what basis additional allowed revenue would be set. We note that the offshore regime arrangements are likely to be suitable, albeit with a need to disapply (for a CATO) the cap of 20% which exists in that regime. The reason we recommend this cap is disappplied for early competition is due to the greater likelihood of exceeding the cap when facilitating new connections onshore, especially for more integrated network solutions.

If there is an uncapped obligation (as recommended) on certain new investment, we acknowledge that this could be a concern in relation to future financing. Therefore, in the event new competitively priced finance is unavailable at the time new investment is needed then fall-back arrangements might be appropriate. These could involve some flexibility in relation to the means of funding the new investment and would require further consideration at that time. For example, there could be a funding competition undertaken in relation to additional investment required under such obligations.



Stakeholder feedback



For non-network solutions, we agree with stakeholders that new investment obligations are less likely to be needed, especially where related to the facilitation of new connections. Therefore, we think that non-network solution providers should not have comparable obligations to network solution providers regarding facilitating new investment at this point in time.

In addition, we note that the contract change mechanism could potentially facilitate such new investment on a case-by-case basis e.g. if it becomes apparent that a contracted non-network solution provider could adapt their solution to facilitate a new connection.

With regard to the above recommendation one of the related areas which will require further consideration in any future implementation period will be in respect of boundaries of influence in relation to network planning, including in relation to new connections.

Network charging

Our recommendation is that network solution providers follow the charging processes within the STC, and non-network solution providers follow our self-billing processes. This relates to allowed costs being recovered via Transmission Network Use of System (“TNUoS”) and Balancing Services Use of System (“BSUoS”). This remains subject to there being no separate wider changes to the charging regime.

In addition, the recent Ofgem decision in relation to the TNUoS cash-flow risk notes that 'any allocation to CATOs will be considered as and when the CATO policy develops further'.⁷ As such, in future we think Ofgem will need to further consider the impact of early competition on TNUoS cash-flow risk policy in respect of network solutions procured via early competition.

5.3.4 Dispute process during the contract or electricity transmission licence period

As further described in Appendix 2, Heads of Terms, we recommend that standard contract dispute processes are utilised for most potential non-network solution disputes (e.g. escalation processes). However, for disputes related to the TRS, especially the PPWCA, we feel that a dispute should ultimately be referable to Ofgem for determination.

With regard to electricity transmission licence dispute processes we envisage the standard licence dispute processes will be utilised.

5.3.5 End of revenue period review

As per Section 5.1 we envisage a process step towards the end of the initial revenue period to assess and decide upon which option(s) should be progressed after the end of the initial revenue period from a suite of options.

Further information in respect of our thinking on end of revenue period options can be found in Section 4.1.4 and further information on decommissioning is set out below.

5.3.6 Decommissioning

In setting decommissioning obligations, it is important that consumers are protected from decommissioning cost uncertainties, including successful bidders not adequately fulfilling their eventual decommissioning obligations to the required standards.

⁷ https://www.ofgem.gov.uk/system/files/docs/2020/07/tnuos_decision_letter_final_0.pdf



Our recommendation is that the procurement framework evaluates bidder decommissioning plans and costs as part of the tender process and then requires the successful bidder to maintain such plans and hold decommissioning security once operational.

Under this framework, bidders would be required to provide a draft decommissioning plan as part of their tender bid in respect of their proposed solution and ensure that their bid price takes account of future decommissioning costs. These costs, along with others, would be updated according to the PPWCA. The reason for including the cost of decommissioning as part of the bid cost is that this could provide an important differentiator when it comes to identifying the best value solution for consumers.

The Procurement Body would review the draft plans as part of the tender evaluation criteria, ensuring that bidders have properly considered decommissioning costs and can deliver on their obligations. The Procurement Body would also carry out a further review of draft decommissioning plans as part of the wider bid evaluation process, prior to the formal award and tender conclusion.

Following the conclusion of the tender process, the preferred bidder would further develop their decommissioning plan before submitting a final draft plan to the appropriate counterparty no later than six months prior to the start of solution delivery for plan assurance.

As there remains a significant amount of cost uncertainty at the point that the preferred bidder is selected, the plan put forward at the tender stage would comprise indicative decommissioning costs, to be reassessed following the completion of the preliminary works. While such costs would be fixed following the PPWCA, some form of cost pass-through mechanism or reopener would need to be in place to enable adjustments to the successful bidder's TRS should material additional costs arise due to, for example, an unforeseeable change in legislative requirements.



Stakeholder feedback

Stakeholders feedback was that decommissioning obligations underpinned by legislation would be disproportionate.

Therefore, whilst bidders will still be responsible for decommissioning, we think existing provisions and processes will remain suitable e.g. with landowners, consenting authorities and under the codes.

There should be provisions related to decommissioning in place. We expect that decommissioning plans should include information on end of revenue period decommissioning assumptions (for example, whether the bidder has assumed a residual commercial or regulatory asset value, and whether it included the full estimated costs for future decommissioning within the bid TRS).

Decommissioning related risks are less of a concern in the case of the incumbent TOs; but they emerge as a new potential risk in the case of early competition. Specifically, decommissioning activities for incumbent TOs are considered as part of their regulated portfolio. Therefore, there would be a greater impact on them (whether financial or reputational) of not fulfilling any onshore decommissioning obligations when they occur in future. Therefore, we see merit in some form of security related to decommissioning in the early competition regime to ensure that decommissioning obligations are fulfilled as and when they materialise. On the other hand, we also acknowledge that any requirement for decommissioning security is likely to increase costs for bidders which will need to be factored into the TRS and this could increase costs to consumers.

Therefore, as well as there being options on whether or not to require decommissioning security, there is an option available where the scope of the decommissioning security is limited. This limited decommissioning security could be to solely cover decommissioning obligations in respect of the industry codes. Then, any decommissioning security related to landowner agreements and planning conditions would not be a requirement for early competition.

Furthermore, we remind again our recommendation that some form of security is needed towards the end of the initial review period in relation to availability and incentive performance (as per Section 5.3.3). We expect that the scope of this financial security could be extended to also cover



decommissioning obligations, however broadly or narrowly they may be defined. This potentially avoids the need for additional security. This would be additional cost to consumers over and above what would exist as a result of there being financial security related to incentive performance.

Based on the above our preference in relation to decommissioning security is to seek to narrowly define the scope of these security requirements to cover the decommissioning processes and obligations set out in industry codes. This will provide assurance that decommissioning activities and disconnection is sufficient to not adversely impact the Transmission System.

We expect that the security requirements within Section 5.3.3 could be utilised for this dual purpose. Therefore, whilst the scope of this security would be slightly extended, the value and duration of such security could remain the same as would otherwise be the case. However, we expect the exact scope and value of the decommissioning security requirement would be discussed and set in any future implementation period.

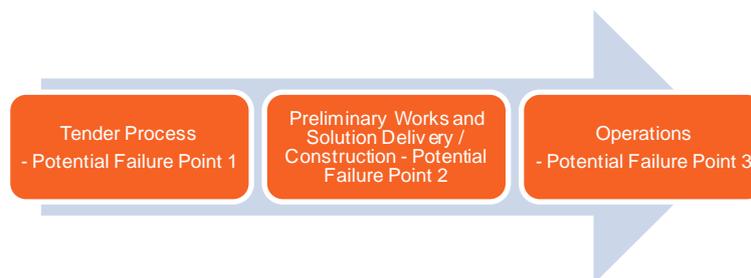
5.4 Arrangements in the event of a process failure

We need to consider what happens in the event an early competition process or outcome fails. This could occur for three main reasons, shown in Figure 22.

First, if a successful bidder is not appointed through an early competition tender process. Second, if a successful bidder fails to deliver and commission the awarded solution. Third, if a successful bidder is no longer able to fulfil their obligations once the awarded solution has been commissioned. This could include failure as a result of a successful third-party tender process challenge.

To expand on one of these potential process failures, further development is required in relation to exactly what constitutes a process failure in respect of 'Potential Failure Point 1'. If there is limited liquidity in the competition and this results in materially higher costed bids than expected, consideration is required as to whether this is an applicable process failure in the context of the remainder of this section. This will also need to be taken into account in the context of potential adverse impacts on market attractiveness.

Figure 22: Potential process failures



As the underlying transmission need is likely to still exist in the event of a successful bidder failing to be appointed or failing to deliver once they have been appointed (e.g. if they were to enter administration), we need to make sure that a contingency process exists. This is to make sure that the underlying need continues to be adequately satisfied in the event of process failure.

Network solutions

In the offshore regime, there are 'OFTO of Last Resort' provisions in place via Standard Condition B18 and Standard Condition E21 of the Transmission Licence as well as via [associated guidance](#). These arrangements ensure that the underlying need (i.e. access to the wider system for the offshore wind farm) can continue to be adequately satisfied in the event of OFTO failure.

We see no reason why these arrangements cannot be extended to cover network solutions (i.e. CATOs), whether that be due to an unsuccessful tender process outcome (noting other options would also exist to mitigate such as rerunning a process), or due to subsequent failure of the successful bidder throughout the delivery period or the operational period.



In practice, we expect that this situation will be unlikely to occur and if it were to occur the provisions would be used as a last resort as is detailed within the associated guidance.

This guidance (and the associated licence conditions) will need to be updated by Ofgem to incorporate CATOs within the implementation period and this exercise will need to identify whether any CATO specific inclusions or amendments are needed. At a minimum, we expect the arrangements and the guidance will need to be updated to reflect the extended coverage i.e. to account for failure of the process at a much earlier stage than would be the case under the OFTO arrangements. It may also need to be updated to reflect that in some circumstances such arrangements could potentially be used to replace a non-network solution in the event of process failure.

Whilst the CATO of Last Resort process will require further development and consultation, we do not expect that the incumbent TO will necessarily become a 'default provider' under those arrangements. Therefore, if an early competition process fails in future, then whilst the incumbent geographic TO would be an option, they would not necessarily be the only option or the default option.

Non-network solutions

However, regarding non-network solutions there are further considerations, because the 'CATO of Last Resort' provisions foreseen above are unlikely to be directly transferable to non-network solutions.

The reason being that non-network solutions will not have a Transmission Licence and so the existing licence conditions associated with the process cannot be utilised in the same manner as they could (if first updated) for network solutions. Therefore, further consideration is needed on whether it is practical to develop 'Non-Network Solution Provider of Last Resort' arrangements.

If a non-network solution is successful in a competition it is important that the early competition arrangements provide sufficient confidence in delivery in the necessary timescales. It is also important that they can ensure that the underlying need can continue to be satisfied in the event a non-network solution fails to deliver, or can no longer provide the contracted service. Both are equally important in relation to network solutions with the arrangements recommended above likely being sufficient for network solutions. Table 11 sets out the options we have considered for these circumstances in relation to non-network solutions.

Table 11: Recommendations for failure of non-network solutions

Option and Overview	Observations	Recommendation
<p>Enhanced risk management:</p> <p>Enact an enhanced risk management approach e.g. enhanced monitoring or enhanced contract terms.</p>	<p>Whilst this could potentially mitigate our concerns it would need to be assessed on a case-by-case basis and then confirmed pre-tender so that bidders are aware of any enhanced provisions.</p> <p>Example 'enhanced provisions' could include additional delivery guarantees such as higher liabilities and/or securities related to non-delivery, a requirement to hold an investment grade credit rating, or enhanced financing reporting/monitoring requirements.</p> <p>For the avoidance of doubt, such measures would not include contractual step-in rights.</p>	<p>We recommend this option.</p>
<p>Licence obligation extension:</p>	<p>Whilst this would be the most comparable solution it has numerous challenges.</p> <p>The first challenge is that network owners are unlikely to be</p>	<p>We do not feel that this option would be practicable.</p>



Option and Overview	Observations	Recommendation
<p>Apply 'provider of last resort' licence conditions to non-network solutions whether with an electricity transmission licensee or with other licensees.</p>	<p>able to own non-network solutions due to regulatory policy and unbundling restrictions.</p> <p>The second challenge is that whilst non-network solutions may be another form of licensee, other licence types do not have 'provider of last resort' arrangements (at least not for this purpose) and it is not likely possible or proportionate to introduce them as a result of early competition.</p> <p>The third challenge is that some non-network solutions could have no other form of licence.</p>	
<p>Contractual step in rights:</p> <p>Allow the contract counterparty to step into the contract to continue to provide the service.</p>	<p>Whilst this would mitigate the concern it has numerous challenges.</p> <p>The first challenge is that successful non-network solutions may be stacking services i.e. they may be participating in other markets and this would make any step-in rights difficult in practice.</p> <p>The second challenge is that the Contract Counterparty is unlikely to have the necessary skillset to step into the contract to provide the service.</p> <p>The third challenge is that (depending on the Contract Counterparty identity) there may be unbundling restrictions. We acknowledge other parties such as debt providers may have step-in rights.</p>	<p>We do not feel that this option would be practicable.</p>
<p>Network solution only competitions:</p> <p>Exclude non-network solutions from participating in certain competitions e.g. where non-delivery would result in significant operability issues.</p>	<p>Whilst this would mitigate the concern, we feel it conflicts with one of the aims of early competition i.e. in respect of transmission network needs to explore direct competition between network solutions and non-network solutions.</p> <p>We have previously noted that in the event of unmitigated risk of a material nature then this would be our fallback position. However, after further considering the aims of early competition and our recommended option above we are no longer proposing this as a fallback position. Whilst it will be kept under review we feel our recommended option is sufficient in respect of non-network solutions.</p>	<p>We do not feel that this option would be proportionate.</p>

Therefore, our recommendation is for the 'OFTO of Last Resort' licence conditions and guidance to be extended to incorporate relevant 'CATO of Last Resort' provisions. This would be in respect of both tender process failures and issues with network (and in some circumstances potentially non-network)



solutions. We expect that Ofgem will need to consider how any such changes interact with existing TOs and OFTOs in respect of their own licences and regulatory arrangements.

In addition, further consideration is needed in relation to what is most suitable for non-network solutions e.g. whether enhanced risk management is suitable or whether a more suitable option exists in relation to future 'Non-Network Solution Provider of Last Resort' provisions. We acknowledge that this could result in different treatment in some cases between network solutions and non-network solutions (if non-network solutions are subject to enhanced provisions). However, we feel that such differences can potentially be justified due to the apparent incompatibility of the anticipated 'CATO of Last Resort' provisions and non-network solutions. In the event they cannot be justified then such enhanced provisions may not be appropriate and this would need to be considered when developing enhanced contract terms.

We do not foresee any 'enhanced provisions' being developed until necessary in any future implementation period, but we have highlighted some areas where they could be potentially applicable in Appendix 2, Heads of Terms.

Stakeholder feedback



Some stakeholders have suggested that our high-level thinking and recommendations in respect of a provider of last resort have underestimated the extent to which status quo arrangements are impacted. This feedback applies not only to the required amendments to the 'OFTO of Last Resort' arrangements but also in relation to their views on a heightened risk of non-delivery related to early competition.

For the avoidance of doubt, where there is an early competition process failure we expect the CATO of Last Resort process will be a distinct process route in its own right i.e. other options could be re-rendering the network need under early competition or reintegrating the network need into the RIIO arrangements, including with the potential for late competition in future. It is worth noting that in such circumstances it is likely that there will be consequential material delays in relation to then delivering an alternative solution to meet the network need associated with such a process failure.

We were also asked for more information on specific changes to the last resort arrangements for CATOs, such as in relation to the order in which types of TO could be a last resort provider. We expect that Ofgem will need to further develop and consult upon changes to the OFTO of Last Resort provisions around the time they develop and consult upon a CATO Licence and in advance of any inaugural tender process. This exercise will also need to further consider the non-delivery risks, as will the development of the standard form contract in similar timescales.

6 Roles and responsibilities

This section presents the roles and associated responsibilities that are necessary to enable early competition. It also sets out the role of Transmission Owners ("TOs") in early competition both in terms of their role in network planning and as potential bidders.

We also discuss which industry participant could undertake these roles. Where we recommend the Electricity System Operator ("ESO")⁸ we have considered the overall implications on our business risk profile, how the roles could be structured within the ESO operating model and the capabilities that would be needed to deliver them on an enduring basis.

This section presents the role of the TO first as it provides context to our recommendations on the other key roles to facilitate early competition. In particular, to discuss the role of the Network Planning Body we need to first set out the role of the TO as TOs currently play a key role in network planning.

6.1 The role of the TO



Recommendation

The TOs should participate in early competition as bidders.

This section considers whether it is in the consumer's interest for TOs to participate in early competition in the context of their existing role in network planning. It also considers how they could participate in early competition. Finally, it explores whether there are any potential conflicts of interest between their role in network planning and as a

potential bidder and mitigation arrangements which may be needed.

We have structured our thinking from the topics we have explored with stakeholders as three key questions:

- 1) Should TOs participate in early competitions?
- 2) If TOs do participate, should TOs participate in the same way as other bidders or as a counterfactual to competition?
- 3) If TOs do participate, does this create any potential conflict of interest and how could these be mitigated?

Stakeholder feedback



Some stakeholders had a strong interest in these questions and opinions varied significantly. In particular, two TOs were of the view that they should only compete under a counterfactual model which is discussed in more detail below. Several potential bidders were concerned about the potential conflicts of interest created by the TOs role in network planning and as bidders. Some stakeholders had concerns about incumbent TOs participating in competitions and the ability of other bidders to compete with them.

Question 1: Should TOs participate in early competitions?

As a general principle, participants should not be excluded from a competition unless there is good reason to do so. Exclusion may lead to a reduction in competitive tension and may potentially lead to a loss of potential consumer benefit. There are a number of consumer benefits of TOs bidding into the competitions:

⁸ This paper proposes that National Grid ESO may be the most appropriate industry participant to perform one or more of the roles that will be required to implement the early competition model. This paper sets out a proposed model, identifying the roles and responsibilities to undertake such projects. It should not be taken as an indication that the ESO Board and/or shareholder of National Grid ESO have consented to carry out specific roles or actions, other than the development of the model as requested by Ofgem. Certain parts of the model, such as the allocation of risk and reward for performing any specific role and the associated limitations on liability have not been fully clarified by Ofgem. When those parts of the model are finalised and should Ofgem recommend that the ESO fulfil a particular role, the Board and shareholder of National Grid ESO would then consider whether it was appropriate and able to take on the particular role or roles.

- TOs are well placed to deliver competitive bids which benefit consumers due to their expertise in delivering such projects
- TOs competing against one another may offer significant consumer benefit. Their participation will therefore increase competitive pressures compared to a situation where TOs are excluded
- Incumbent TOs also have the potential to utilise their existing assets within their bid, which would not be the case if the TO's parent company participates through a separate entity
- A competition should only run where there is reason to believe that alternative solutions or an entity could potentially offer better consumer value than the incumbent TO regulated approach.

Stakeholder feedback



One TO and two other stakeholders agreed with our phase 2 proposal that TOs should participate (and should do so as bidders in the competition). Two TOs felt that TOs should provide solutions but that their solutions should be developed under their RIIO arrangements and then compared to the competitive solutions.

A potential equity investor felt that TOs should not be able to participate as assets, experience and capabilities of the TOs have been paid for by consumers and are difficult to replicate in the market. Also, there is a risk of cross-subsidisation between regulated and competitive parts of the business. They also felt that the need for competition demonstrates that the monopoly TOs have not met the customer's needs cost effectively. Overall, they felt TO involvement would lead to lower, if any, market interest. A non-regulated utility expressed similar concerns that market appetite could be reduced by TO involvement. Other stakeholders highlighted concerns around conflicts of interest if TOs participate in competitions.

Several stakeholders recognise that conflict mitigation arrangements would need to be put in place to provide confidence to other bidders that the TO is not advantaged by its role in network planning, particularly their role in assessing the impact of other bidder's proposals on their networks.

We continue to recommend that TOs should participate in competitions for the reasons set out earlier.

Question 2: If incumbent TOs do participate, should they participate in the same way as other bidders or as a counterfactual to competition?

TOs participating as bidders in the competition:

The typical approach for most competitions is that all bidders participate in the same way through the same process to ensure that there is a level playing field. This provides a fair and transparent process for all participants. It means all participants follow the same timescales and are evaluated on the same basis. It also means there is a clear route to dispute the outcome of the competition. A consistent and transparent tender evaluation framework is key to establishing a level playing field which is a core aim of comparable tender processes.⁹ A potential disadvantage of this approach is that a solution delivered under the regulatory regime cannot be put forward.

