Early Competition Plan

Phase 3 Consultation: Chapter 4, Commercial Model

December 2020

nationalgridESO

Contents

1 Summary

This chapter provides an overview of our proposed Commercial Model for early competition.

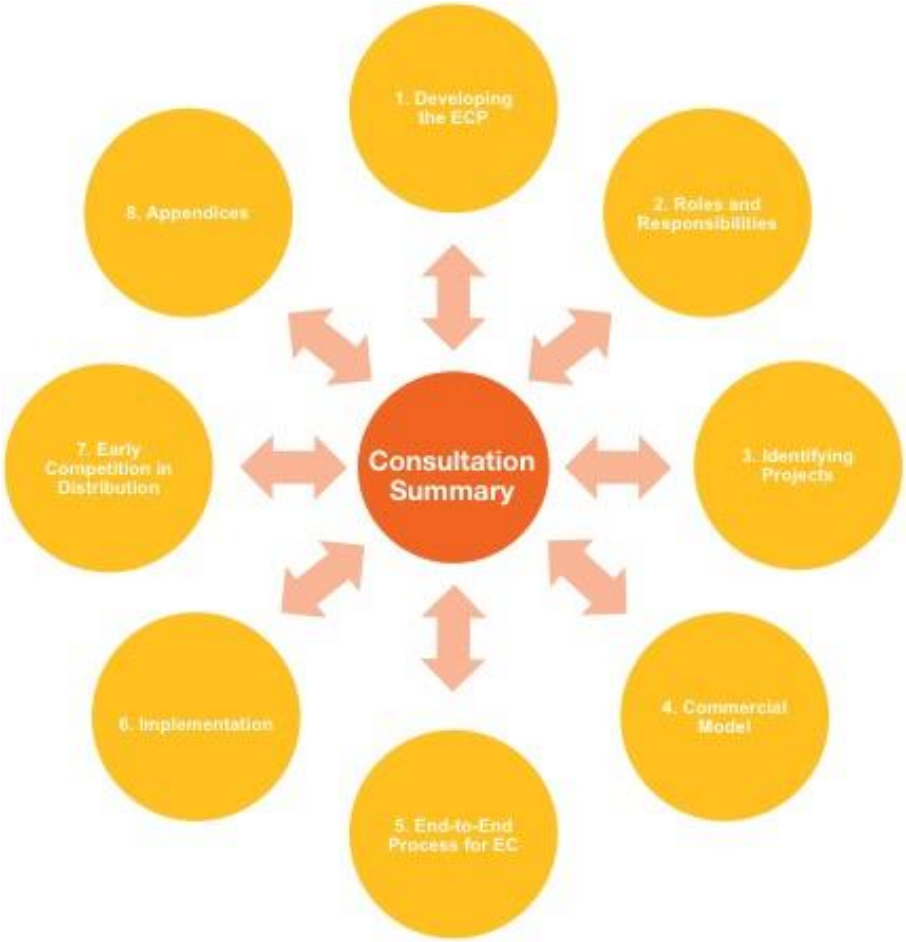
Following consideration of the alternative options proposed and further stakeholder engagement our proposals remain broadly aligned with our Phase 2 position. We do however include further detail on areas such as risk allocation and how consumers are protected if a solution which wins a tender subsequently fails to deliver.

We continue to think a Tender Revenue Stream type revenue model is best suited to early competition and provides for a wide range of companies to participate in the process. It is also important that all bidders are subject to the same revenue model to ensure a level-playing field.

Having considered several possible configurations, we determined that underlying costs would remain indicative at point of award and become fixed via a cost assessment process after the preliminary works stage and prior to the start of the solution delivery/construction stage.

We also continue to propose that the cost of debt will also be indicative and fixed via a debt competition after the conclusion of the cost assessment process and that the cost of equity, overheads and margins will be fixed at tender award.

We would welcome views on our specific questions found at the end of some sections, but we would also appreciate any wider feedback you have on our commercial model proposals.