Stakeholder feedback



Two stakeholders feel that TOs are not well placed to participate in such a process as their business models are designed for the regulated regime.

A Consumer Body stakeholder felt that the incumbent TO should not be able to participate as a bidder in a competition as this would give them a second chance to develop a proposal. They argued that TOs should put forward their best proposal as part of the initial solution development for Network Options Assessment ("NOA") and should not be able to revise this through submitting a new bid.

⁹ [Ofgem Offshore Transmission market update page 17](#)

TOs participating as a counterfactual to the competition

An alternative approach that has been proposed is for the incumbent TO to produce a 'counterfactual' solution under their regulated frameworks. Under this approach, if the TO solution is chosen, it would be funded and regulated under the TOs regulatory framework, unlike the competitive solution which would receive a TRS and be regulated under the competitive framework. Two separate processes would be run alongside each other (i.e. the competition process and the TO regulated process) and ultimately be compared against each other at a point in the process. A process diagram setting out one option for how this process might work is shown in Appendix 5, Counterfactual approach.

Non-incumbent TOs could be allowed to compete as bidders under the counterfactual approach.

Stakeholder feedback



Two stakeholders proposed the counterfactual model where the incumbent TO develops its proposal alongside, but separate to, the competition. The successful solution in the competition would only be awarded if it was deemed to be better value to consumers than the counterfactual developed by the incumbent TO. They felt that this approach would allow TOs to operate under their regulated frameworks under which they have been designed to operate and potentially deliver better value for consumers through this.

These stakeholders felt that this approach may allow Ofgem to quantify the value of competition (factual) versus not competing (counterfactual). They also felt that this approach will insure against a situation where there is no market interest or the market fails to deliver.

A Consumer Body stakeholder raised concerns about how the counterfactual approach would work. They highlighted the need to compare bids fairly and questioned whether TOs would be funded under their regulated deal to develop their solution.

Counterfactual precedents

There are few known precedents in infrastructure procurement processes in the UK for counterfactual model. It is highly unusual to run a procurement process where one participant would follow a different process to all the other bidders.

A form of counterfactual approach comparable to the counterfactual model one has been trialed in our NOA Pathfinders. This has highlighted some of the challenges involved. These Pathfinders compare incumbent TO solutions to non-network solutions. They do not compare TO solutions to alternative transmission asset options. Early competition is more complex and will require a more in-depth assessment of the solutions and bidders than NOA Pathfinders. We would expect the challenges to be exacerbated.

Assessment of the counterfactual models

There are several key areas which require significantly more thinking to develop a counterfactual model which maintains a level playing field between the incumbent TO and other bidders.

Some key areas which require further work in both the counterfactual models are:

- **Consistent bid evaluation** - The incumbent TO and other bidders would need to be assessed against the same criteria and on a comparable basis
- **Dispute process** - There would need to be a transparent way for the competition winner or counterfactual to dispute the process. This would add a second disputes process into the overall process, potentially leading to time delays
- **Timeframe** - The counterfactual solution would also need to be produced within the same timeframe to the competition to ensure bidders and the incumbent TO has equal length of time to develop proposals
- **Bidder costs** - Incumbent TOs would be funded under RIIO arrangements in developing their bids whereas bidders would be developing their solutions at risk

- **Post-tender price change** - It would also be important to ensure that incumbent TOs are restricted to the same post-tender price change restrictions as the competitive process to prevent low cost estimates being used and then costs escalating unduly after the competition
- **Regulatory cross-subsidisation** - The true costs of incumbent TO proposals would need to be clearly accounted for, including any shared costs spread across other RIIO funded activities. Therefore, any costs associated with developing proposals being competed would need to be transparently separated from other RIIO costs. It should also be noted that under this approach consumers will need to pay for the development of the counterfactual, through RIIO, regardless of whether it goes ahead
- **Regulatory restrictions** - Incumbent TOs could be restricted in what they can propose by the RIIO framework and not able to tailor their proposal to best meet the consumer need. For example, if the need being tendered for is only 20 years, incumbent TOs will still need to propose assets that last for 45 years in line with their regulated arrangements. This could prevent incumbent TOs from providing good value consumer options
- **Incentive regime** - The incentives and obligations applied to a competitive tender may be different to the RIIO framework given that most bidders will be single transmission asset owners rather than incumbent TOs. This could affect the costs of the proposals
- **Conflict mitigation arrangements** – These would need to be put in place so that the TO is not advantaged by its role in network planning, particularly their role in assessing the impact of other bidder’s proposals on their networks.



Stakeholder feedback

Some stakeholders noted that this approach may allow Ofgem to quantify the value of competition (factual) versus not competing (counterfactual).

The counterfactual approach would not allow Ofgem to determine the overall value of competing versus not competing. The introduction of a competition changes the status quo by asserting a competitive pressure on the incumbent TOs i.e. under the counterfactual model the incumbent TO is still in effect competing and exposed to competitive pressure. It is not, therefore, a true counterfactual representation of a non-competitive regime.

There is a role for the counterfactual, through the initial solution developed for NOA, in determining whether it is in the consumer interest to launch a competition. Our proposed cost benefits analysis (“CBA”) process would form part of this process.



Stakeholder feedback

A Consumer Body stakeholder proposed a variation whereby the decision on whether the counterfactual would be progressed to a requisite stage of development to be a comparator. This could be at an early stage, before the competition is launched, or after ‘Invitation to Tender (“ITT”) stage 1’ or ‘ITT (stage 2)’. If it is felt at any stage that no bidders can propose a solution which offered greater value for money than the solution proposed by the incumbent TO in the NOA process then the incumbent TO would progress their solution. They felt it is important that the TO cannot put forward new proposals after NOA, in order to incentivise TOs to put forward their best solution from the outset. This stakeholder also suggested the incumbent TO proposal be made available to other bidders as a marker to consider in the formal bidding.

It would be challenging to compare competitive and the counterfactual solutions at ITT (stage 1) because costs will not be known at this stage. We propose that development of proposals to our proposed ITT (stage 2) is required before we can determine which competitive solution is the best for consumers. This also applies to the counterfactual, which would need to be developed to ITT (stage 2) in order to provide a fair and meaningful comparison.

It is important to ensure the best initial solutions are put forward from the outset. Our proposed strengthened planning role for the ESO should help to achieve this. However, because of the tight

timeframes for initial option development in the NOA process and the volume of options developed across the network, there is a limitation to how far the option could be developed at this stage of the process. Allowing TOs to review and refine the proposed solutions over longer timeframes could deliver better outcomes for consumers.

Question 3: If TOs do participate, does this create any potential conflict of interest and how could these be mitigated?

If incumbent TOs participate in the competition, their involvement in network planning has the potential for a number of potential conflicts of interest to arise that need to be addressed. These are:

1. TOs will have advanced knowledge of the likely tender specification (as their reference design will drive the specification)
2. TOs have access to information not available to other bidders
3. TOs will need to undertake feasibility assessments of the impact of proposed solutions on their network. This will give them sight of other bidders' proposals and mean they also assess their own proposals
4. TOs will have access to RIIO funded resource. This means TOs don't have to take the bidding cost risks that other bidders have to take
5. The initial solution will help set the tender specification. As the TOs currently design the reference solution, the TO will therefore have influence over the tender specification (and whether a project is eligible for competition).

Stakeholder feedback



A TO felt that the phrase 'conflicts of interest' is unhelpful in ascribing a status to the role of the TO and felt that it had crystallised a concept across stakeholders that the TOs licence obligations are prejudicial in some way to this new process. They felt there is a lack of evidence that consumers could be negatively affected by existing TO roles and responsibilities.

Several other stakeholders have fed back that they believe that there are clear conflicts of interest if the TO participates in a competition and continue their network planning role. In particular, concerns have been highlighted around the TOs ability to influence which projects are competed, and around TOs assessing other participants bids.

As set out above we are of the view that there are potential conflicts of interest under the early competition model that hamper a fair and transparent competitive process. These potential conflicts of interest are between the TO participating in competitions and their current role in network planning.

Two main approaches to mitigate these potential conflicts have been considered, which are:

- Ringfencing of TO bidding teams and challenge of TO initial solution development; or
- Transferring relevant planning responsibilities to the ESO.

Ringfencing of TO bidding teams and challenge of TO initial solution development

Ringfencing of TO bidding teams could be introduced to mitigate against potential conflicts 1 to 4 above. There is already precedent for this across the utilities sector as set out below.

There are ring fencing arrangements for managing similar conflicts in competitions for distribution connections as highlighted by a non-regulated utility. A [code of practice](#) was introduced in 2017 to help manage these concerns. Another example is in the non-household water retail market. Ofwat's 2013 discussion paper on [a Level Playing Field For the Water Market](#) sets out some useful thinking on this topic.

A further useful example to consider is BT and Openreach, who were subject to functional separation between 2005 and 2016. However, Ofcom subsequently decided to [implement full legal separation](#) in 2016 due to limitations of functional separation.

The [guidance](#) set out by Ofgem around ring fencing arrangements for late competition provides practical steps for how this could be implemented for early competition, which includes:

- Managerial separation of the bidding team from the TO
- Strict rules in place around IT access to prevent TO bidding teams accessing information related to planning functions
- The bidding unit must not comprise any employees of the TO who are involved in the development of the initial solutions
- Some physical restrictions of access to shared TO facilities
- Bidding teams are not allowed to recover their costs from regulated revenues
- Information relating to tender support undertaken by the TO must not be shared with the bidding team
- The TO must confirm its intention to bid and begin to implement conflict mitigation arrangements within eight weeks of the initial approval of projects that will be subject to early competition.

Stakeholder feedback



A TO felt that the conflict mitigation proposals would inhibit whole system considerations and efficiencies. They also felt there are implementation issues that need to be addressed and the impacts on TO regulatory obligations need further consideration.

A non-regulated utility noted that using ring-fencing approaches in their business had helped deliver value for consumers via their programme of interconnector investment.

Whole system considerations and efficiencies will still be identified during the initial network planning. The implementation of any conflict mitigation arrangements will require further consideration during the implementation phase. Ofgem also need to ensure that any impact of competition on TO regulatory obligations are addressed.

In addition to ring fencing of TO bidding teams, the ESO's role within the NOA process could be strengthened (see Section 6.2.5) to provide further assurance around conflict mitigation. This would specifically address conflict 5 set out above. The ESO could review solutions proposed by the incumbent TOs and challenge the solutions to consider whether they could be brought into scope for competition and ensure the initial tender specification does not favour TOs. Stakeholder input into the network planning process would also help to strengthen this challenge. Further detail on this stakeholder process is set out in Section 3.1.

The ESO already does some challenge and review of TO options, and this year the introduction of the Interested Persons Option Process began to seek stakeholder input. However, our current expertise does not extend to challenging, for example, build timescales. The ESO would therefore need additional resource and capabilities in such areas in order to meaningfully undertake such a role, for example, project delivery expertise.

Equipping the ESO with the capabilities and resources to challenge TO proposed solutions along with the right resources to provide meaningful challenge will enable us to:

- Undertake more extensive review of TO proposals such as challenging TO delivery dates and proposing different solutions or technologies
- Repackage TO proposed solutions such that they meet the competition criteria. For example, separating out an element of a solution that are 'new and separable' from the elements which are not
- Integrate third party solutions into the overall package of solutions.

Transferring planning functions to the ESO

Stakeholder feedback



Some stakeholders have fed back that our ringfencing and 'ESO challenge' recommendations are insufficient and that a real or perceived conflict of interest would still exist.

A potential debt investor stakeholder felt that ringfencing is the only practical approach but had concerns about how it would be monitored and enforced. They noted that it may be a case of perception over reality that can have an impact on the market appetite to compete.

A TO felt that ringfencing was insufficient to address the conflicts and felt that the opportunity for the network planning role to be more effectively and independently delivered needs further consideration.

The alternative option would be to transfer the relevant network planning functions from all three TOs into the ESO. This would involve transferring responsibility for the initial planning of NOA options and connection planning functions to the ESO.

This would mean that the TOs no longer produce the reference designs that determine whether a project should be competed and the specification for the competition. It would also mean that the ESO could conduct the connection feasibility assessments for each bid, rather than the TO.

The change would represent a significant shift for TOs. Their licence obligations would have to change to reflect this. It would also require a significant new function and level of resource for the ESO as we have very little experience of asset construction. We note some resource would also need to be retained within the TOs in order for them to progress the development of solutions not contested and undertake asset replacement planning.

There is a risk that some network planning knowledge will be lost as the ESO will not have on-the-ground experience of preliminary works, detailed design, construction and some operational aspects of the existing network, compared to TOs. Some synergies may be gained, however, from the ESO's on-the-ground system operation experience.

A further risk is that there could be loss of optimisation of solutions based on a number of different need drivers. Processes can be established between TOs and the ESO to do this. However, there could be some loss in the effectiveness of this due to the involvement of different organisations with different priorities.

Summary of our recommendations on the role of the TO

Based on stakeholder feedback this is an element of the early competition model which requires further consideration and testing with stakeholders. We understand that Ofgem intends to consult further with stakeholders on roles and responsibilities over summer 2021.

Based on the information available to us our current views on questions above are:

Question 1: Should TOs participate in early competitions?

Consumers may benefit from TOs participation in early competition as they are well placed to offer competitive bids.

Question 2: If TOs do participate, should TOs participate in the same way as other bidders or as a counterfactual to competition?

TOs should participate through the same process as other bidders as this is the most fair, transparent and efficient way to compare bids and maximise competitive tension.

Question 3: If TOs do participate, does this create any potential conflict of interest and how could these be mitigated?

The potential conflicts of interest from their role in network planning could be managed through ringfencing arrangements and a strengthened planning role for the ESO, which is supported by

regulatory precedent. The level of separation required to give the market confidence in bidding into an early competition is a key area Ofgem should consider as part of their ongoing work on competition.

We recommend that further work around the role of the TO in network planning for early competition is undertaken in parallel with Ofgem's [Review of GB System Operation](#) and BEIS's consultation on institutional arrangements. The review considers enhanced and new ESO functions in network planning, potentially requiring the ESO to make binding recommendations to TOs or developers on network investment.

6.2 Roles and the activities required to facilitate early competition

In this section we discuss the roles and associated activities required to facilitate early competition and recommend which entity could carry out the role. We note where this entity is the ESO, our recommendation is subject to having appropriate risk, liability and remuneration frameworks in place.

Following extensive engagement over the past year, we have identified 6 key roles that will facilitate our early competition model. These are:

- **Contract Counterparty** - manages and monitors any obligations placed on a successful bidder who will hold a contract for any solution not performing the function of electricity transmission (non-network)
- **Payment Counterparty** - manages financial transactions between the successful bidder and the other counterparties
- **Licence Counterparty** - manages and monitors the obligations placed on a successful bidder that is issued, or has, a transmission licence
- **Approver** – makes the formal decision to conclude a stage of early competition
- **Network Planning Body** – an existing role responsible for network planning that is jointly delivered by the ESO and TOs. An extension to the scope of this role will be required to deliver early competition
- **Procurement Body** - responsible for the design of the procurement structure and process, supporting the development of tender and contractual documents as well as management of the procurement process.

We have developed a roles interaction map to set out for each role, the main activities it would need to perform and its interactions with other roles. This can be found in Appendix 6, Roles Interaction Map.

Summary of the stakeholder journey

The stakeholder journey around roles and responsibilities began in our Phase 2 consultation. There, we considered the roles above along with the Licence Provider role, provided a high-level summary of the activities for each role and made suggestions for different entities that could undertake these roles.

Stakeholder feedback on our [Phase 2 consultation](#) (July 2020) generally agreed with the roles and associated activities. Some stakeholders considered that the roles of Procurement Body, Contract and Payment Counterparties should be carried out by ESO while the roles of Licence Provider, Approver and Licence Counterparty should be carried out by Ofgem. Other stakeholders did not provide a view on particular parties but emphasised that the chosen party for each role should have the right knowledge to carry it out. Overall, we considered that stakeholders supported our policy direction.

In developing our thinking post-consultation we realised that there were many areas that would benefit from stakeholder engagement ahead of our Phase 3 consultation which wouldn't be published until December 2020. Due to the volume of information we would need to consult on in December, we decided to publish a [Thought Paper](#) earlier in September 2020 which covered the following:

- Set out for each role, high level activities at each stage of the tender process. We did this by allocating the different activities under the end-to-end process to different roles
- In light of the updated activities for each role, revisited our Phase 2 Consultation suggestions on who should carry out each role and considered the pros and cons of different entities

- Reviewed the risks for each role that would apply to any entity taking on the role
- Removed the role of the Licence Provider as this activity overlapped with activities under the Licence Counterparty
- Added the role of Network Planning Body to help us in our thinking on the role of incumbent TOs.

The feedback for the Thought Paper was mostly provided in two workshops. We received one written response focussed on the role of the TO. In the workshops, we ran a poll for who should undertake the Contract Counterparty, Payment Counterparty and Procurement Body roles. The consensus favoured the ESO to perform the Contract Counterparty and Payment Counterparty roles however there was no clear view on the Procurement Body role. Feedback covered other wide-ranging areas and there was general request for additional information.

Our Phase 3 consultation (December 2020) built on our Thought Paper and presented our preferred position in respect of different roles based on the Thought Paper feedback. More specifically, the paper covered the following:

- Presented the role interaction map for the first time
- Provided extensive details on the activities the Approver would perform for the first time
- Assessed the prospect of multiple entities undertaking the Procurement Body role and the capability required for the role in response to Thought Paper feedback
- Presented the minded-to position that the ESO should undertake the Contract Counterparty and Payment Counterparty roles in line with Thought Paper feedback
- Set out potentially relevant case studies for early competition.

The feedback from our Phase 3 consultation and how it has shaped our recommendations is set out in detail below.

We note that a recurring theme we heard from stakeholders throughout our engagement was that there would be benefits to some of the roles being combined or run by a single entity. This would mean fewer interfaces and parties involved overall in managing the whole process. As a result, less time would be needed to manage interactions between parties and less handovers required during the process.

Additional detail around our full stakeholder journey can be found in the Appendix 10, You Said We Did.

Case Studies

In Phase 3 we presented two case studies which aimed to provide background information on some precedents that have been raised by multiple stakeholders. These are on the Thames Tideway Tunnel project and the Contracts for Difference regime. We consider the roles under each example, and how these compare to our proposals under early competition and whether there are any lessons we can learn from these precedents. We asked stakeholders whether they agree with the key differences we had identified between our early competition proposals and these case studies. We also asked whether these key differences would limit the lessons that could be learnt for the purposes of developing the early competition model.

A majority of stakeholders agreed that there was limited applicability and usefulness of these precedents. A TO also pointed out that the examples presented are both bespoke projects which require unique approaches. Therefore, early competition will require the same. Some stakeholders noted that some lessons can be learnt from these case studies, for example from the process and scheme intent, however it would be difficult to draw direct comparisons or parallels with early competition. Stakeholder did raise other case studies we could look into such as PPP/PFI and DPC. We have considered other regulatory precedents when looking our model as a whole, roles and responsibilities and also when considering remuneration options for similar roles. These can be found in Appendix 11, Early Competition Precedents.

6.2.1 Contract Counterparty

We recommend the Contract Counterparty role is responsible for the activities set out in Figure 23, which illustrates the activities the Contract Counterparty would need to undertake at each stage of the end-to-end process.

Some of the key activities under this role include:

- Determining the Post-Preliminary Works Cost Assessment (“PPWCA”) principles and carrying it out
- Creating tender documentation and process in relation to acquiring a contract
- Issuing the contract and enacting any changes to it that may occur at a later stage
- Managing contract obligations during stages of early competition
- Discussing end of contract options with the successful bidder.

The activities we have identified for the Contract Counterparty are dependent on work we have been undertaking as part of our Post-tender workstream, set out in Section 5.3.

Stakeholders recognise the need for this role to ensure that non-networks and networks solutions are held to the same standards where appropriate. The key justifiable differences between the treatment of network and non-networks solutions relate to codes (Section 4.3.1) and Competitively Appointed Transmission Owner (“CATO”) of last resort provisions (Section 5.4).

To provide additional detail on this role we also considered some high-level regulatory changes within our Phase 3 consultation. We estimate the magnitude of these changes will be low to moderate.

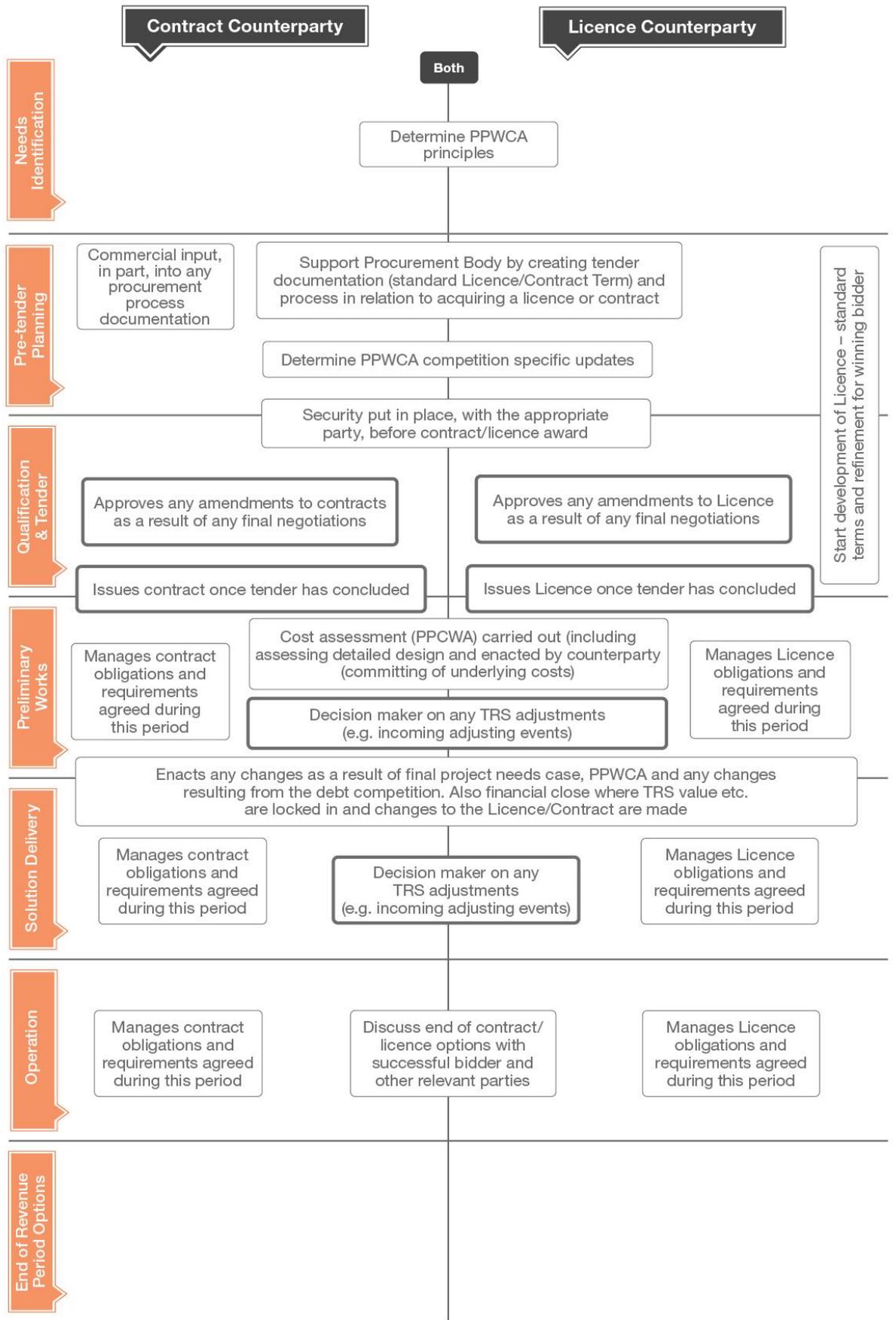
Recommendation



Estimated magnitude of changes is Low to Moderate

Initial view of changes to facilitate the role is as follows: Depending on what legislation and licence changes are defined for the procurement process, it may lead to updates or creation of a new commercial services agreements, including overarching Entity Licence updates.

Figure 23: Contract Counterparty activities



Who could carry out this role?

The ESO could undertake the Contract Counterparty role because:

- We have experience in contracting through, for example, our role in Balancing Services and Pathfinders
- This role would build on existing capabilities therefore less time would be needed to upskill and resource the ESO
- Have current relationships with some potential bidders.

This recommendation is subject to the final contracting arrangements to make sure that counterparty rights and obligations are appropriate.

Stakeholder feedback

The feedback from our Phase 3 consultation was as follows:



- A majority of stakeholders supported our views and position that the ESO could be the Contract Counterparty
- A couple of stakeholders raised the risk that under these recommendations the ESO would be taking on the delivery and compliance risk for the non-network solution. This is considered in Section 6.3
- There were also concerns raised that more needs to be understood on enforcement actions if a third-party non-network solution fails. This is considered in Section 5.4
- Further consideration will need to be given on the alignment of contract and Licence obligations and ensuring that the Contract Counterparty retains the same authority as the Licence Counterparty.

Given the feedback received, we continue to recommend that the ESO undertakes the Contract Counterparty role.

6.2.2 Payment Counterparty**Recommendation**

The ESO could undertake the Payment Counterparty role.

We recommend the Payment Counterparty role is responsible for the activities set out in Figure 24, which illustrates the activities the Payment Counterparty would need to undertake at each stage of the end-to-end process.

Some of the key activities under this role include:

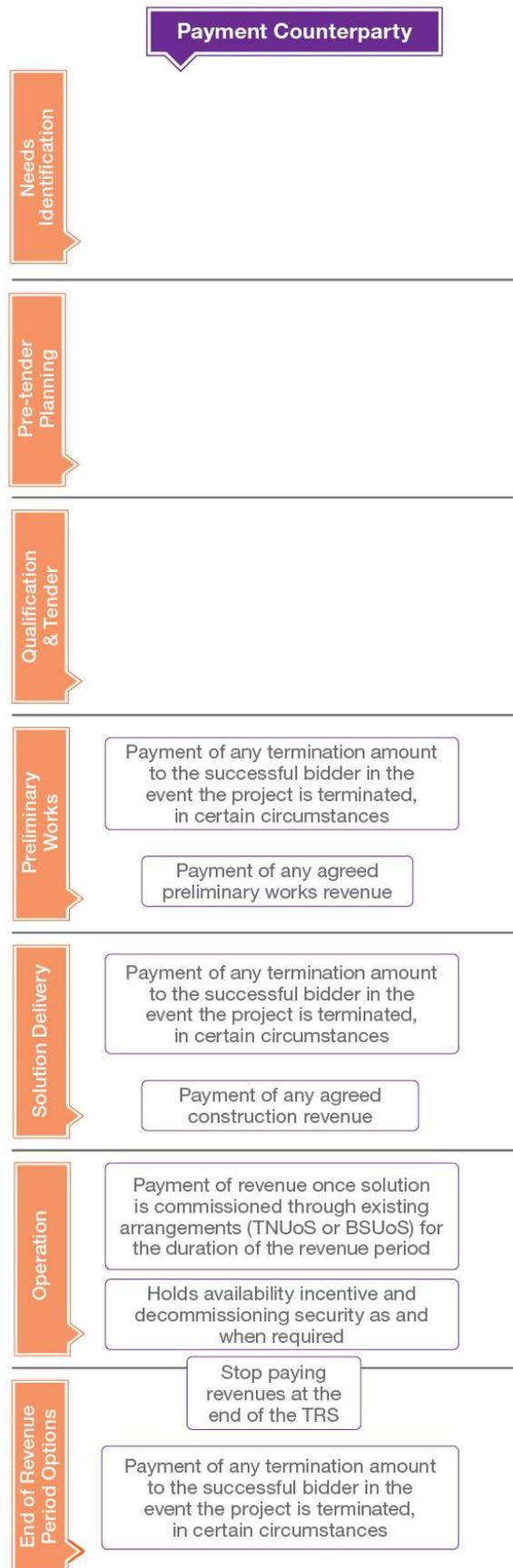
- Payment of any agreed preliminary works or construction revenue
- Payment of any termination amounts
- Payment of revenue once the solution is commissioned
- Holding the availability incentive and decommissioning security as and when required.

To provide additional detail on this role we also considered some high-level regulatory changes within our Phase 3 consultation. We estimate the magnitude of these changes will be low.

Stakeholder feedback

A key point raised in our Thought Paper feedback was that we should consider whether the Payment Counterparty could hold the decommissioning security and be responsible for releasing them back to the contractor. We have reflected on this feedback and the activity is now included as an activity for the Payment Counterparty.

Figure 24: Payment Counterparty activities



Who could carry out this role?

The ESO could undertake the Payment Counterparty role because:

Recommendation



Estimated magnitude of changes is Low

Initial view of changes to facilitate the role is as follows: Consequential amendments to CUSC and STC depending on remuneration and payment approach for roles.

- We currently undertake this role for Transmission Network Use of System (“TNUoS”) and Balancing Services Use of System (“BSUoS”) charging arrangements
- We are recommending that monies related to early competition are included within the scope of these two charges, as set out in Section 5.3.3
- Regulatory arrangements and codes currently allow for the ESO owning this role
- We have experience in delivering this role and the arrangements surrounding it.

This recommendation should be reviewed if charging arrangements change.

Stakeholder feedback



The feedback from our Phase 3 consultation was as follows:

- All stakeholder supported our views and position that the ESO could be the Payment Counterparty
- A TO noted that it is sensible for the Contract Counterparty and the Payment Counterparty to be the same entity as per standard contractual practice
- Stakeholders also noted that there are wider industry developments in network charging that need to be kept in consideration.

Given the feedback received, we continue to recommend that the ESO undertakes the Payment Counterparty role.

6.2.3 Licence Counterparty

Recommendation

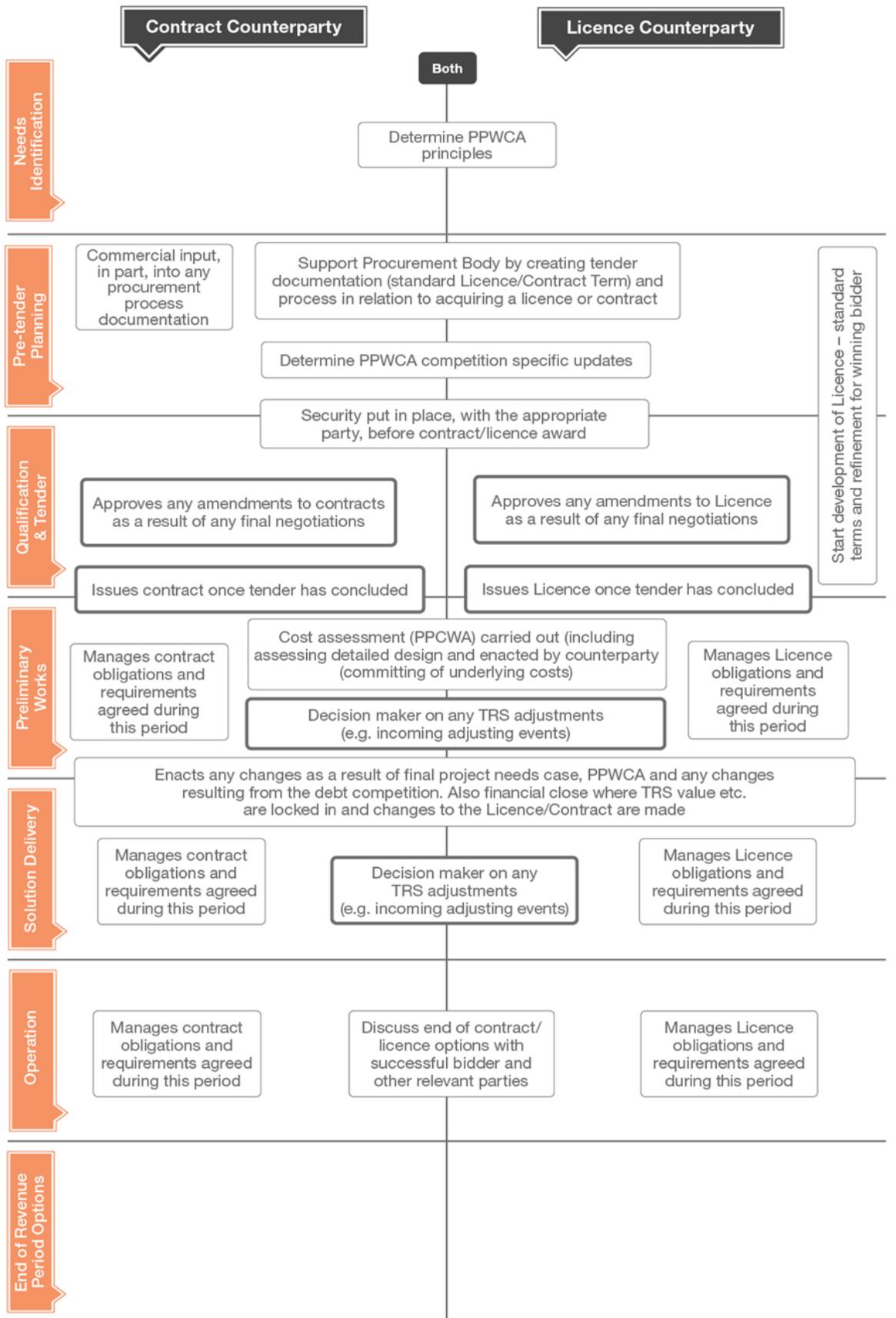


Ofgem is the only party (due to legislation) who can take on the role of Licence Counterparty for successful bidders with network solutions.

We recommend the Licence Counterparty role is responsible for the activities set out in Figure 25, which illustrates the activities the Licence Counterparty would need to undertake at each stage of the end-to-end process.

These activities do not differ substantially from those of the Contract Counterparty however are modified to reflect Licence specific activities.

Figure 25: Licence Counterparty activities



Who could carry out this role?

Our recommendation is that Ofgem take on the role of Licence Counterparty because they are the only body that can issue a Licence due to legislation (Electricity Act 1989).

**Stakeholder feedback**

All previous engagement resulted in unanimous agreement that Ofgem should undertake the Licence Counterparty role given legislation. For this reason, we did not consult on who should carry out the role further in our Phase 3 consultation.

On this basis, we continue to recommend that Ofgem undertakes the Licence Counterparty role.

We also recommend that Ofgem, in the role of Licence Counterparty, considers publishing a guidance document on which solutions require a licence and which could be delivered under a contract to help guide bidders. This is based on stakeholder feedback from our Phase 3 consultation around activities for the Approver.

6.2.4 Approver**Recommendation**

Ofgem should play a role as the Approver, via Stage Gates and other points during the early competition process.

We recommend the Approver role is responsible for the activities set out in Figure 26, which illustrates the activities the Approver would need to undertake at each stage of the end-to-end process. As set out in Section 5.1.1, we are recommending that the end-to-end process is governed by a series of Stage Gates. These are comparable to the process stages for interconnectors applying to the

cap and floor regime or the Direct Procurement for Customers (“DPC”) control point process.

At each Stage Gate the Approver will need to provide approval to progress to the next Stage Gate. In our Phase 3 consultation we asked stakeholders for feedback on the Approver role and all of the recommended activities.

**Stakeholder feedback**

The feedback from our Phase 3 consultation on the Stage Gates was as follows:

- Majority of stakeholders agree that it was appropriate for the Approver to take decisions to conclude a stage of early competition
- A couple of stakeholders supported the requirement for the Approver to check the need
- Clarity was needed on the purpose of each check and approval
- There should be a consideration of the length of time each activity will take.

We continue to recommend that the Stage Gate process should be undertaken by the Approver to ensure consumers are protected. We recommend that Ofgem further develops the checks and activities during the implementation phase and as part of its consultation on roles for early competition. We recommend that the detail of these activities are developed based on the following principles which have been refined through stakeholder feedback:

- Each stage should be transparent in how the Approver makes its decision
- All Stage Gates and activities carried out by the Approver should be well understood by bidders
- These activities at the Stage Gates should be formalised and standardised.

One area of feedback that warrants further consideration is whether the outcome of PPWCA should be approved by the Approver to ensure clear governance. When looking at this role, we considered whether the Approver would want to approve all cost assessment outcomes. However, we felt the accountability for the outcome of the assessment sat with the respective Counterparty. Therefore, we have recommended that the relevant Counterparty conducts and approves the cost assessment, but this outcome can be referred to the Approver if there is a dispute. However, Ofgem may want to consider this area further.

Stakeholder feedback



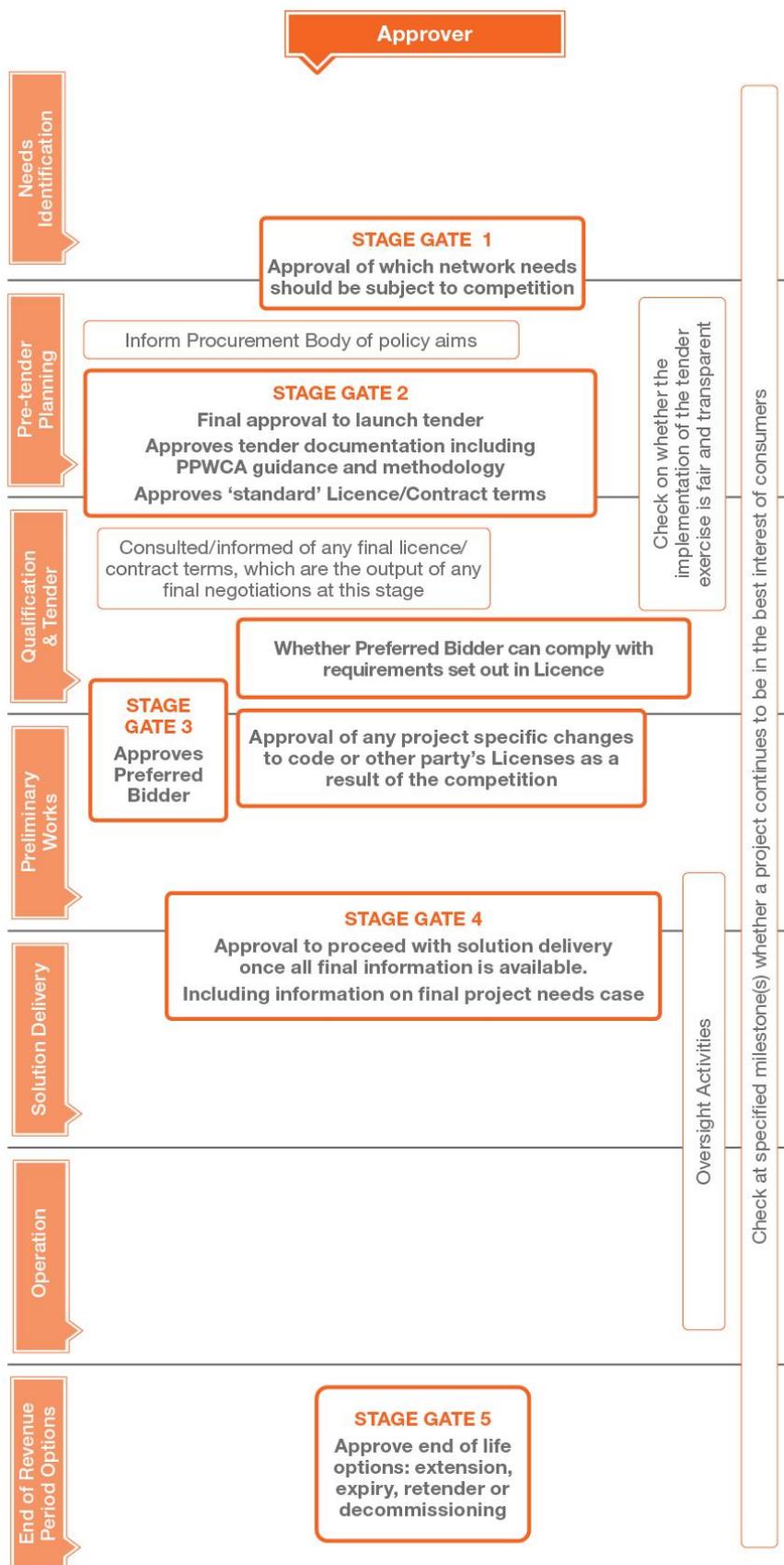
A number of stakeholders noted that the Approver could undertake a number of other checks and activities during the end-to-end process to help support their decision making at the Stage Gates, reduce burden and timescales for decisions and improve consumer protection. Specific points of feedback can be found in Appendix 10, You Said We Did.