2 Revenue

In our Phase 2 consultation we set out our initial thinking on the basic framework under which the successful bidder would receive revenue to recover its costs. We highlighted the key objectives in determining how and when the successful bidder would receive revenue - as a basis for raising competitive finance and to incentivise successful solution delivery.

In this section, we consider the stakeholder feedback we received on our initial proposals and develop the framework in several key areas. We reconfirm our position on the basic revenue model for early competition being a Tender Revenue Stream ("TRS") and consider how the TRS could be adjusted over time to account for inflation. We review the options set out in our Phase 2 consultation in relation to the length of the tender revenue period and develop our thinking on potential arrangements for the end of the revenue period. We also expand on our initial thinking regarding revenue during the preliminary works stage.

2.1 Revenue Model

In our Phase 2 consultation we set out how, for early competition, a market-based revenue model would introduce unnecessary complexity and volatility that was unlikely to be value for money for consumers. We then considered two alternative models for providing the successful bidder with a stable revenue stream, against which they could raise competitive finance - allowed revenue based on a Regulated Asset Value ("RAV"), and a TRS.

Our preferred option was for a TRS; an annual amount paid regularly to the successful bidder from commissioning for the life of the contract or licence. It is similar to the revenue model used for Offshore Transmission Owners ("OFTOs") or Public Private Partnerships ("PPPs"). We considered that for a single network or non-network solution, the RAV based regulated model would be unnecessarily complex and costly to implement. This was broadly supported by stakeholder feedback, which identified the flexibility, simplicity and familiarity of a TRS model as key advantages over a RAV based mechanism.

Phase 2 consultation

In our Phase 2 consultation we looked to test our conclusions on the most appropriate revenue model. As the basis for much of the early competition framework, it was important to determine that the approach had sufficient support and any concerns were identified.

Stakeholder feedback

While there was support for a TRS type revenue model, several stakeholders asked for additional analysis as to why this approach was suitable for early competition and expressed concerns that it may not be appropriate in all cases.

In particular, concerns were raised that it may not be suitable for incumbent Transmission Owners ("TOs") under an existing RAV regime and the revenue model should not prevent bidders participating in other revenue streams.

Updated preferred option

Based on the above feedback we reviewed the rationale for a TRS type revenue model. Returning to the principles of early competition - encouraging innovation, creating a level playing field for competition, and protecting consumers - we continue to think a TRS type revenue model is best suited to early competition.

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. It provides for direct comparability between bids and protects consumers for the duration of the licence or contract.

On specific concerns, we continue to think that to ensure a level-playing field it is important that all bidders are subject to the same revenue model. While there may be limited instances where a very long revenue period may (unless capped) make the RAV model more appropriate, any alternative revenue model would have to be offered to all bidders equally.

We also do not think adopting a TRS type revenue model necessarily prevents bidders from participating in other revenue opportunities. As we develop the details of early competition, we recognise the desirability of the model being able to accommodate revenue stacking opportunities, to the extent possible.

We continue to think that a TRS should be the default revenue model for all bidders, including the incumbent Transmission Owners.

A concern was expressed that the TRS model may be too similar to the Private Finance Initiative ("PFI"), which was ended by the Chancellor in 2018.

While PFI was a form of procurement that provided a fixed revenue stream to the successful bidder, there is no requirement to adopt all the features associated with PFI when doing so.

Other forms of procurement, such as OFTOs and Direct Procurement for Customers in the water sector, provide current examples of models with a fixed revenue stream outside of PFI.

New issues for consultation

As set out above, the current preferred approach is for bidders to bid for the annual amount of revenue they require for the length of the revenue period (the TRS). The TRS would be expressed as a single number, in real terms, as at a date specified in the tender.

For the length of the revenue period, the TRS would be adjusted annually for inflation to calculate the actual amount payable in each period. The adjustment for inflation in any year would depend on two items: i) the reference index being used; and ii) the proportion of the TRS subject to indexation. Below we discuss our current preferred approach for each of these items.

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 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 CPI/CPIH, and 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 is being consulted upon here.