Following our Phase 3 consultation we refined some further activities that the Approver could carry out to support it in its decision-making process at each Stage Gate. We are not recommending when these could take place but they could happen across the end-to-end process in Figure 18.

- **Check at specified milestone(s) whether a project continues to be in the best interest of consumers** - This activity could occur at specified point(s) within the early competition process or if there is a material change in the project
- **Check on whether the implementation of the tender exercise is fair and transparent** - This activity could occur at any point throughout the procurement process. We see this activity being triggered if there have been any material changes to the procurement e.g. need change
- **Oversight activities** – From Stage Gate 3 there would be some merit in the Approver having some oversight of activities that occur during this period, for example any income adjusting events. We have not developed any views on this at present, as it was added in response to feedback from our Phase 3 consultation, but this should be considered further by Ofgem.

We are still working on the detail of what these checks would look like and involve. We expect these to be defined during the implementation phase and that it is a topic Ofgem should consider further.

Figure 26: Approver activities



Who could take on this role?

Our recommendation is that Ofgem is the most appropriate party who could undertake the role of the Approver.

**Stakeholder feedback**

From our Phase 3 consultation, a majority of stakeholders agreed that it was appropriate for the activities under the Approver to be carried out by Ofgem. A TO disagreed and questioned whether Ofgem had the right knowledge and experience to carry out to make the decisions required.

Ofgem has experience overseeing interconnector development and managing price controls. Combined with their duty to protect consumers we are of the view that they are best placed to take on the Approver role.

Therefore, we continue to recommend Ofgem undertake this role, to oversee and approve Stage Gates throughout the end-to-end process. We also feel that this would be in the best interest of consumers to make sure the project continues to represent consumer value.

6.2.5 Network Planning Body

The Network Planning Body role is an existing role focussed on network planning and is currently delivered jointly by the ESO and TOs. A number of additional essential activities will need to be added to the scope of this role to deliver early competition, these are:

1. Recommend which NOA options meet the eligibility for early competition (Stage Gate 1)
2. Support the reassessment of projects against the criteria at Stage Gate 2
3. Identify asset replacement, compliance or customer connection driven projects that meet the early competition criteria
4. Articulation of the network need for the technical specification
5. Support for any market or bidder engagement in regard to the technical specification
6. Provision of network modelling tools or alternatively, a modelling service to bidders
7. Evaluation of whether bids meet the network needs required in the technical specification
8. Feasibility studies for integration of potential solutions with existing network or proposals seeking to connect to the network as part of the tender process (See Section 5.2.4 for more information). The studies would be equivalent to the connection review process under Pathfinders or the optional feasibility study under the current connections process. These studies focus on the connection to, and use of, the system and will include, for example, voltage step changes for each proposed solution.

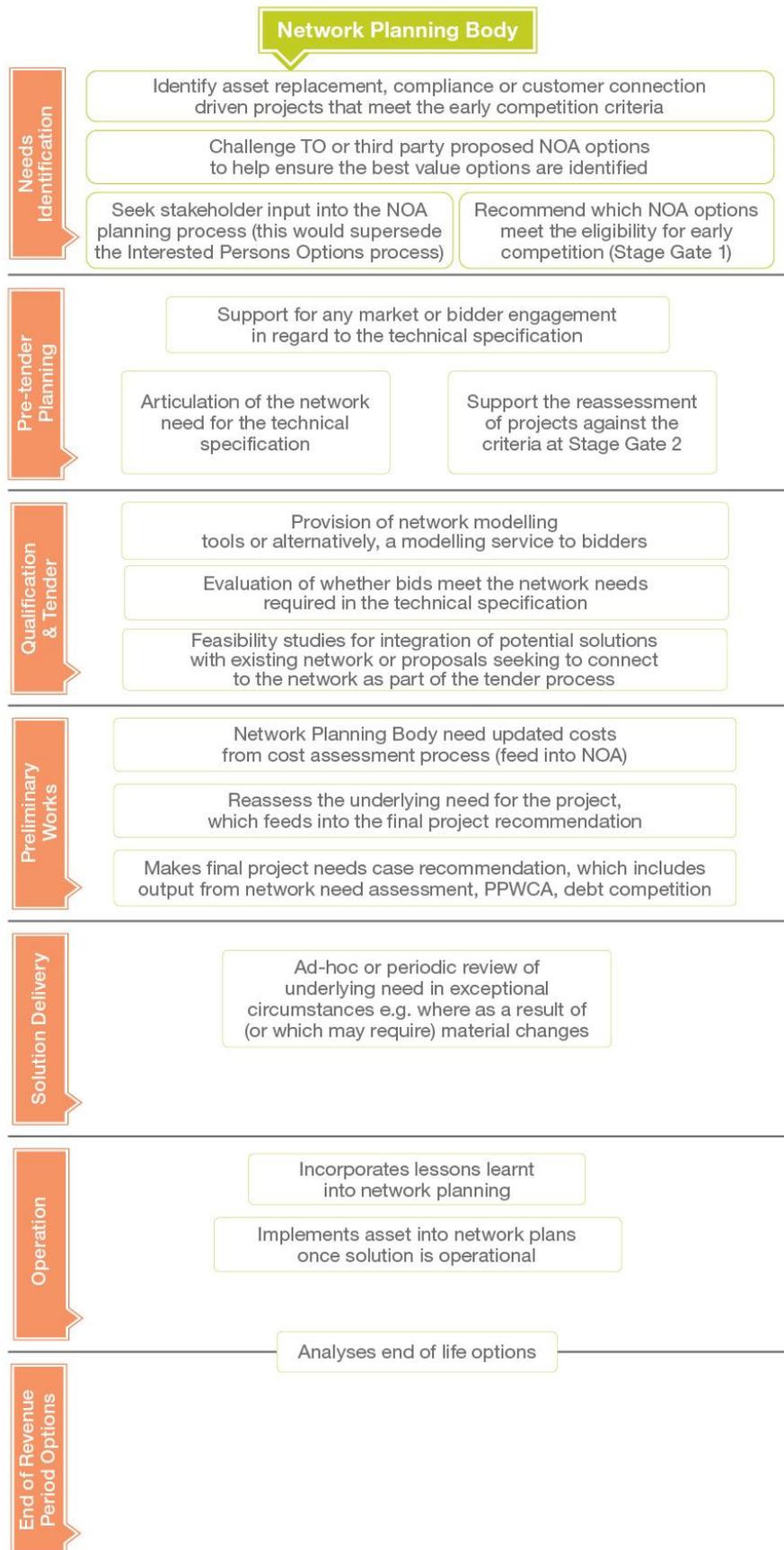
We recommend that, on top of the essential activities above, the following additional network enhancement activities are carried out by the Network Planning Body role:

9. Seek stakeholder input into the NOA planning process (this would supersede the Interested Persons Options process)
10. Challenge TO or third party proposed NOA options to help ensure the best value options are identified.

These additional activities could increase the value gained through early competition and bidder confidence in the project identification process. This is because the activities will help to ensure that all appropriate projects are identified for competition.

The full list of activities we recommend the Network Planning Body is responsible for is set out in Figure 27, which illustrates the activities the Network Planning Body would need to undertake at each stage of the end-to-end process.

Figure 27: Network Planning Body activities



Who could carry out the activities?

If the activities set out above were allocated in line with current network planning activities:

- The ESO could undertake activities 1 to 7 and activities 9 and 10 as part of a strengthened Network Planning Body (ESO) role
- The relevant network owners - predominantly the incumbent TOs but potentially on occasion also Distribution Network Owners (“DNOs”) - should take on activity 8 as the Network Planning Body (TO/DNO).

Conflict mitigation arrangements may need to be put in place to manage conflict positions from the TO carrying out feasibility studies for potential solutions and itself bidding in competitions. Whilst such mitigation arrangements may resolve actual conflict positions, the perception of conflict could still remain (see Section 6.1).

As set out in Section 6.1, we recommend that further work around the role of the TO in network planning for early competition is undertaken in parallel with Ofgem’ ongoing [Review of GB System Operation](#) and BEIS’ consultation on institutional arrangements.

We didn’t explicitly consult on the allocation of additional activities as those recommended for the ESO build on existing ESO activities and were assumed to continue to sit with the ESO. Our consultation focussed on activities for the TO where there could be potential conflicts of interest.

**Stakeholder feedback**

Stakeholder feedback around conflict positions is covered in Section 6.1.

6.2.6 Procurement Body

We recommend the Procurement Body role is responsible for the activities set out in Figure 28, which illustrates the activities the Procurement Body would need to undertake at each stage of the end-to-end process.

Some of the key activities under this role include:

- Undertaking market sounding to set financial parameters for commercial evaluation
- Defining the bid evaluation criteria
- Market engagement and networking events about the upcoming tender
- Carrying out the tender process (Pre-Qualification (“PQ”), ITT (stage 1), ITT (stage 2), including specifying performance bond
- Overseeing the debt competition run by bidders and financial close.

All of the Procurement Body’s activities are dependent on work we have been undertaking as part of our Pre-tender and Tender workstreams as set out in Section 5.

Stakeholder engagement on the activities for the role suggested general support for our recommendations. We cover specific points of feedback raised by stakeholders ahead of our Phase 3 consultation in the list below:

- Some stakeholders queried how the Procurement Body would be set up and requested greater detail on what activities it would be tasked to do. We have provided a view on how it could be set up in Section 6.3.1 and more details on the activities through Appendix 6, Roles Interaction Map. The map was first introduced in our Phase 3 consultation and has been refined for the Early Competition Plan (“ECP”)

Recommendation



Estimated magnitude of changes is Moderate to High

Initial view of changes to facilitate the role is as follows: Depending on the final procurement process, new legislation and subsidiary documentation may be needed. This could be followed by Entity (if they currently hold a Licence) and TO licence changes (or the potential of a new Licence for a third party), consequential changes to System Operator Transmission Owner Code ("STC") and STC Procedures (such as data, disputes and new process). Minor consequential change to the Connection and Use of System Code ("CUSC") dependant on remuneration route.

- Some stakeholders questioned whether the Procurement Body will be procuring on behalf of another body/entity. We cannot confirm this at present but it should be clarified by the legislative arrangements developed by Ofgem/BEIS to create the role and confirm its activities. We will continue to engage with Ofgem/BEIS during the implementation period (see Section 7) as they continue to develop their proposals. Nonetheless, we have developed some initial views on potential regulatory changes irrespective of who takes on the role. We estimate that the magnitude of these changes will be moderate to high
- Stakeholders discussed the possibility of the involvement of multiple parties in the procurement process at one of our workshops in September 2020. When exploring this option, we found that there could be the potential for independent assurance activity. However, in our Phase 3 consultation, we considered that such an activity would overlap with approval activities carried out by the Approver and would therefore be unnecessary

The Approver (see Section 6.2.4) through its approval activities, should provide adequate assurance that the tender process has been run properly as recognised by a majority of stakeholders. Moreover, the Approver role will be carried out by a different entity to that performing the Procurement Body role. We consider this removes the need for independent assurance and therefore maintain our Phase 3 consultation position.

Stakeholder feedback



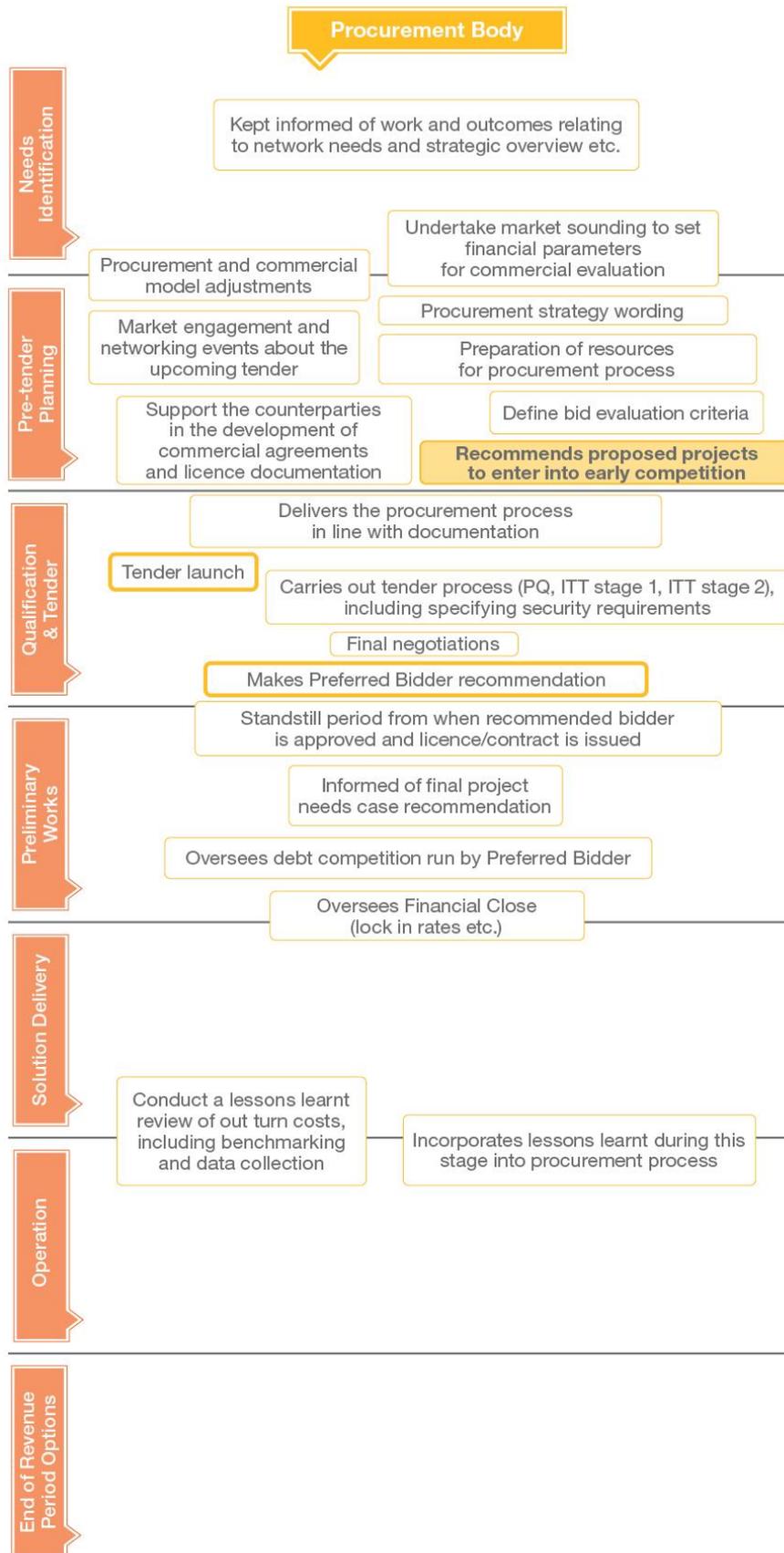
Most feedback on our Phase 3 consultation agreed that an independent assurance activity was not needed as long as the Approver had an oversight role and assurance activities were built into the scope of the role.

A TO noted that independent assurance would not be required for a network company as they undertake self-audits. They emphasised that any third party Procurement Body should be held to the same standards of audit and quality assurance as for a network company.

The stakeholder also indicated that third party independent assurance could substitute, and may be less disruptive than, the milestone checks and other approval activities recommended for the Approver role (see Section 6.2.4) However another view was that reliance on a third party for assurance could increase uncertainty for bidders at costs to consumers.

Furthermore, we do not fully agree that independent assurance will be less disruptive than relying on the Approver. The party carrying out the assurance, unlike Ofgem, may not have sufficient expertise of, and experience in, large infrastructure procurement or the electricity system which could potentially prolong the competition.

Figure 28: Procurement Body activities



Who could carry out this role?

Stakeholders, up to our Phase 3 consultation, have supported either Ofgem, a third party or the ESO taking on the role of Procurement Body. We now recommend that the ESO could undertake the Procurement Body role.

**Recommendation**

The ESO could undertake the role of the Procurement Body.

Feedback to our Phase 3 consultation generally suggested that the ESO could carry out the role subject to certain conditions covered below.

Stakeholder Feedback

Stakeholders noted the following conditions if the ESO were to take on the role:

- Ofgem should have oversight. This is considered in Section 6.2.4
- The ESO would require an enhanced procurement team and upskilling (for example, in project delivery), and greater resources to deliver the recommended pre-tender and tender activities. This is considered in Section 6.3.1
- The ESO would require suitable incentives to deliver good value for consumers. This is covered in Section 8
- A potential equity investor noted that the design of the tender process should remain with Ofgem and ESO would have to be fully independent of National Grid Group.

The current legal separation requirement provides sufficient independence.

Some stakeholders endorsed other parties to carry out the role or did not demonstrate a clear preference. These views are summarised below.

We reflected on these responses and have provided our views on the issues discussed:

- Whilst there may be certain advantages of the TO taking on the Procurement Body role, we agree with the view that, under our current recommendations where TOs can participate in competitions, it would create a conflict of interest
- We do not agree with the view that a third party would face significant barriers or inefficiencies because all of the parties that have previously been considered have expertise in some areas of our model but would require upskilling in other areas
- We consider that any barriers or inefficiencies would be minimal, particularly in the context of removing potential conflicts of interest.

Stakeholder feedback

One TO suggested that the TOs are best placed to carry out the Procurement Body role because TOs have established relationships with stakeholders which are essential in progressing projects. They commented that a third party, by contrast, would face significant barriers and inefficiencies.

A potential bidder recognised the advantages of the TOs taking on the Procurement Body role. However they considered it may create a perceived conflict of interest under our current recommendations where TOs can bid into the competition. They concluded the only alternative to TOs was the ESO.

A couple of stakeholders did not indicate a preference of who could take on this role but agreed that better sight of the liability, risk and remuneration framework would help clarify this.

A TO highlighted Ofgem would need to carry out further work to decide who should perform the Procurement Body role as part of their own consultation exercise.

Given the feedback received, we recommend that the ESO could undertake the Procurement Body role.

Procurement Body role

We have considered the benefits of the ESO performing the Procurement Body role in conjunction with the other roles we could undertake, these benefits include:

- **Efficiencies with other roles** - Combining the other roles could undertake with the Procurement Body role would create efficiencies throughout the tender process. For example, reducing the number of handovers and interfaces, improving the bidder experience, and avoiding the high set up costs of having a third party carry out the role
- **Interaction with the Network Planning Body (ESO)** – Through our role in network planning we could potentially be putting the need out for tender. Carrying out the Procurement Body role in addition to this would give us sight of the entire end-to-end procurement process and could therefore lead to the best outcome for the consumers
- **Contribution to our strategic ambitions** – These roles, in particular the Procurement Body and Network Planning Body (ESO) roles, are critical to making early competition a success and realising its potential value for consumers. We are motivated to deliver these outcomes as it aligns closely with our RII0-2 ambitions such as, Competition Everywhere and Unlocking consumer value through competition.

6.2.7 Summary of recommendations

In summary, we recommend that:

- Ofgem takes on the Approver and Licence Counterparty roles
- The ESO could perform the Procurement Body, Contract Counterparty and Payment Counterparty roles
- The ESO could take on a strengthened role in network planning. The full extent of this should be considered alongside wider network planning roles being considered, following Ofgem's [Review of GB System Operation](#).

We note that roles the ESO could undertake are subject to having appropriate remuneration, risk and liability frameworks in place.

These recommendations are based on the information we have available today. There are a number of uncertainties in areas that will potentially impact our recommendations, which are:

- Competition/procurement legislation and associated liabilities
- Consequential ESO Licence changes
- Ofgem's ongoing [Review of GB System Operation](#)
- A clear view of the scale and frequency of projects suitable for early competition.

Therefore, these recommendations could change during the implementation period (See Section 7), once we know more information on the areas above.

6.3 Impact on the ESO

As noted above, we are recommending that the ESO could take on the following roles:

- Strengthened Network Planning Body (ESO)
- Procurement Body
- Contract Counterparty
- Payment Counterparty.

We are recommending that Ofgem undertake the Approver and Licence Counterparty roles. We are not covering them in this section as we are focussing on the impact to the ESO as requested by Ofgem.

In considering these roles we have looked at the key risks of undertaking these roles (for any entity taking on this role) and then applied these risks to the ESO. Please note that this analysis is based on the information available today and our obligations as they are now. These will be revisited post ECP submission as recommendations are refined and there is greater clarity on competition legislation and associated procurement regulations. For each risk considered we provide an illustrative example, but they are not limited to just these. In our risk assessment we considered whether the ESO was already exposed to each risk through our current activities. We then did some initial analysis of the impact the roles we could undertake would have on our current risk profile. We found in Table 12.

Key:

High = significant new activity compared to current activities with expanded scope

Moderate = Some alignment with current activities but with an expanded scope

Low = alignment with current activities with a slightly expanded scope

Table 12: Impact on the ESO

Risk (for any entity taking on this role)	Is the ESO currently exposed to this risk?	What impact does taking on additional early competition activities have on the ESO's risk exposure?
Procurement (or legal) challenge by a third party <i>e.g. failure to follow procurement rules</i>	Yes	High
Procurement underperformance/failure <i>e.g. failure to find a successful bidder or successful bidder walks away</i>	Yes to an extent	High
Technical risk (engineering perspective) <i>e.g. failure to perform correct technical assessment of bids</i>	Yes to an extent	High
Political risk <i>e.g. failure to deliver new obligations leading to Ofgem seeking enforcement action</i>	Yes	High
Non-network solution fails to deliver <i>e.g. if the successful bidder becomes insolvent during the construction phase</i>	Yes to an extent	High
Contract management and challenge <i>e.g. dealing with income adjusting events or price re-openers</i>	Yes to an extent	High
Network information provided is incorrect <i>e.g. bidders input this information into their bids, therefore if this is incorrect the solution will be incorrect</i>	Yes to an extent	High to moderate
Inadequate funding for activities <i>e.g. remuneration requirements for activities are not granted and so costs of the roles are not covered</i>	No	Moderate to High
Cashflow/ financial risk <i>e.g. the payment of potentially large lump sums at uncertain times, BSUoS risk</i>	Yes	Moderate
Resource or capability gap/shortage <i>e.g. unable to deliver the activities due to lack of skilled workforce</i>	Yes	Moderate

Risk (for any entity taking on this role)	Is the ESO currently exposed to this risk?	What impact does taking on additional early competition activities have on the ESO's risk exposure?
Liquidity risk <i>e.g. bearing the liquidity risk due to timing difference in receipts from suppliers and payments to the successful bidder</i>	Yes	Moderate
Breach of Contract/price reopeners (dispute process) <i>e.g. if these are referred to Ofgem there is the potential for a Judicial Review</i>	Yes	Low
Breaches of code/Information Commissioner's Office ("ICO") rules <i>e.g. in the provision of information/data relating to network users including GDPR</i>	Yes	Low
Needs Change <i>e.g. inaccurate forecasts of future network demand causing the need to change</i>	Yes	Low

We consider the risk of a perceived unlevel playing field to be overarching and ultimately, could increase the likelihood of other risks materialising such as procurement / legal challenge risk. We are exposed to this risk under Pathfinders however this is to a lesser extent than it would be under early competition. The risk could arise under early competition from the following issues:

- Level playing field between different types of bidders
- TO biased towards its own bidding team (under our ringfencing recommendations this risk is potentially mitigated for the TOs but not for the ESO).

Below we explore the other high impact and high to moderate impact risks in more detail.

High impact risks

We identified seven risks where, in taking on the additional activities linked to the roles we could undertake, our risk profile would be impacted significantly. The following expands on why these risks have been given this rating:

- **Procurement (or legal) challenge by a third party** We are exposed to this risk through Balancing Services and the Capacity Market. However, due to the level of subjectivity and the early nature of the competition, there is an increased likelihood of procurement challenge. At present this is exacerbated because it will require new capabilities and capacity to deliver the procurement process. Another element is that as legislation and regulatory arrangements for competition are being drafted the liability allocation and flow is unknown in relation to any challenge. Therefore, the extent or scale of this risk is unknown
- **Procurement underperformance/failure** – Our current procurement activities are well established processes and so we are exposed to this risk to an extent. However, what we are recommending for early competition is significantly more complex and requires activities that we do not currently carry out. For example:
 - the debt competition assumption setting process could be challenged as not being robust enough and leads to additional costs to consumers.
 - Undertaking large pre-tender market engagement and networking events
 - Preparation of all resources for the procurement process and defining the bid evaluation criteria
 - Recommendation of projects to enter into early competition
 - A more complex tender process including multiple stages (PQ, ITT (stage 1), ITT (stage 2)) and specifying a performance bond
 - Overseeing financial close

- PPWCA including assessing detailed design
- Holding availability incentives and decommissioning securities
- **Technical risk** – We undertake network planning activities and technical system assessment today. However, elements such as build and construction assessments and articulating the need/indicative solution are activities we do not currently do. We would need additional skills and resource to mitigate this
- **Political risk** – There is a risk that changes to the recommended entity's role that are out of scope of their current statutory and regulatory obligations. Due to the current uncertainty of what any Licence changes to facilitate early competition would look like, this risk may be significant. The significance is dependent on the legislative and regulatory arrangements of early competition. Any Licence additions or updates that are over and above our current obligations could increase our risk and liability exposure. We will only know the true extent of this risk once we know more detail from Ofgem and BEIS on competition legislation and any consequential Licence changes required to facilitate it
- **Non-network solution fails to deliver** – We hold this risk today, to an extent, in our role as contract counterparty for Balancing Services and Pathfinders. This risk covers, for example, if a successful bidder becomes insolvent during the construction phase or the solution is innovative and does not work in practice. This could lead to greater constraint costs and/or higher costs in obtaining other services as a replacement solution. This existing risk to the ESO is exacerbated under our early competition proposals where in the event of failure it could potentially be argued that we have not effectively managed early competition contracts. This risk is significant because these contracts will likely be more complex and of a longer duration. We will also potentially have greater scope and more hands-on responsibilities across the entire lifecycle of the solution compared to the status quo. We could also be viewed as being partially responsible for any failure due to our contract management practices so there is an added element of delivery risk. The extent of this risk is not fully known because legislation, licence changes and detailed contract provisions are yet to be finalised. Therefore the liability exposure for both the successful bidder and the Contract Counterparty are currently unknown
- **Contract management and challenge** – We currently contract with a number of Balancing Services providers for example. Therefore, this risk currently exists. However, under our early competition recommendations our model requires more complex assessment and contracting arrangements and more contract management activities than we have at present. For example, the PPWCA process is not something we carry out for our current contracts and will require detailed assessment of costs relating to infrastructure build.

High to moderate impact risks

We identified two risks which, at the moment, would present a moderate to high impact on our risk profile if we were to take on these additional activities. Our analysis found:

- **Inadequate funding for activities** – Activities under early competition were explicitly left out of the RII0-2 price control. In proposing additional roles and the associated risk, we need to work with Ofgem to determine the appropriate remuneration framework to not only deliver early competition but deliver the best value for the end consumer. The risks associated with early competition are, in some cases material, and cannot be balanced with a cost-pass through approach. We have considered this in more detail in Section 8
- **Network information provided is incorrect** – Bidders will be relying on the information provided to them in their designs, therefore there is a significant impact if this information is incorrect. We already publish network information to industry, including information provided by the TOs and so hold this risk to an extent today. However, under early competition we are proposing to expand the scope of this information. As the information required and the role of the TO within our Network Planning Body (TO/DNO) recommendations, obligations and processes are yet to be defined, this increases this risk until the arrangements are clarified.

Moderate impact risks

Lastly, we identified 2 risks that, at present, would have a moderate impact on our risk profile. They are:

Cashflow/financial/liquidity risk – this risk associated with the ability to pay out termination/stage revenue payments as we are a relatively small company with a relatively small balance sheet. We currently hold this risk, to an extent, as a business and in our role as revenue collection agent under payments such as Final Sums. However, under our early competition model there will be an increase in potentially large lump sum payments at unpredictable times for example, termination payments. As mentioned, we already hold this risk to an extent, however the moderate impact is due the dependency on scale and frequency of these payments

There is also the risk associated with recovery of use of system charges. Recently the risk of under/recovery of TNUoS has been transferred to the TOs by Ofgem. However, the risk of over/under recovery of BSUoS remains with us. Therefore, if more non-network solutions win competitions, more monies will flow through BSUoS and so impacting our cashflow (even more so in the future when BSUoS becomes fixed)

- **Resource or capability gap/shortage** – we currently hold this risk as business and for the unique work we carry out. However, the additional roles we are proposing to take on, mainly the Procurement Body, Contract Counterparty roles and Network Planning Body (ESO), will require new skills and capability to carry out activities that we do not currently undertake.

Delivery of the unique and untested model of early competition, and the resulting benefits to the end consumer, presents inherent risks to whichever entity takes on these activities.

Our analysis suggests that the additional roles we are proposing to undertake to facilitate early competition will significantly impact our risk profile as a business. This is based on our analysis using our knowledge of current information, obligations and the regulatory environment.

To build on this we have begun considering remuneration options to cater for these additional risks. These can be found in Section 8.

These risks may change, and new ones may appear, depending on future legislation and or any possible policy changes. Therefore, these will need to be reviewed and updated during the implementation phase of the project should a decision be taken to implement early competition. More information can be found Section 7.

6.3.1 Enhancing ESO expertise

Based on the analysis above, the ESO will need to significantly enhance its expertise in a number of areas in support of early competition. For example:

- Network Planning Body (ESO): broaden skills into niche technical areas and market engagement
- Procurement Body: develop expertise in a wide range of areas, including infrastructure procurement, commissioning, legal knowledge, etc
- Contract Counterparty: understand the design, build and finance elements of the contract
- Payment Counterparty: increase capacity and enhance risk management functions.

In Section 7.1.4, we consider these requirements further and the activities during implementation needed to build up ESO capacity and capabilities for the enduring regime.

6.3.2 Potential ESO operating models

In this section we set out our initial recommendations for an ESO operating model to support the roles we could undertake under an enduring regime. This will be considered in more detail during the implementation phase as set out in Section 7.

Please note that at present there are too many uncertainties for us to say which would be the right model for the ESO and to provide detailed costs. This is an initial view based on the information we have today, as more information becomes available, such as pipeline of projects and any legislation, we will be able to develop these further.

Operating model options

In considering the roles we are proposing to undertake, we looked into what the enduring structure could look like for the ESO and would need to be in place by late 2023. We are only proposing possible models at this point as there are too many uncertainties to determine the right model. In looking at the ESO's current structure, we considered three models in total. A summary of the structures and our recommendations can be found in Figure 29. Compared to Option C, Option A and B are possibly more economic and less complex to implement, therefore they could be more beneficial for the end consumer. They also have a limited impact on the ESO's existing operating model. We are proposing that these two models (A and B) are the most feasible with the information we have today. This links to Section 7.1.5 which discusses ESO organisational changes during the implementation period.

Figure 29: Operating model options

Structure	Option A Fully matrixed early competition delivery	Option B Integrated procurement and contract management	Option C Early competition as a centre of excellence
	<p>A. Fully matrixed EC delivery</p> <ul style="list-style-type: none"> EC specific capability & increased team capacity built into existing teams for each role. New ringfenced PB role and team built into the ESO 	<p>B. Integrated procurement and contract management</p> <ul style="list-style-type: none"> As per A, except PB capability integrated with CCP role to provide end to end commercial management 	<p>C. EC as a centre of excellence</p> <ul style="list-style-type: none"> Dedicated EC team providing an integrated service across all roles envisaged under EC Potentially placed under Head of Markets
Overview	Existing teams are upskilled and capacity increased. Procurement Body (PB) is an independent role inside the ESO minimising impacts on existing teams.	New capability and capacity for early competition EC is built within existing teams. The PB and Contract Counterparty (CCP) are integrated providing end to end commercial capability	Early competition is integrated as a ring-fenced, specialised centre of excellence. Differentiating it from the rest of the ESO.
Strength	Limits impact on existing operating model and roles. Leverages existing expertise and economies of scale, leading to a lower cost option.	Provides end-to-end management of procurement and contract management lifecycle. Limits the impact on existing operating model and potentially the lowest cost option.	
Weakness	Accountability and leadership would need to fit into an existing role. Clear governance and RACI required. May have a greater impact on current team if early competition demand is high.	As per A. With additional difficulty in extracting Procurement Body role if future decision is to remove this role from the ESO.	
Recommendation	Strong Option	Strong Option	Discounted

7 Implementation

In this section we consider the activities and potential costs associated with implementing our early competition recommendations from submission of the Early Competition Plan (“ECP”) until the launch of the first tender.

Our assumption is that Ofgem will take the lead in managing the implementation programme, with the Electricity System Operator (“ESO”) having a significant role to play. The implementation plan recommended below is built around an estimated view of the timing of legislation and the activities which need to be undertaken by BEIS and Ofgem.

If the timing of the legislation were to change, or Ofgem proposed to undertake different activities, the plan would need to be reviewed.

Initially, we expect Ofgem’s activities to include analysis and consultations in the following areas:

- Roles and responsibilities
- Key aspects of any early competition model
- How early competition would sit alongside other regulatory approaches and competition models
- How Ofgem would regulate the competition and its outcome.

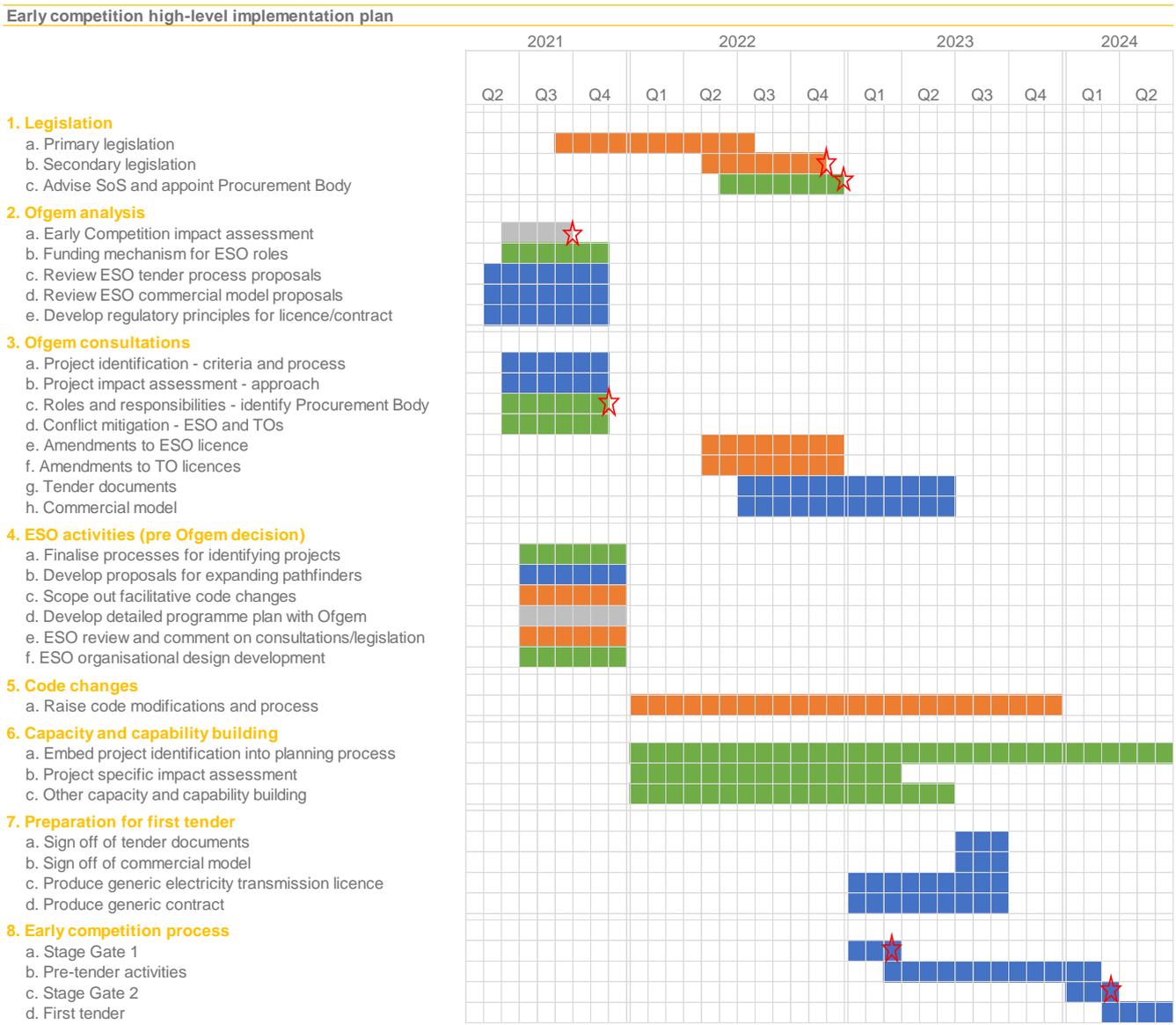
Ofgem’s activities are also likely to include consideration as to whether introducing early competition would ultimately deliver benefits to GB consumers. This will result in Ofgem making a decision as to whether to continue with implementing early competition.

Many of the activities in the plan will depend on both a positive decision from Ofgem on implementation and the necessary primary and secondary legislation being in place. However, we have identified a number of activities which the ESO could, subject to Ofgem agreement, progress before a decision is taken and the legislation is in place. We discuss these in Section 7.2 below.

The implementation plan and timeline set out in Figure 30 are high-level and will require refinement. A detailed programme plan will need to be developed following submission of the ECP. This could be carried out by the ESO working together with Ofgem.

As part of the detailed programme plan, Ofgem will need to further consider any coordination with plans to implement late competition and results of the outcome of its ongoing [Review of GB System Operation](#).

Figure 30: Implementation plan and timeline



- Key**
- Planning
 - Legislative, licence and code changes
 - Capacity & capability building and organisational change
 - Commercial model and tender
 - ★ Key decision points

7.1 Implementation activities

Below we describe the activities in each of the main implementation workstreams.



Stakeholder feedback

In considering implementation, some stakeholders have noted the complexity of the task and suggested a longer implementation period than recommended. Other stakeholders have suggested that legislation could be accelerated.

On balance, and subject to the development of a detailed programme, we think our recommendations represent an ambitious but achievable plan.

7.1.1 Legislative changes

To fully implement the early competition process legislative changes will be needed to introduce competition in onshore transmission.

- Primary legislation will be needed for early competition which allows both network solutions and non-network solutions to compete against each other to address onshore electricity transmission network needs
- Secondary legislation will likely be needed to set out the early competition criteria and/or to set out the early competition procurement process.

In December 2020, BEIS published an [Energy White Paper](#). The paper highlighted that, in partnership with Ofgem, BEIS will promote more innovation and competition in networks. To this end, BEIS states:

“We will legislate, when Parliamentary time allows, to enable competitive tendering in the building, ownership and operation of the onshore electricity network.”

We expect BEIS will continue to lead on progressing the necessary legislative changes, with Ofgem and the ESO providing input and support in relation to early competition where required.

7.1.2 Licence changes

A set of facilitative licence changes will likely be needed for the ESO and/or incumbent Transmission Owners (“TOs”), setting out obligations and remuneration in relation to facilitating the implementation of early competition – including respective future roles in relation to periodically identifying and facilitating early competitions. This will need to include any appropriate conflict mitigation measures.

Changes to licences will likely follow the appropriate formal change processes.

7.1.3 Code changes

A set of facilitative industry code changes will likely be needed in respect of the ESO and/or incumbent (and future) TOs to set out any obligations and/or processes in respect of periodically identifying and facilitating early competitions e.g. in respect of data exchange to support a tender process, etc.

Substantive industry code changes will also need to be raised and concluded e.g. in respect of the rights and obligations under codes of successful network solutions and non-network solutions.

Further information on the potential nature of the changes are set out in Appendix 1 - Industry Codes.

Making code changes

Changes to codes will likely follow the appropriate formal change processes. Based on our high-level assessment and stakeholder engagement to date we estimate that Connection and Use of System Code (“CUSC”) and Grid Code modifications would take 6-12 months and System Operator Transmission Owner Code (“STC”) modifications (including STC Procedures) would take 12-18 months.

These estimates are dependent upon both the final volume of changes needed as well as whether the changes are subject to any form of code panel prioritisation. The estimated timescales for other codes and standards remain to be confirmed but we expect they would be no longer than the STC changes and as such, in respect of industry code change, this would be on the critical path.

Whilst there could potentially be some parallel working, we expect that industry code change will follow on from any legislation and licence changes needed to implement early competition i.e. any facilitative licence changes to the ESO and/or incumbent TOs will be undertaken prior to any material code changes.

In making industry code changes it would not be efficient for the ESO or wider industry to undertake a detailed code review or raise code modifications until a decision has been taken by Ofgem on what (if

any) early competition model should be implemented. However, we do see value undertaking some work in this area ahead of a decision, as set out in Section 7.2 below.