Proportion of TRS to be indexed

During the revenue 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. Debt may or may not be indexed linked, but usually there is a greater availability of unindexed debt in the market. As a result, debt service costs are typically not linked to inflation.

Whether equity returns are subject to inflation or not will depend on the requirements of a particular investor.

For the project to be able to service these costs it needs matching revenues in each period. *Figure 1* 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, project cash flow is insufficient to cover costs. Conversely, in later years, 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.

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'.

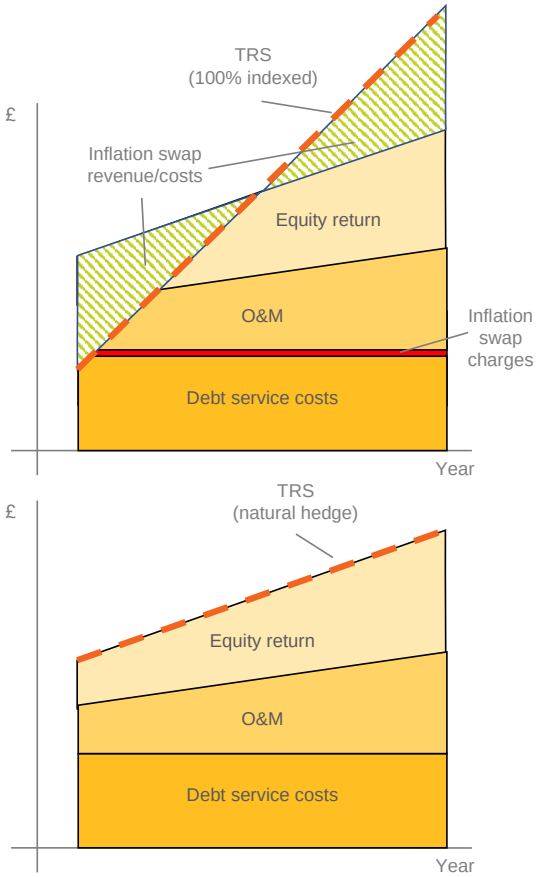
This removes the need for additional financial instruments (and their associated cost) to reprofile the cash flow and remove the inflation risk.

Treasury guidance (see Paragraph 3.2) 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.

Preferred option

Our current preferred option for early competition is therefore to try and achieve a natural hedge by only partially indexing the TRS and how this proportion could be set is discussed in Section 3.5.

Figure 1: Illustrative diagram of costs and TRS indexation



Questions

1. Do you agree with the partial indexation of the TRS and the adoption of CPIH as the index? Why?

2.2 Revenue Period

To calculate the TRS they require, bidders will need to know the length of the revenue period over which they can recover their costs. In our Phase 2 consultation we set out several options for setting the length of the period. These included setting it in line with the network need, setting it in line with the asset life, or setting it in line with precedent e.g. 20-25 years, similar to PPP/OFTO.

Our preferred option was to set the revenue period equal to the length of the need. This approach we noted would help remove the requirement to launch a second tender for the remaining length of the need and avoids putting costs on to future consumers where the need has ended. It was also our preferred option to cap the length of any revenue period at 45 years, consistent with RIIO-2.

The TRS only commencing on commissioning provides a strong incentive for timely delivery. The potential consequences of a delay, and how this could be managed, is discussed in Chapter 5, End-to-End Process.

Phase 2 consultation

Our Phase 2 consultation went on to consider the impact of our preferred option where the length of the need is longer or shorter than the technical asset life. We noted this may lead to bidders having to take reinvestment or residual value risk where they could and were willing to do so.

We also considered the impact of our preferred option where the length of the need is longer or shorter than that of comparable PPP/OFTO projects. We noted that a revenue period significantly longer or shorter than 20-25 years may impact the cost and availability of finance.

Stakeholder feedback

Stakeholders broadly agreed with setting the revenue period equal to the length of the need. Most also agreed that the maximum revenue period should be capped. It was suggested by some stakeholders that in setting the length of the revenue period consideration should be given to the availability of funding. There were concerns that participation in a tender may be limited, or substantial premiums could be added, where the revenue period was too long.

Updated preferred option

Based on the above, we have refined our position with regards to setting the length of the revenue period. While our preferred option remains setting the revenue period equal to the length of the forecast need as best value for consumers, we consider that it would be appropriate to allow for this to be adjusted on a case-by-case basis for each tender.

Issues 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, or
- Evidence that technological innovation may render any proposed solutions obsolete.

In any event, it remains our preferred option to cap the length of any revenue period to 45 years, in line with RIIO-2. 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 and what the scope of the cost-benefit analysis will need to be to allow them to make an informed decision as the Approver in respect of the various stage gates. Further information can be found in Chapter 2, Roles and Responsibilities.

New issues for consultation

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 TRS period. This will allow them to understand if there is any potential remaining value, which could be used to enhance the competitiveness of their bids.

In our Phase 2 consultation we asked a question regarding the principle of an extension but provided no further details on what any mechanism may look like. We remain of the view that an extension mechanism would be of value to consumers and below set out options for how this may work.

End of revenue period options

As part of an updated Network Options Assessment process, we expect the Network Planning Body will include in its modelling the removal of the current solution at the end of its revenue period. As the end of the revenue period approaches, the modelling will indicate whether the same or similar need currently met by the solution continues beyond the original end date. In addition, 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 end of the revenue period the 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 solution with a permitted extension. Assuming permissible via prevailing procurement legislation and noting we assume there will be new procurement regulations for early competition, a permitted extension may take the form of:

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

Retendering the need would allow for the consideration of new technologies and developments since the original tender. It may also provide (where the need has extended for longer than the remaining technical/asset life of the existing solution) for 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 fully (or at least substantially i.e. if they have taken some residual asset value risk) depreciated asset. The existing solution provider is likely to have a lower cost base than other bidders. It could make supernormal profits 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 would be similar to (2), with a negotiated process. The negotiated extension process would, as with (1), 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.

We think the successful bidder should remain responsible for their solution at the end of the revenue period and any process to transfer that solution to a third party at the end of the revenue period would add significant complexity and hence we are not further considering this option.

Preferred option

Given the above, our preferred solution is to set out in the original contract (or state as policy with regards to the licence) the basis on which an extension would take place to try to find a suitable balance between the second and third options. 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 not be limited to):

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

High-level principles for agreeing these costs would be set out in the tender and would then be included within the contract.

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 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 solution does not form part of the evaluation criteria.

If the existing solution provider turned down a permitted extension request based on the contractual provisions, then a new tender process would have to be run for the extended need. To prevent potential gaming of such a situation, it may be appropriate to exclude 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 in such circumstances.

Questions

2. Which of the options for extending the revenue period do you think are most appropriate? Why?

2.3 Other Revenue

While focusing on the main revenue stream, the TRS, in our Phase 2 consultation we also raised the potential for other forms of revenue to address certain concerns around achieving a level playing field amongst bidders.

In particular, we noted that an area for further exploration was whether payments to the successful bidder during the preliminary works period could help participation in early competition. This was to try and address the 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.

Phase 2 consultation

In our Phase 2 consultation we set out three potential options for preliminary works revenue:

- Fixed payments
- Flexible/variable payments, or
- A combination of fixed and variable payments.

Stakeholder feedback

Almost all stakeholders supported the idea that revenue during the preliminary works period would help encourage participation in early competition.

A stakeholder noted the importance of clarity during the tender process as to the size of the revenues and how they would be paid.

Updated preferred option

Based on the above it is our preferred option to have some form of revenue for the successful bidder during the preliminary works period where the Procurement Body identifies this as beneficial to the process.

In our webinars, we also discussed the possibility of revenue during construction. While we do not think this is necessary in most cases, for projects with very long delivery periods this may be an option to consider when a tender is launched.

To avoid distorting the tender process our current view is that this revenue would be in the form of fixed payments (set for each tender) at set points during the preliminary works period. These points may be set by key contract/licence milestones such as submitting planning applications, etc.