7.1.4 Capacity and capability building

In Section 6, we set out the roles required to support the early competition enduring regime. Below we describe, for each of the roles, the capacity and capabilities that need to be put in place during implementation.

Network Planning Body (ESO)

As set out in Section 6.2.5, we recommend that further work is required to determine network planning roles and responsibilities, linked to Ofgem's [Review of GB System Operation](#).

As a minimum, we recommend an enhanced network planning role for the ESO in order to support early competition. We therefore anticipate that the ESO will need to increase resources and skills to enhance and grow our existing functions in order to support early competition.

The role is expected to have a significant impact in terms of both capacity and capability, especially in areas of niche technical expertise and in market engagement, requiring:

- Additional technical specialists (electrical engineering) and project management capacity
- Additional capabilities in network model development, technical understanding of network needs and potential solutions, non-network cost assessment, and communications. We note that some technical capabilities may be difficult to source
- Additional capability and capacity in general cost assessment, planning and project delivery, and regional expertise.

In addition to developing the capability and capacity to support the early competition enduring regime, the ESO will play an important role during implementation itself, particularly in developing processes and methodologies in the following areas:

- **The Network Options Assessment (“NOA”) process** - The existing process will need to be reviewed and potentially amended to support identification of network needs which may be suitable for early competition. This will be linked to the development of the early competition criteria methodology. This may also be linked to facilitative industry code changes
- **Early competition criteria methodology** - A methodology will need to be created by which network needs will be assessed against the early competition criteria, including the development of a cost-benefit analysis methodology to determine whether the savings associated with an early competition are expected to outweigh the corresponding costs
- **Other process amendments e.g. connections, asset replacement, etc** - Other existing processes may need to be reviewed and potentially amended to support identification of network needs which may be suitable for early competition. This will be linked to the development of the early competition criteria methodology. This may also be linked to facilitative industry code changes.

Contract Counterparty

As set out in Section 6.2.1, we recommend that the ESO could perform the role of the Contract Counterparty. While we currently manage contracts, early competition will require an increase in resources and skills in a number of areas, in particular in relation to the design, build and finance elements of the contract. Specific areas where additional resource are required are:

- Additional capacity in finance, cost assessment and for early competition specific incentives and performance management
- Additional capabilities in engineering, contract management, dispute management, and programme controls and reporting
- Additional capacity and capabilities in construction, change management, and quantity surveying.

Payment Counterparty

As set out in Section 6.2.2, we recommend that the ESO could perform the role of Payment Counterparty. While much of the capability required for early competition already exists within the ESO, there will be a requirement for increasing capacity in key areas:

- To process the increased volume of payments
- To enhance risk management functions, especially given the cash flow implications of early competition.

Procurement Body

As set out in Section 6.2.6, if the ESO were to take on the role of Procurement Body, we would need to increase both our capabilities and capacity in a wide range of areas:

- Procurement (particularly skills in infrastructure and solution development)
- Commissioning and interfaces
- Cost planning
- Engineering (civils, electrical, systems)
- Project management
- Finance and cost assessment
- IT systems and support (management and assurance, data portals)
- Health, safety, and environment and social impact
- Legal
- Risk qualification and analysis
- Commercial management
- Functional capability management (resourcing, competence)
- Communications and events planners
- Technical business development (networking, engagement with bidders, etc).

The ESO would also need to establish governance arrangements in respect of the Procurement Body, internally and externally, for example, the relationship with Ofgem.

Alongside developing the capability and capacity necessary for its role in the early competition enduring regime, the Procurement Body will play a central role during implementation in preparing for the first tender:

- Market engagement and Stage Gate 2 decision (see Section 5.1.1) - The Procurement Body will undertake pre-tender engagement and share its findings with Ofgem. Ofgem will then take a final decision at Stage Gate 2 on whether to formally launch a tender
- Tender process and documentation - The Procurement Body will need to create tender process documentation, including developing the contract/licence pro-forma
- Tender specific policy decisions - In preparing the tender documentation, decisions will need to be taken on a number of inputs, assumptions and processes that will impact on a bidder's assessment of risk and cost. We would expect policy in these areas to be developed by the Procurement Body, in consultation with Ofgem as required. Ofgem, as Approver, would have final approval of the policy being adopted at Stage Gate 2. Below we summarise some of the key decisions required ahead of the first tender and where they are discussed in this ECP:
 - Particular term/conditions in the generic electricity transmission licence or contract (e.g. termination provisions, debt refinancing gain share parameters, availability incentives, etc) (Appendix 2 - Heads of Terms)
 - Indicative debt term sheet assumptions for Invitation to Tender ("ITT") (stage 2) (Section 4.2.2)

- Post-Preliminary Works Cost Assessment (“PPWCA”) process guidance (Section 4.2.2)
- Security requirements (Section 4.2.3)
- Pre-Qualification (“PQ”) criteria (Section 5.2.3).

We note that in the event that the Procurement Body is a third party then as well as the activities set out above, the relationship between that body and the industry codes will need to be further considered.

Licence Counterparty

As set out in Section 6.2.3, we recommend that Ofgem should perform the role of Licence Counterparty. While Ofgem already issues licences, and in particular licences following a competitive process (i.e. Offshore Transmission Owners (“OFTOs”)), we expect that early competition will require some increase in resources and skills.

The early competition licence will cover preliminary works and construction periods, and a unique set of incentives and assessments, potentially necessitating some additional capability and capacity.

Approver

As set out in Section 6.2.4, we recommend that Ofgem should perform the role of Approver. As for the role of Licence Counterparty, while Ofgem already performs many of the functions associated with the role, we expect that early competition will require some increase in resources and skills or may necessitate changes in process or governance.

7.1.5 ESO organisational changes

Based on the roles identified above that may be performed by the ESO (including Procurement Body), we set out below a potential process for rolling-out progressive organisational changes. The recommended process would allow for a transition to any of the operating models identified in Section 6.3.2.

The implementation of the ESO organisational structure would be divided into four stages:

- **Early competition operating model design** – setting the design principles
- **First tender operating model readiness** – developing the detailed design and change requirements
- **Interim operating model build** – establishing the initial operating capability to support the launch of the first tender, with an iterative review of the model as the first tender progresses
- **Full operating capability in operation** – finalising the enduring model based on lessons learned and embedding continuous improvement.

The phased roll-out approach has been considered from a flexibility and control standpoint. With changes from the external environment (i.e. legislation changes and BEIS' consultation on institutional arrangements following Ofgem's [Review of GB System Operation](#) proposals) having a high impact on the timelines for the implementation, we anticipate a high level of flexibility is required along the course of the transformation.

The organisational structure may well evolve over time with further changes being proposed based on lessons learned from the first tender and NOA Pathfinders. The level of control required across the implementation period will come at some cost to speed, requiring a phased 'release' approach.

Clarity over the accountabilities for the various roles affected by the transformation will be vital as well as monitoring through the gateways when control is transitioned from the central design team into each role.

7.1.6 Incumbent TOs organisational changes

If Ofgem decides to allow incumbent TOs to bid into early competition tenders and to also retain their network planning roles, the TOs would need to establish suitable conflict mitigation arrangements as detailed within Section 6.1.

TOs may also, if required, need to make adaptations to their NOA processes to support any process changes that may be required (such as different timings for submitting options).

TOs would also need to establish processes and ensure they are resourced to undertake feasibility assessments on the impact of bidders' proposals on their networks.

Finally, TOs will also need to establish processes to identify asset replacement projects and any compliance driven investment that is not driven through the NOA process.

7.2 Potential ESO activities prior to an Ofgem decision

Below we consider what implementation plan activities could start prior to Ofgem taking a decision to proceed with early competition. The recommended activities are likely to be on or around the critical path, and relatively low regret if early competition was delayed or not taken forward.

Finalise process for identifying possible projects for early competition

The ESO could finalise 'back office' processes for identifying electricity transmission projects for early competition. The arrangements could be developed 'offline' (to Ofgem's satisfaction) but held back from 'going live' until Ofgem makes a decision on early competition. Arrangements that could potentially be progressed are:

- Development of a cost benefits analysis ("CBA") methodology to assess individual projects for competition
- Further development and definition of the criteria for competition
- Setting out the processes for early competition, Pathfinders, Interested Persons Options and NOA and interactions with RIIO-2 uncertainty mechanisms
- Development of a process to identify connections projects for early competition
- Development of a process for identifying asset replacement projects for early competition.

The above activities would allow a better understanding of the potential changes needed to internal ESO processes, as well as help identify exactly which network needs may potentially be suitable for early competition and hence identify a potential pipeline of early competition projects.

Explore the potential for expanding NOA Pathfinders as a pre-legislative form of early competition

We intend to align the Pathfinders and early competition processes wherever possible. Our early competition thinking is being considered as part of the ongoing development of the Pathfinders. The Pathfinders also have, and continue to, produce important learnings that will ultimately influence the delivery of full early competition.

The NOA Pathfinders which we currently run already pilot parts of the full early competition arrangements:

- Comparing network and non-network solutions – Pathfinders, like early competition, allow non-network solutions to compete against network solutions. In the case of Pathfinders, the network solution is provided by an incumbent TO ‘counterfactual’
- Tendering for the duration of the need – As with our early competition recommendations, each pathfinder tender duration is driven by the duration identified through network planning
- Open to a wide range of project sizes – Our Pathfinders are already in line with early competition in that there is no value limit. Values already range from low 10s of £millions to over £500m.

The full early competition model contains arrangements designed for a specific purpose, and these will not necessarily be appropriate for a project that does not involve tendering for a Competitively Appointed Transmission Owner (“CATO”). However, there may be areas where Pathfinders could be further aligned. Following the submission of this ECP, we will undertake a thorough review of how the two processes should be aligned, taking into consideration the need to retain tender processes that are proportionate to the need. We will set out:

- Our preferred end state for the relationship between Pathfinders and early competition
- The differences between Pathfinders and early competition
- Whether those differences should be aligned, and if so, whether this is achievable before legislation
- Whether and where upcoming Pathfinders may present an opportunity to begin aligning those differences
- Recommendations for changes to frameworks to facilitate the evolution of Pathfinders.

Further areas of development could include:

- **Types of need** – We will explore what would be required in order to broaden out the types of need competed through the pathfinder approach. We will take ongoing learnings from our constraint management pathfinder to consider whether there is merit in competing for residual thermal constraints. We will also consider what would be required to expand Pathfinders further to cover other types of network need
- **Direct TO participation** – we will explore whether it would be possible to introduce a way for other licenced TOs to compete outside of their geographic area, prior to the introduction of full competition. We will also explore what could be done ahead of legislation to support TOs bidding into the competitive process fairly and transparently. We will require support from Ofgem to explore these given the links to regulated frameworks.

Code changes

Following submission of this ECP, we recommend that further work on code changes is undertaken. However, prior to an Ofgem decision on early competition we suggest the work should be limited to code change planning and continued high-level consideration of and discussion on (with relevant stakeholders) the potential changes.

The exception would be where this exercise identifies any specific code change where it would be prudent to develop detailed proposals (and potentially raise a targeted code modification) in advance

of a decision being taken on early competition e.g. to support one of the other advanced implementation activities.

The outcome of the above exercise should be an agreed strategy to deliver the required code changes in appropriate timescales. This would include moderately developed code change proposals e.g. a high-level structure and desired outcome for each planned change. This could subsequently be utilised to develop detailed proposals and it would inform the resources required to deliver code changes.

Develop a detailed programme plan with Ofgem

We recommend that the ESO work with Ofgem to develop a detailed programme plan for implementing early competition.

This would look to coordinate early competition implementation with other programmes (e.g. late competition or offshore co-ordination), as well as other potentially relevant developments in the sector.

The programme plan would allow for greater consistency in approach and would help the ESO when considering the options for organising itself to best serve the industry and consumers.

ESO organisational design development

The design development activity will explore the enduring operating model options identified in order to reach a final recommendation and re-align the requirements as needed. We would look to develop an outline of the design from a people, process, governance and technology perspective, with a focus on:

- Detailed 'as is' status of preparedness for early competition across each operating model lens
- Updated gap analysis which combines future and current state assessment
- Integrating input from relevant internal/external stakeholders
- Conducting a high-level change impact assessment for the recommended design for each new role for the ESO, including implementation considerations
- Confirming capability maturity targets for first tender and enduring model.

The findings will result in a clear design direction and plan and set the priorities for the next phase of detailed design in preparation for the pre-tender activities.

As part of reviewing the ESO's organisational design, we would look to finalise our preferred position with regards to providing all qualified bidders equal access to appropriate modelling capability.

7.3 Estimated costs of implementation

Below we estimate the cost of implementing early competition. These costs are purely indicative and would require further work to substantiate.

In order to estimate the cost of moving from current arrangements to launching a first early competition tender we have considered the potential industry wide costs on a 'top down' basis.

Where, within the industry, particular costs are incurred will depend on a number of factors that will only become apparent as the model is finalised, roles and responsibilities are fully defined, the contents of the legislation are confirmed, and a detailed programme plan is developed. This will also inform how the costs are incurred, for example using existing resources, taking on additional resources, or engaging external consultancy services.

For the purposes of this exercise we do not consider any potential savings from coordinating the implementation of early competition with any other programme (such as late competition) that may be under development at the same time.

Basis for estimate

We have taken as a basis for our estimate the impact assessments carried out by Ofgem for OFTOs¹⁰ and late competition¹¹.

¹⁰ Of gem/BERR, Offshore electricity transmission: updated impact assessment (January 2008)

¹¹ Of gem, Extending competition in electricity transmission: impact assessment (May 2016)

For both OFTOs and under late competition proposals, it was anticipated that projects for competition would be identified through existing network planning processes.

In addition, Ofgem was expected to run the procurement and all competitions would conclude with the award of a licence.

On this basis, Ofgem assumes that the costs of implementation consist largely of its own and the government's staff costs, along with associated legal and technical consultancy, arriving at the following estimates:¹²

- Offshore transmission: £2.2m
- Late competition: £2.7-3.2m.

In arriving at their estimate for late competition, Ofgem note that implementation would largely build on the established systems and processes of the offshore regime. If Procurement Body and Licence Counterparty capacity and capability were being developed from scratch, a standalone estimate for late competition may be expected to be higher.

Based on Ofgem and Government sharing costs, and Ofgem costs being applicable to late competition, around 50% of the cost of implementing offshore transmission might be assumed to have benefits for late competition. This suggests that a standalone cost estimate for late competition may be in the region of £4m.

The higher costs associated with late competition implementation compared to offshore transmission are reflective of the additional complexity introduced by moving from a 'very late' to 'late' tender point. Bringing the tender point forward will tend to mean greater changes to existing industry arrangements and processes.

Moving to an 'early' tender point can therefore be expected to introduce further complexity and additional costs. For early competition, the late competition estimate therefore needs to be updated in a number of important respects:

- Licence or contract – unlike late competition or OFTOs, early competition could result in an electricity transmission licence or contract being awarded. The capabilities and capacity for the Contract Counterparty need to be developed, and ahead of the first tender a template contract needs to be created alongside the template licence. We have estimated this at 25% of the OFTO implementation cost (half of the 50% cost ascribed to Ofgem above for one of its two new roles)
- Changes to network planning – early competition will require a number of changes to the network planning process. Key changes include making network models available (or providing a modelling service), third party involvement in NOA, greater ESO challenge of TO options, a CBA assessment of potential projects for competition and small process changes to identify connections or asset replacement projects and preparation of information in a format that can be shared with bidders. This will have impacts on both the ESO and TOs as new systems, models and processes are developed and tested. We have estimated these costs in a range of £0.5-1.5m, largely driven by the extent to which models have to be rebuilt to support the tender process
- New procurement body – if a body other than Ofgem were to undertake the procurement role, it would not have the benefit of the capabilities and capacity developed by Ofgem for OFTOs. The designated body would have to develop its own capabilities and capacity – either from scratch, or by adapting, enhancing, and adding to existing structures and processes. This may mean a proportion of OFTO implementation costs are incurred again for early competition. We have estimated this at 25% of the OFTO implementation cost (half of the 50% cost ascribed to Ofgem above for one of its two new roles)
- New governance arrangements – if a body other than Ofgem were to undertake the procurement role, this would introduce a new interface between the Procurement Body and Ofgem as Approver and Licence Counterparty. Governance arrangements will need to be developed and tested in order to manage this relationship. We have estimated this at £0.5m

¹² £1.76m (2008) and £2.5-3m (2016) updated at Consumer Price Index including owner occupiers' housing costs ("CPIH")

- Early competition complexity – in addition to the new capabilities and capacity required for early competition, the complexity of the early competition tender process compared to a late competition process may be expected to add to the general cost of implementation. In particular, changes to legislation are required, detailed policy is needed in a larger number of areas, and more parties are involved. We estimate the potential premium of early competition at around 10%.

Table 13 summarises potential adjustments to the late competition estimate to arrive at an industry wide implementation cost range for early competition. These costs are purely indicative and would require further work to substantiate.

Table 13: Early competition estimate of industry wide implementation cost

Early competition estimate of implementation cost	
	£m
Late competition implementation cost estimate	2.7 to 3.2
Addition of potential contract outcome	0.6
Changes to network planning	0.5 to 1.5
Estimated cost of early competition implementation with Ofgem as Procurement Body	3.8 to 5.3
New Procurement Body capabilities and capacity	0.6
New governance arrangements	0.5
Estimated cost of early competition implementation with Body Other Than Ofgem as Procurement Body	4.8 to 6.3
Potential premium for early competition complexity	10%
Estimated cost of early competition implementation with Body Other Than Ofgem as Procurement Body incl. complexity premium	5.3 to 6.9

8 Enduring costs, remuneration and incentives

As set out in Section 6.2.7, our recommendation is that, as long as the regulatory framework is appropriate, we could take on the strengthened Network Planning Body (ESO), Contract Counterparty, Payment Counterparty and Procurement Body roles.

In this section we set out our initial thoughts on the enduring costs, remuneration and incentives which would need to be in place for the ESO to undertake those roles. It does not present full proposals and has not been tested with stakeholders or customers. Once Ofgem and BEIS have provided more clarity on the roles and responsibilities to facilitate early competition we will develop our proposals collaboratively with customers and stakeholders as we would in the development of a business plan. This assumes that we will be providing the roles and associated services, although this has not yet been finalised or agreed with Ofgem/BEIS.

These four roles and associated activities represent four different service offerings that we could undertake in the facilitation of early competition. The positioning of the roles and activities as services reflect the fact these activities are asset-light and is consistent with how we present activities in our RIIO-2 Business Plan.¹³ This does not mean these activities would be non-regulated as these would be regulated obligations.

This section considers the opportunities and risks associated with these services and how the risks could impact our risk profile. Our initial risk analysis assesses:

- Whether the roles result in a change in risk and therefore merit an adjustment to remuneration
- Whether the scale and characteristics of the increase in risk means some roles warrant different remuneration mechanisms to those included in RIIO-2.

Finally, we provide an early view on how each of the roles could be remunerated in practice.

We note our early view will require further development during the implementation phase and may change as more information becomes available and key policy decisions for early competition are made.

8.1 ESO roles and services

We understand that by taking a central role within early competition we will need to act as stewards of the system and lead others to do the right thing. The decisions we make will transform the way Great Britain's electricity system is designed and built. Through facilitating, promoting and harnessing competition our aim is to meet Ofgem's objectives for early competition and build a better system by:

- Addressing ongoing and foreseeable system stability challenges
- Improving the long-term, strategic planning and coordination of future network development
- Encouraging innovation and a wide range of solutions from network and non-network solutions
- Enacting cultural change across the industry
- Enabling investment in low carbon generation to support the transition to net zero
- Keeping prices low for consumers.

We recognise that early competition will have the effect of fragmenting the ownership of the system which will introduce some additional transaction costs to its management. For example, the transaction costs between new entrants and incumbents in terms of establishing boundaries for ownership, accounting and accountability. Effective competition is when the benefits from competition across the system, as a whole, exceed those costs and in doing so, creates value for consumers.

The interaction between our existing network planning services and Procurement Body services will be particularly important to making early competition deliver value for consumers. We will need to ensure that early competition is employed optimally and is implemented to secure the best outcomes

¹³ ESO (2019), RIIO-2 Business Plan Annex 5 – Finance report, pg 2

for the system as a whole. In practice, this means seeking out opportunities for early competition that allow all types of bidders to compete on an equal footing and setting the evolutionary path of the network to maximise the scope for the benefits of early competition.

It will be our mission to ensure that early competition becomes a positive force for the evolution of the system and we are ready to embrace the challenges that come with our central role.

8.1.1 Key principles for remunerating our roles

Services provided by central roles are critical to the outputs they support. It is important that we are actively engaged in playing a central role to deliver Ofgem's objectives and make early competition a success for consumers. Ofgem can encourage us to stay actively engaged and provide strong performance incentives by structuring the regulatory framework in a way that recognises our central role. With the right remuneration our incentives will be aligned to really creating better outcomes for the system and for consumers.

We have developed key principles for remunerating services in a regulated context based on precedents, incentives theory and economic principles:

- Incentivise the right behaviours
 - Remuneration should be calibrated to encourage the best outcomes for consumers and the delivery of Ofgem's strategic objectives
 - This is supported by stakeholder feedback: "There is also the matter of ensuring that the Procurement body is suitably incentivised to deliver good value for end consumers"¹⁴
- Standalone viability
 - Remuneration should not assume cross-subsidy from other parts of the ESO's RIIO-2 business
- Simulates competitive markets
 - Remuneration should approximate competitive markets for commercial services and simulate efficient market outcomes i.e. reflect what a third party would charge for providing the same set of services
 - Ofgem has a statutory duty to "carry out its functions in the manner it considers is best calculated to further the principal objective...by promoting effective competition".¹⁵ This is typically interpreted as structuring regulation to reflect market outcomes
- Fair bet
 - Remuneration should represent a fair bet and not result in a loss on an expected basis, as no reasonable investor would invest in business services that are expected to generate losses
 - In practice this mean all risks associated with the services should be remunerated and there should be no uncovered exposure
 - The fair bet principle was applied by Ofcom to BT Openreach¹⁶ and by the Competition and Markets Authority ("CMA") to System Operator for Northern Ireland ("SONI").¹⁷

We have used these principles when considering the services, the opportunities they provide, the impact they have on our risk profile and how they could be remunerated.

8.1.2 Summary of the key costs for each role

The provision of services will, for the most part, require additional investment from us ranging from people to IT equipment and offices. We have identified the main, but not all of the, cost categories¹⁸

¹⁴ TO response to our Phase 3 consultation

¹⁵ Of gem, <https://www.ofgem.gov.uk/publications-and-updates/our-powers-and-duties>

¹⁶ Of com (2011), Proposals for WBA charge control: Consultation document and draft notification of decisions on charge control in WBA Market 1, para A8.27

¹⁷ CMA (2017), SONI Final Determination, para 12.109

¹⁸ For example, one of the main costs for the Contract Counterparty role is likely to be payroll for additional resources. Additional resources may lead to additional accommodation costs, however we do not expect these accommodation costs to be significant and as such they have not been included in the analysis.

for each role as set out in Table 14. The analysis is based on current available information¹⁹ and our previous experience of relatively comparable services.

We have considered the types of costs we spend to deliver Pathfinders, Balancing Services and the revenue collection role to inform the Procurement Body, Contract Counterparty and Payment Counterparty roles respectively. In addition, we have reviewed the following:

- Data Communication Company (“DCC”)²⁰ as it is largely a procurement and contract management entity and is a company familiar to Ofgem
- Partnership for Schools (“PfS”)²¹ for its role in the Building Schools for the Future (“BSF”) procurement
- SONI²² and EirGrid²³ as they are responsible for network planning in Northern Ireland and Ireland respectively.

Table 14: Key cost categories for each role

Main cost category	Description
Procurement Body	
Payroll costs	<ul style="list-style-type: none"> • Carry out the procurement process, in particular programme delivery and assessment of bids • Require highly skilled financial, engineering, planning and design staff to manage external support assessment of bids • Could represent a predominant share of total costs • Expect to scale with the number, scale and complexity of projects put through the procurement process.
Accommodation costs	<ul style="list-style-type: none"> • Cover premises costs such as rent, rates, office maintenance • Represent a reasonable share of total costs • Expect to be substantially fixed.
External services costs	<ul style="list-style-type: none"> • Cover the cost of third-party suppliers, principally consulting fees • Cover highly skilled services, targeted to meet more specialist, short-term requirements - less specialist, long-term requirements would sit under payroll • Could represent a material share of total costs • Expect to be significant upfront and thereafter to correlate with the number, scale and complexity of projects put through the procurement process.
Internal services costs	<ul style="list-style-type: none"> • Cover business support services such as finance and legal • Represent an insignificant share of total costs • Expect to be generally stable unless a legal event occurs.
IT services costs	<ul style="list-style-type: none"> • Cover costs related to IT • Require specialist IT systems specific to procurement processes • Represent a reasonable share of total costs • Expect to be substantially fixed.

¹⁹ The analysis assumes that the roles would not be ringfenced in a separate legal entity to the ESO and that all current financial and operational arrangements within the ESO remain in place without modifications. This does not take into account any further separation from National Grid Group.

²⁰ Ofgem (2020), DCC Price Control Consultation: Regulatory Year 2019/20, Figure 3.1

²¹ Companies House, <https://find-and-update.company-information.service.gov.uk/company/04650964/filing-history>

²² Utility Regulator (2020), Final Determination for SONI Price Control 2020-2025, Annex 4

²³ Commission for Regulation of Utilities (2020), Price Review 5 Final Determination, Table 26

Main cost category	Description
Contract Counterparty	
Payroll costs	<ul style="list-style-type: none"> Carry out contract management and cost assessment Represent the major driver of cost Expect to scale over time in line with the number, scale and complexity of projects.
Internal services costs	<ul style="list-style-type: none"> Cover business support functions such as finance and legal Represent a reasonable share of total cost but likely small in magnitude - unless a legal event occurs Expect additional legal resource may be required to support current legal services.
Payment Counterparty	
Internal services costs	<ul style="list-style-type: none"> Cover business support functions such as finance and legal Represent the major driver of cost but likely small in magnitude - unless a legal event occurs Expect additional resource may be required to support current finance/revenue collection services.
Network Planning Body (ESO)	
Payroll costs	<ul style="list-style-type: none"> Cover additional and new types of resources to carry out new services.

The main cost categories we have identified across the roles are typical costs associated with procurement and contract management. We are relatively confident that these costs will be required for early competition however the exact quantum is inherently uncertain. This is because outturn is likely to be a function of the number, scale and complexity of projects put through early competition. We expect costs to be largely opex in nature reflecting the fact we will be operating as an asset-light service provider.

Our current view is there will initially be one early competition ongoing at any point in time, potentially growing to two. The value of early competition could vary depending on the need tendered but we assume most will range between £100m to £2bn for the initial early competitions.

We have not undertaken a bottom-up costing exercise of the services at this stage for a given number of early competitions as it is not possible to do this robustly until the scope of the services have become more specified and certain. This, in turn, relies on greater clarity around the legislative and regulatory framework for early competition to enable more detailed process and capability mapping. Instead, we have performed indicative top-down estimates which are set out in Section 8.3. The bottom up analysis will be undertaken as part of the implementation stage as set out in Section 7.

8.1.3 Summary of the key risks for each role

We have identified, based on the process presented in Table 15, a non-exhaustive list of the key risks associated with each role as set out in Table 16. The table sets out an example of how the process was followed for the Payment Counterparty role.²⁴

Where the recommended service is entirely new for us (i.e. process step 2 resulted in a no) identifying the relevant risks was less straightforward as we could not rely on past experience. For instance, as part of the Contract Counterparty role we may need to be involved in signing off income adjusting events (“IAE”) claims by non-network solutions. We note the Offshore Transmission Owner (“OFTO”) market has seen a number of IAE claims and Ofgem’s decisions have been subject to judicial review

²⁴ We note that the analysis assumes that the Procurement Body, in the absence of legislation, would be exposed to legal challenge risk on the procurement process although this may be somewhat mitigated by our recommendations for the Approver role (e.g. the Approver grants approval at each Stage Gate during the procurement process).

on several of these applications. If we were to become involved in a legal challenge of our decision, this could have an operational impact on our time/costs. However, we are uncertain whether we would be exposed to such risk as the expectations around this are currently very unclear.

Table 15: Process for identifying key risks for each role

Process step	Payment Counterparty example
1. What are the recommended services for each role as set out in Section 6?	The service is to collect receipts from suppliers and generators, and distribute these as payments to successful bidders as post-commissioning revenue or milestone/termination payments. We expect payments to be made from Transmission Network Use of System (“TNUoS”) charges for network solutions and from Balancing Services Use of System (“BSUoS”) charges for non-network solutions.
2. Are the services (and associated risk) comparable to any existing services?	In our capacity as revenue collection agent we perform a highly comparable service which exposes us to liquidity risk due to the cashflow timing mismatch in receipts and payments. This risk will likely apply to the Payment Counterparty role.
3. Do existing regulatory arrangements/allocation of risk provide insight into early competition risk exposure?	Based on Ofgem’s recent decision to transfer cashflow timing risk on TNUoS payments to onshore Transmission Owners (“TOs”), we assume the Payment Counterparty role would not be exposed to liquidity risk for network solutions. However, Ofgem is yet to consider and take a decision in relation to this aspect of competition in respect of CATOs. In addition, current soundings from Ofgem suggest it could be reasonable to assume that liquidity risk ²⁵ will apply to non-network solutions although this also remains to be confirmed in future.

The keys risks across the roles are generally operational, reflecting the fact we will be acting as a service provider, and asymmetric in nature. There are also significant reputational risks to us of providing the services which have not been presented in the analysis, given the wide range of implications, but we plan to revisit this.

The level of certainty for the risks is generally low given the lack of clarity around the legislative and regulatory frameworks for early competition. The actual risk exposure for the services is dependent on policy decisions made by BEIS and Ofgem. These decisions may change the allocation of risks amongst different bodies and our role within early competition.

We note that stakeholders, in particular TOs, considered the services would imply additional risks for us in response to our Phase 3 consultation.

Table 16: Key risks for each role

Main risk category	Description
Procurement Body	
Procurement failure and underperformance risk	<ul style="list-style-type: none"> • Fail to find a successful bidder or the successful bidder walks away • Fail to generate sufficient interest from bidders²⁶ • Fail to generate value for money for consumers (sub-optimal outcomes) • Fail to meet minimum quality standards for the procurement • Fail to meet procurement milestones on time.

²⁵ There are a number of other risks that would likely apply for the Payment Counterparty role in the same way as the revenue collection agent role such as cyber risks (vulnerability to cyber attack) and operational risks (risk of process failure in an environment with low tolerance for error). However we do not consider these to be key risks and they are not included in the analysis.

²⁶ For example, actual/perceived unlevel playing field between TOs and non-network solutions could have a strong effect on dampening market appetite.

Main risk category	Description
Technical risk	<ul style="list-style-type: none"> Perform incorrect assessment of the technical element of bids and bidders such as deliverability or risk to the network (which is heightened by the uncertainty of the early tender model) Fail to set accurate cost of debt assumption for bidders Fail to oversee debt competition and financial close effectively.
Legal challenge risk	<p><u>Procurement process challenge</u> Possible challenges that an aggrieved bidder alleges that:</p> <ul style="list-style-type: none"> We fail to follow procurement rules There has been a material change in need which means that we should run a revised tender process We fail to ensure that incumbent TO complied with the conflict mitigation rules and was successful as a result We fail to remove all sources of actual/perceived unlevel playing field between TOs and non-network solutions. <p><u>Licence breaches</u> Ofgem may seek to take enforcement action against us if we:</p> <ul style="list-style-type: none"> Fail to attain the desired procurement outcome²⁷ Receive a legal challenge from aggrieved bidders ('double jeopardy').
Contract Counterparty	
Contract management risk	<ul style="list-style-type: none"> Fail to manage the contract with the successful bidder effectively e.g. cost and time overruns Deal with contractual variations associated with, for example, the annual need assessment or change in ownership of the successful bidder Deal with potential IAEs/price re-openers for non-network solutions Terminate the contract with the successful bidder if it does not fulfil its obligations Deal with unexpected situations e.g. successful bidder becomes insolvent during the construction phase and/or the solution is innovative and does not work in practice.
Legal challenge risk	<p><u>Contract challenge</u> Possible challenges from the successful bidder if:</p> <ul style="list-style-type: none"> We fail to remove ambiguity in the interpretation of contract terms There are actual/perceived differences in treatment of TOs and non-network solutions e.g. contract terms, Post-Preliminary Works Cost Assessment ("PPWCA"). <p><u>Licence breaches</u> Ofgem may seek to take enforcement action against us if we:</p> <ul style="list-style-type: none"> Fail to put robust contracts in place e.g. the contracts fail Are the only licence holder in an incident. For example, where a non-licence holder is in breach of an agreement with us that, for example, means that Security and Quality of Supply Standard ("SQSS") is not

²⁷ Of gem may judge our decisions ex-post with the benefit of hindsight which means decisions we take that seem optimal ex-ante could be viewed as sub-optimal ex-post by Ofgem. This increases the risk that Ofgem would deem that we have failed to attain the desired procurement outcome.

Main risk category	Description
	<p>complied with. This could happen where a non-network solution fails to provide the contracted service when requested by us to do so</p> <ul style="list-style-type: none"> Fail to monitor the successful bidder effectively²⁸ which we may be obligated to carry out. <p><u>Breaches of code/Information Commissioner's Office ("ICO") rules</u></p> <ul style="list-style-type: none"> Fail to adhere to codes in relation to information/data relating to network users. There are also obligations placed on us by the Utilities Act and general data protection responsibilities.
Payment Counterparty	
Liquidity risk	<ul style="list-style-type: none"> Bear liquidity risk due to cashflow timing difference in receipts from suppliers and generators, and payments to the successful bidder.
Legal challenge risk	<p><u>Payment default</u> Possible challenges from the successful bidder if we:</p> <ul style="list-style-type: none"> Fail to pay the successful bidder on time.
Network Planning Body (ESO)	
Technical risk	<ul style="list-style-type: none"> Perform inaccurate forecasts of future network demand (that determines the network need on which the Competitively Appointed Transmission Owner ("CATO") service is based) Articulate the network need/indicative solution inaccurately Perform incorrect assessment of whether bids meet the network need.

There are strategic risks to the system associated with early competition, such as the risk that it is not used for the benefit of the system or it leads to unforeseen delays to infrastructure delivery. It will be our responsibility to effectively manage these strategic risks and ensure early competition delivers benefits for consumers.

It is important that we are exposed to suitably aligned risk to these strategic risks when performing our central role. Our risks will be small relative to the strategic risks to the system and should not be seen to overshadow the importance of these strategic risks. Our exposure will be critical to ensure we are properly incentivised and that our interests are aligned with those of consumers.

There are good reasons why Ofgem should allocate the risks set out in Table 16 to us. The risks are productive which means they drive us to better outcomes for the system and consumers when performing our central role within early competition:

- Procurement underperformance risk:** incentivises us to run an efficient procurement process and intensify competition which will be for the benefit of the competition objectives
- Technical risk:** encourages us to maximise opportunities for competition and find the optimum solution for consumers rather than to simply select the cheapest bid which may in the long-term end up not being best value for consumers
- Legal challenge risk:** ensures we manage the procurement process and non-network contracts professionally and holds us to account for our decisions
- Contract management risk:** in the more complex contracting arrangements we are recommending, this puts onus on us to effectively monitor whether successful bidders are faithfully fulfilling their obligations and actually creating value for money in practice

²⁸ Of gem may judge that a contract becomes sub-optimal during the life of the contract even though it may have appeared optimal when the contract was entered into, which reflects the same benefit of hindsight risk described in foot note 27.

- **Liquidity risk:** allows us to facilitate the transactions between parties and secure better outcomes. This naturally sits alongside contract management risk.

8.1.4 Whether the key risks for each role alter our current exposure under RIIO-2

This section assesses whether the risks identified in the previous section increase our existing risk profile and can be entirely mitigated then the roles and services should be remunerated.

Our risk assessment is qualitative and consists of two stages: (1) evaluate how each risk will change under early competition in terms of size²⁹ and type; and (2) evaluate the materiality of any changes, as set out in Table 17. We do this by considering our current position and separately, the early competition counterfactual (our risk profile taking account of early competition) to isolate the impact of early competition.

We have set out illustrative examples of our process below:

- Liquidity risk has been identified as a key risk for the Payment Counterparty role. We are already exposed to such risk through our revenue collection agent function. It would be sensible to assume that early competition could lead to an increase in the scale and volatility of cashflows³⁰ and therefore the magnitude and frequency of any cashflow timing mismatches. This is likely to moderately increase our risk exposure³¹
- Contract management risk is important for the Contract Counterparty role. We have some exposure to this risk from our role on Balancing Services contracts however early competition contracts are expected to be of far longer duration and complexity. In particular the undertaking of the PPWCA (see Section 4.2.2) involves a detailed assessment of changes to cost estimates following the preliminary works stages and taking a view on which changes were reasonably foreseeable and which were not. In combination, this is likely to materially increase our risk exposure
- We have no prior experience of overseeing debt competitions which would be required under the Procurement Body role. Whilst we are ready to take on the challenges associated with this, it would expose us to a new risk and is likely to have a material impact.

Table 17: Differences in risk exposure between our current position and the early competition counterfactual

Main risk category	(1) How will the risk change under the early competition counterfactual?	(2) Materiality
Procurement Body		
Procurement failure and underperformance risk	We are exposed to this risk to an extent already under our roles on e.g. Pathfinders and Balancing Services. Early competition is expected to significantly increase the likelihood of the risk materialising and so the size of the risk. The model for early competition is much riskier than other procurement exercises we are involved in because for example it is an early tender model. Compared to Pathfinders, the model is significantly more complex and projects are likely to be of greater scale.	Material increase in risk – size
Technical risk	We are marginally exposed to this risk currently. It is predominantly a new risk that is solely attributed to early competition services.	Material increase in risk – type

²⁹ We consider the size of the risk = likelihood of the risk materialising x scale of the impact

³⁰ For example, the current position is that TO and OFTO operational payments are made from TNUoS on which we have no liquidity risk. However, if new assets are developed by non-network solutions, the payments for this are likely to be sourced from BSUoS where we are likely to have liquidity risk. This could mean the scale and volatility of cashflows could increase in future.

³¹ We note as per footnote 25, other risks such as cyber and operational risks would likely increase.

Main risk category	(1) How will the risk change under the early competition counterfactual?	(2) Materiality
Legal challenge risk	Same as procurement failure and underperformance risk. The procurement for early competition is far more likely to be challenged as the bid evaluation incorporates a number of subjective components and the process is more complex. In contrast, on Balancing Services the bidder with the most economic tender wins. Early competition contracts could be of larger value than those we currently award and therefore attract a greater degree of scrutiny.	Material increase in risk – size
Contract Counterparty		
Contract management risk	We are currently exposed to this risk. The risk would be significantly more likely to arise because (1) early competition contracts may cover innovative technologies which are inherently more likely to experience implementation issues; (2) the contracts will be more complex and of longer duration; and (3) we will have a greater scope of and more hands-on responsibilities across the entire lifecycle of the solution. PPWCA is a new service that will likely increase the scale and likelihood of the risk. It requires us to take a view on whether cost changes, with the benefit of hindsight, were reasonably foreseeable ex-ante which is highly challenging.	Material increase in risk – size
Legal challenge risk	We already hold this risk to some degree, early competition could introduce several new routes of legal challenge for example, perceived differences in treatment between TOs and non-network solutions; additional licence obligations; and judgement involved in the PPWCA. This could increase both the scale and likelihood of the risk. We consider the likelihood of the risk could further increase because early competition contracts are expected to be significantly more complex than those we currently handle and consequently more open to interpretation.	Material increase in risk – size
Payment Counterparty		
Liquidity risk	We are exposed to this risk through our revenue collection agent role. Early competition could increase both the scale and likelihood of cashflow timing mismatches due to the reasons set out earlier. This could be further amplified as (1) we will be responsible for milestone payments to successful bidders during the preliminary works stage; and (2) CATOs could be more likely than TOs to request termination payments which are highly uncertain and very difficult to forecast.	Moderate increase in risk – size
Legal challenge risk	We do not expect this risk to change materially from our current exposure. The likelihood of the risk may increase as we could have a substantially greater number of payment counterparties as a result of early competition.	Small increase in risk – size
Network Planning Body (ESO)		
Technical risk	We currently hold this risk to an extent from our current network planning responsibilities. Our recommendations for early competition will require us to take a more challenging and important role in network planning which may lead to potential conflicts with the TOs. The presence of competition could change TO behaviours and affect the relationship between TOs and ESO. We may need to look for ways to reconfigure our network planning responsibilities to mitigate the risk of a degraded relationship.	Moderate increase in risk – size

Inherent uncertainty of costs is a key cost risk that is relevant for all the roles. It is likely to be more pronounced for the Procurement Body and Contract Counterparty roles as the associated services for these roles will have a stronger and more direct relationship with the outturn number, scale and complexity of early competitions. We are already exposed to uncertain costs but these two roles are likely to acutely exacerbate the risk.