For example, consider two bidders (A) and (B) bidding for a TRS where there is no preliminary works revenue. Though they each have their own profile of preliminary works and construction costs, at the start of the revenue period they both have the same rolled up capital cost (including financing) and bid the same TRS.

If bidder (A) were then to claim a larger amount of preliminary works revenue than bidder (B), this difference in early revenue would improve bidder (A)'s return relative to bidder (B)'s. This in turn would allow bidder (A) to reduce the TRS they bid by proportionately more than bidder (B), winning the tender.

As a solution with larger preliminary works costs is not of value to consumers, it seems inappropriate that the payment of revenue during this period be used as a basis for determining the successful bidder.

By providing a fixed payment (set for each tender) to any successful bidder, irrespective of their preliminary works costs, this potential distortion can be avoided. However, it may also be seen as inappropriate to pay revenue during the preliminary works period in excess of direct costs incurred by the bidder. Our current preferred option is therefore to cap preliminary works revenue at the lesser of the fixed amount and evidence of actual costs confirmed to the relevant counterparty. This cap would likely need to be identified via bidder forecast costs provided during the tender process with a reconciliation undertaken as part of the Post Preliminary Works Cost Assessment to ensure that any preliminary works payment does not exceed the preliminary works costs.

Questions

3. Do you agree with the preferred option of a fixed payment to the successful bidder upon the delivery of key milestones during the preliminary works period? Why?

3 Cost Risk

As set out in Section 2.1, our preferred option is for a successful bidder to receive a Tender Revenue Stream ("TRS") as its primary source of revenue. This would be a fixed amount (subject to certain incentives and reopeners) starting at commissioning and partially updated annually for inflation.

This section considers how the TRS is established based on the costs of the successful bidder. Initially the TRS amount bid at Invitation to Tender ("ITT") (stage 2) would be incorporated into the contract or licence. This amount would then be updated following the completion of preliminary works to become the fixed amount (subject to certain incentives and reopeners) for the revenue period.

In setting out our preferred option for how the TRS would become fixed we build on the framework developed in our Phase 2 consultation. There we looked at alternative options for when costs making up the TRS would become fixed, based on achieving value for money for consumers and protecting them from unnecessary risk. *Figure 2* summarises our preferred option in our Phase 2 consultation.

In this section, we review the feedback received on our Phase 2 consultation. We go on to set out how our thinking has developed and provide more detail on how the process may work in practice, considering the implications for risk sharing. We also consider how TRS indexation assumptions are treated within the process.