Our analysis implies a number of important conclusions:

- We have considered all the evidence around early competition and have concluded that it will substantially alter our risk profile. All four roles demonstrate an increase in risk exposure albeit of varying materiality
- On balance the Procurement Body and Contract Counterparty roles will materially increase our risk exposure
- Whilst the Network Planning Body (ESO) and Payment Counterparty roles will increase our risk exposure, the scale of the increase is not material.

As all four roles require us to take on additional risk, we would expect some form of additional remuneration for performing the services to balance the asymmetry of the risks and incentivise us to actively engage in our central role.

Our view is that material risk altering roles (i.e. Procurement Body and Contract Counterparty roles) will be best dealt with through an overlay to the RIIO-2 framework comprising of bespoke remuneration mechanisms. These mechanisms will be designed to exactly deal with the materially different risk exposures of the roles and provide additional return for performing these services.

We consider that the increase in risk associated with the Network Planning Body (ESO) and Payment Counterparty roles can be accommodated with some targeted adjustments to the RIIO-2 framework. These adjustments would be intended to recalibrate the level of remuneration of existing RIIO-2 mechanisms to align with our increased risk exposure from these roles.

In summary:

- Network Planning Body (ESO) and Payment Counterparty roles will increase our risk exposure but not materially. Therefore, targeted adjustments should be applied to the RIIO-2 framework to rebalance the level of remuneration
- Procurement Body and Contract Counterparty roles will increase our risk exposure materially. These services warrant new bespoke remuneration mechanisms that can be overlaid on top of the RIIO-2 framework.

8.2 Remuneration and incentives

8.2.1 Summary of the RIIO-2 Final Determination

Before discussing initial remuneration arrangements for the services, we have summarised what is provided under our RIIO-2 framework for context. It comprises of the following components:

- **Costs** - We recover costs on a pass-through basis. Cost efficiency is assessed as part of the evaluative incentive framework (value for money assessment) and supplemented by the Demonstrably Inefficient and Wasteful Expenditure ("DIWE") test capped at 2.5% of RAV. This approach is intended to de-risk our business given the inherent uncertainty in our cost estimates
- **RAV remuneration** - We earn an allowed return on our Regulated Asset Value ("RAV")
- **Non-RAV remuneration** - We are provided an allowance for managing revenue collection agent risk and our exposure to asymmetric risk via DIWE
 - **Revenue collection agent** - Ofgem employs a return-on-capital approach. It first estimates the total capital base required to support forecast liquidity shortfalls. It then approximates a reasonable capital structure for the total capital base and prices equity at the nominal cost of equity and debt to cover working capital facility fees
 - **Asymmetric risk** - Ofgem's allowance assumes a capital base of 2.5% of average RAV and prices the capital assuming a 20% chance it will be drawn

- **Incentives** - We have an evaluative incentive framework with a potential range that is asymmetrically calibrated to the upside. The incentive framework is partially intended to remunerate our services on network planning, Electricity Market Reform (“EMR”), Pathfinders and other procurement related services we provide.

8.2.2 Remuneration for the Procurement Body and Contract Counterparty roles

The risk analysis indicates that the Procurement Body and Contract Counterparty roles and the associated risks will be transformative for us as an asset-light company with a relatively small RAV. For context, the financial impact of the risks implied by the services could represent a material proportion of our revenues.

Additional remuneration in recognition of the same will mitigate risk averse behaviour and encourage us to be fully engaged in achieving Ofgem's objectives for early competition. The shape of additional remuneration should be designed to provide strong incentives - such that we thrive when we are delivering value to the system. We consider our remuneration requirements, small in context of the benefits of getting competition right for Great Britain, will represent massive value for money to consumers.

Our view is that the most appropriate approach to remuneration is to price the services rather than the risks associated with the services. In other words, we have not sought to identify specific mechanisms for holding specific risks but rather aim to remunerate the provision of services.

We consider there are no direct regulatory comparators to the services we will provide but have taken inspiration from the asset-light frameworks of the DCC and SONI to identify potential options for remuneration. We set out these potential options below:

RAV remuneration (RAV*Weighted Average Cost of Capital (“WACC”))

RAV*WACC is the standard approach to remuneration for regulated utilities however it generally fails to provide adequate returns in an asset-light context as reflected in the precedents for SONI and the ESO.

We expect the deficiency in returns will be more pronounced for the Procurement Body and Contract Counterparty roles as these will likely have a RAV of close to zero and face risks that are uncorrelated to this RAV. Service based businesses require very little in the form of tangible fixed assets, they rely substantially on intangible assets in the form of human capital to carry out services. This is reflective of the types of costs in Table 14.

Moreover, any risk-taking business is exposed to profit risk, potentially with a systematic component, even with no assets. Therefore RAV*WACC is a poor risk proxy for an asset-light business.

Margin on costs or revenues

Margins on costs or revenues have become the standard approach to remuneration in an asset-light context. It was applied by the CMA for SONI and by Ofgem for the DCC. However, we note Ofgem now considers a margin-on-revenues incorrectly “assumes a constant relationship between the quantum of revenues collected and the underlying costs and risks³²”.

Fee on the value of the project

A fee-based approach to remuneration is where a percentage is applied to the transaction value. We have provided additional context for this approach because the other options considered, by contrast, are well established in recent regulatory practice. We consider the fee-based approach is appropriate for the reasons set out below.

Comparable commercial services to the Procurement Body and Contract Counterparty in an open, unregulated market should be considered when designing a regulatory framework for remuneration. In practice, comparable commercial services are typically structured as a fee. For example:

- Managed infrastructure funds earn a management fee on the net asset value of investments

³² Of gem (2020), RII0-2 Final Determinations – ESO, para 5.37

- Procurement consultancy services on long-term procurement projects earn a fee on a project-by-project basis
- Professional services on transactions typically earn a success fee on the transaction value.

For avoidance of doubt, we are not suggesting that we operate under a non-regulated commercial fee-based model but rather that our services are priced, under the regulatory framework, as if they were commercial services.

In some ways a fee-based approach carries the same benefits as a margin, without the same flaws:

- Both approaches are easily scalable, and the value of return is linked to the scale of risk, in part, implied by the size of the underlying cashflow/transaction value
- A fee-based approach is more flexible than a fixed margin and could address Ofgem's concerns on the matter. The fee could have fixed and variable components which can be calibrated to achieve value for consumers.

Source of the fee

The fee could be charged to bidders as is normal for procurement services and is the case with Ofgem's procurement services on OFTOs. Given that this arrangement is generally accepted by the market it should not deter or skew bidders in any way. We consider that levying the fee on the successful bidder instead of spreading it across the bidder pool would provide greater transparency to the market. However, the successful bidder is likely to have a long construction phase before it is able to generate revenue and pay the fee. This could expose us to significant timing lags in fee recovery. Alternatively, the fee could be recovered through TNUoS/BSUoS which is consistent with the rest of the regulatory framework.

The exact fee structure, if the fee-based approach is taken forward, will rely on policy and regulatory decisions made by Ofgem/BEIS. For example, the incentive properties of the fee should not overlap with or run counter to those implied in the evaluative incentive framework. This cannot be reflected on until Ofgem decides how to incorporate early competition into the incentive framework.

There are many different ways a fee-based approach could work in practice, such as:

- **Procurement Body** - (1) fixed fee on the successful project size; and (2) variable fee on the successful project size which varies based on value for money created by the competition
- **Contract Counterpart** - (1) fixed fee on the contract value; and (2) variable fee on the contract value which varies based on efficiency of the contracted solution.

The exact fee structure should take account of the standard market practice for comparable commercial services.

Value at risk

A value at risk approach involves estimating the mean expected loss we would face for providing the services (e.g. due to legal challenge) and prices the contingent capital required to cover the risk. This closely resembles the approach that Ofgem adopted for risks we hold in other parts of our business such as asymmetric risk of DIWE and liquidity risks associated with our revenue collection agent role. Similar analysis was performed by the CMA for SONI to calculate the mean expected loss it was exposed to from asymmetric risk in the framework. However, this approach raises several complex and difficult questions on how to estimate the exact value at risk.

Conclusion

We recommend that all options for remuneration are considered in more detail during implementation.

In addition, the Procurement Body and Contract Counterparty roles have costs (as set out in Table 14) that are inherently uncertain. We consider that the existing RIIO-2 cost recovery mechanism (pass-through with capped DIWE retrieved via TNUoS/BSUoS), is reasonably well suited to recover these types of costs and so there is no need to operate a parallel cost regime for these roles. This avoids the practical problems around how to create secure accounting boundaries between, and set fair cost allocation methodologies to separate, differentially incentivised costs.

8.2.3 Targeted adjustments to RIIO-2 for the Network Planning Body (ESO) and Payment Counterparty roles

On the basis of the risk analysis, we consider that the Payment Counterparty and Network Planning Body (ESO) roles can fit within the scope of RIIO-2 with targeted adjustments. In this case, we seek to directly price the risks rather than the services to be consistent with Ofgem's approach for RIIO-2. Hence, the adjustments are intended to align our remuneration from RIIO-2 with the additional risk implied by these services.

Payment Counterparty role

As stated previously, it is plausible that the Payment Counterparty role could lead to more pronounced and frequent liquidity shortfalls and therefore additional contingent capital may be required to cover these shortfalls. We consider that instead of remunerating the risk separately, Ofgem should recalibrate the remuneration for the revenue collection agent role to reflect any additional contingent capital requirements for the Payment Counterparty role as these become known. This recalibration can take place following decisions on early competition from Ofgem/BEIS and during the implementation phase when there is a better view of the potential pipeline of projects as set out in Section 7.

Network Planning Body (ESO) role and wider considerations

Our current network planning services are incorporated in Role 3³³, system insight, planning and network development, under the RIIO-2 framework and are promoted through the evaluative incentive regime. The incentive regime will need to be amended to reflect our strengthened Network Planning Body (ESO) role for early competition. However, there is a wider question as to whether the evaluative incentive regime properly incentivises us across the four roles to achieve Ofgem's objectives for early competition. This is an area which needs to be considered in the implementation phase and is discussed further in Section 8.2.4.

8.2.4 Incentives

Our current incentive regime is a broad, ex-post evaluative scheme, with minimal changes being made for RIIO-2. Strong incentives encourage us to go beyond our day to day role, providing benefits to consumers. Incentives are a key tool to drive more value and benefits for the end consumer whilst rewarding efficiencies in the delivery and performance of the services. At the same time, it is generally accepted that the evaluative nature of the scheme is associated with discretionary risk which has, in part, been reflected in the RIIO-2 allowed return. Any changes to this risk will need to be accommodated.

Our view is that the incentives for the early competition roles and services should be incorporated within the existing incentive framework. In this section we focus on the enduring early competition regime which we are estimating to be in place from Q4 2024.

Reporting of TNUoS

We currently have a reporting metric on the accuracy of TNUoS forecasts as part of the evaluative incentive framework. The predictability of TNUoS may change as a result of early competition and this should be revisited and taken account of in the evaluative incentive regime.

³³ Ibid, pg 32

Potential areas to incentivise for early competition

To be able to consider how best to incentivise this activity, we would need to have much more detailed information about the services that are being carried out. However, at this point in time we:

- Do not know what the final early competition model will look like
- Do not know what the legislation will look like and so how the process will run and how liabilities will be split
- Do not know the final parties who will be taking on these services.

Therefore, we do not think it is feasible at this time to recommend any detail around for example, incentive performance metrics, baseline expectations or outperformance levels. Incentives should be developed and refined during the implementation period.

However, we have some initial thoughts on possible operational areas where performance could be incentivised, such as:

- Quality of market engagement
- Accessibility to data (this will be dependent on what data we are able to provide, which is still being finalised)
- Timely processes
- Dispute minimisation.

Encouraging the right behaviours may require a step change in the way the evaluative incentive framework is operated:

- **If early competition objectives, or system planning objectives facilitated by early competition, are strategically beneficial to Great Britain, incentives may need to be re-weighted.** The weighting of different incentives should be proportionate to the benefits that each can create for consumers
- **If incentives more generally aren't to be diluted, the value of the incentive regime may need to be expanded in the future.** Expanding the scope of the incentive regime, to include early competition, without expanding the value would weaken the power of all incentives
- **Given the strategic objectives of early competition, there could be emphasis on the incentive to achieve bigger more strategic outcomes for the system.** The focus on operational issues, such as delivering quality standards, is important but it should be balanced with strategic issues to ensure we are properly incentivised for those longer-term objectives.

Related to the issues above, there may be a question around how our risk in the evaluative incentive framework, mainly discretionary risk, could change as a result of our central role in early competition. Early competition presumably will:

- **Increase the risk of actual poor performance.** This is due to the new and complex nature of a majority of our early competition roles and associated services. It will require new thinking and even cultural change, such as having to interact with a whole new class of parties, learn complex new disciplines and become an architect of a new industry. This is going to be more challenging than some of our current services which are well-established and we might take time to become good at it
- **Increase the risk of undeserved evaluation of poor performance where we have actually performed well.** The evaluation of roles performing early competition has not been done to date so those evaluating our performance (Ofgem, the Performance Panel and interested stakeholders) might take time learn how to effectively evaluate our early competition services without any previous benchmarks to rely on. We could therefore be unduly penalised in the evaluation compared to any kind of objective assessment
- **Potentially expand the value of the incentive scheme which would imply an increase in the associated risk.** This is because the value of the incentive regime is a scaling factor for the level of discretionary risk.

These changes to risk will need to be reassessed in the context of Ofgem's recommendations from its review of system operation and considered in more detail during implementation stage as set out in Section 7.

8.3 Estimated costs of running a tender

We were asked by Ofgem to include the estimated costs of our role in early competition. In this section we consider these costs, as well as costs for the other recommended roles. This gives us a high-level view of all of the costs associated with the enduring early competition regime. These costs are highly indicative and will need to be refined during the implementation period.

In Section 7, we set out a high-level plan for implementing early competition and arriving at the enduring arrangement of roles and responsibilities described in Section 6 above. Once the enduring set of arrangements are in place, the first stage of the first tender process can start as detailed in Section 5. In testing the full early competition model for the first time, we expect the first tender to identify refinements to the arrangements for future rounds.

To estimate the cost of running a tender (a 2-3-year period) we have considered the costs estimated for similar competitive procurements.

Ofgem examined the issue when considering late competition in onshore transmission, drawing on its experience with OFTO Tender Rounds 1, 2 and 3.³⁴ For the OFTOs, Ofgem found that its own costs (where it fills the role of Procurement Body and Licence Counterparty) were approximately 1% of project value.

In arriving at their estimate, Ofgem noted that OFTOs and late competition are different in a number of respects - driven by the difference in the point in procurement when the competition is run.

The OFTO tenders providing the data, were all forms of 'very late' competition – with the asset transferred to the successful bidder on completion, having been constructed by the generator. By comparison, 'late' competition occurs prior to construction.

This means the exact activities required to run a tender are different. One example Ofgem provides is that with late competition there are additional costs associated with assessing construction proposals. They argue this is offset by not needing to run the cost assessment process to validate the generator build costs for OFTOs. Ofgem conclude that, in the round, its costs for tendering OFTOs and late competition (where it was assumed it would also fill the roles of Procurement Body and Licence Counterparty) were comparable.

The Ofgem analysis was adopted by the water regulator, Ofwat, when introducing Direct Procurement for Customers ("DPC").³⁵ Under DPC water companies procure large infrastructure assets from third parties by running an 'early' or 'late' competition, acting as the Procurement Body and Contract Counterparty. In undertaking these roles, Ofwat has suggested allowing the companies to recover 1% of project value.

For early competition, the procurement activities are more extensive and therefore we would expect the cost to be higher than 1%:

- The tender process and evaluation is more complex. In particular both a cost assessment process needs to be run and construction proposals need to be assessed, whereas for OFTOs or in late competition only one or other of those exercises needs to be undertaken
- Both a Contract Counterparty and a Licence Counterparty are required, to some extent, in the process. Only once the Preferred Bidder is appointed will the relevant Counterparty be known. Both will need to prepare a generic contract or licence and may be involved in discussions with bidders.

This suggests an equivalent early competition estimate of 1-1.5% of project value.

Ofgem and Ofwat also take similar approaches in estimating the costs of other roles in a tender process. In their late competition proposals, Ofgem also estimated the cost to the TOs and ESO (equivalent to the role of the Network Planning Body) of supporting an early competition tender process at less than £1m. Ofwat subsequently used the £1m per tender estimate as the basis for pre-

³⁴ Ofgem, Extending competition in electricity transmission: impact assessment (May 2016)

³⁵ Ofwat, Delivering water 2020: our methodology for the 2019 price review – Appendix 9 Direct procurement for Customers (December 2017)

tender costs in DPC. For early competition, depending on the extent of Network Planning Body engagement with bidders throughout the tender process, we think this cost could range from c.£1-1.5m.

Ofwat also considered the cost of the Approver role during a tender process. Under the DPC model, Ofwat will have an oversight function – providing approvals at various Stage Gates throughout the procurement. It estimates a cost of £0.5m to undertake this role based on Ofgem’s experience with the Shetlands New Energy tender. We recommend assuming the same for early competition.

The above suggests that a project with a value of, for example, £250m would incur procurement costs for an early competition tender in the region of 1.6%-2.3% of project value.

Comparison with actuals

We note that the estimated costs based on late competition proposals in onshore transmission and a methodology established for DPC has never been fully tested by completing a tender process. A comparable competitive procurement model has, however, been used frequently as the basis for Public Private Partnerships (“PPPs”), including Private Finance Initiatives (“PFIs”) in the UK.

A European Investment Bank (“EIB”) report, compiled after PPPs had been used as a procurement model for around 15 years, looked at actual transaction costs.³⁶ The PPP model is a form of ‘late’ competition, with the public sector selecting a third party to build, finance and operate an asset on the basis of their detailed design and associated fixed price bid.

Considering the total public sector costs of running a tender process (as opposed to bidder costs), the report noted that costs as a percentage of project value vary significantly with size. For projects of over £170m³⁷, costs were in the range of c. 1.5%-2.5% of project value. Below this, costs stepped up from over 2.5% to c3.5% - with projects under £34m³⁸ exceeding 8%. This suggests that i) a proportionate tender process is required for smaller projects, and ii) a significant proportion of tender costs are fixed.

While 1.6%-2.3% maybe a realistic range for a £250m project, the cash cost (£4m-£5.75m over 2-3 years) may not reduce or increase significantly with changes in the size of the project. The data from smaller PPP’s suggests that c.50% of tender costs may be fixed.

Table 18 sets out the central estimate of tender costs for early competition, and a potential split between fixed and variable elements.

Table 18: Estimate of tender cost

Early competition estimate of tender cost				
Assumed project value (£m)	250			
	Min		Max	
	%	£m	%	£m
Procurement Body, Licence Counterparty and Contract Counterparty	1.0%	2.50	1.5%	3.75
Network Planning Body	0.4%	1.00	0.6%	1.50
Approver	0.2%	0.50	0.2%	0.50
Total tender cost (over 2-3 years) for £250m project value	1.6%	4.00	2.3%	5.75
Total tender cost formula: fixed + variable tender cost (over 2-3 years) based on 50% fixed costs				
Fixed (£m)		2.00		2.88
Variable (% of project value)		0.8%		1.2%

³⁶ EIB, Transaction costs in public-private partnerships: a first look at the evidence (March 2005)

³⁷ £125m (2005), updated at Consumer Price Index including owner occupiers' housing costs (“CPIH”)

³⁸ £25m (2005), updated at CPIH

Further analysis in this area, including analysis of the tender costs associated with later OFTO tender rounds, would help substantiate these estimates. This can be carried out and developed during the implementation period (see Section 7 for more information).



Faraday House, Warwick Technology Park,
Gallow's Hill, Warwick, CV346DA

nationalgrideso.com