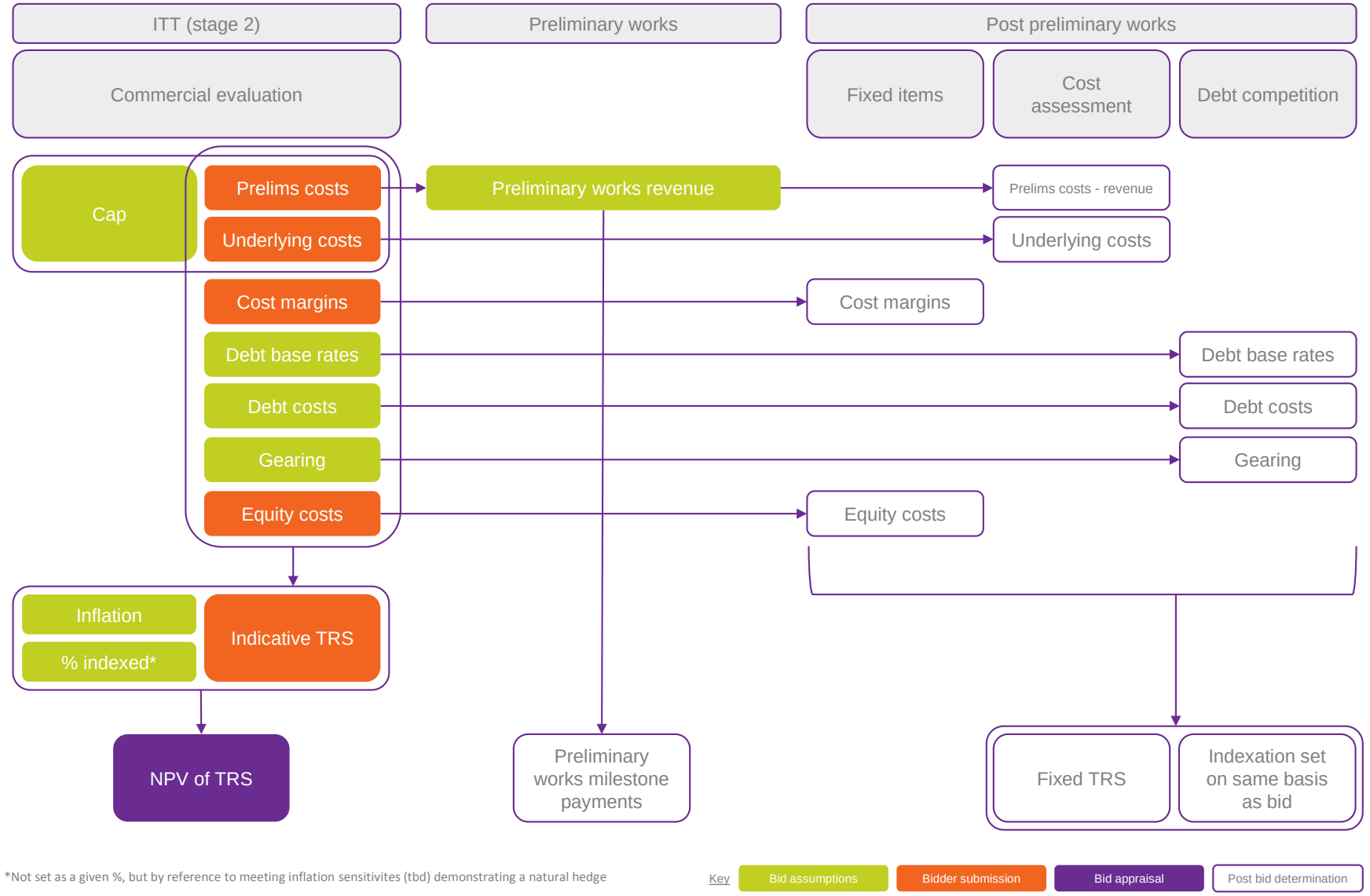
Based on this analysis, *Figure 3* summarises our current preferred position with regards to the process for setting the fixed TRS.

Figure 2: Preferred option on our Phase 2 consultation

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

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

Figure 3: Process map for setting the fixed TRS



3.1 Underlying Costs

In our Phase 2 consultation we set out our views on how underlying costs (e.g. OpEx/CapEx) would be treated in our commercial model.

After considering several possible configurations, we determined that underlying costs would remain indicative at point of award and become fixed via a cost assessment process after the preliminary works and prior to the start of solution delivery/construction. We also considered what security might be needed in relation to this model and in what circumstances (if any) those underlying costs could further change after the start of the solution delivery/construction stage.

Phase 2 consultation

In our Phase 2 consultation we set out our view that underlying costs submitted in bids would be indicative and they would be fixed through a Post-Preliminary Works Cost Assessment ("PPWCA") process.

We set out three options for how this cost assessment process could be structured i.e. economic and efficient review, cost containment or pain/gain share. We noted each option could have some form of cap and/or collar.

We also set out our initial views on risk allocation and which risk could potentially be shared between bidders and consumers in respect of such cost assessment process. We stated that we thought a 'bid bond' could be appropriate for at least the period of the preliminary works.

It is worth noting that whilst we referred to a 'bid bond' we described it as (and meant) a performance bond i.e. being in place from point of contract award with the successful bidder rather than being needed from many bidders prior to and until contract award. Therefore, feedback on a 'bond' has been considered in light of the fact some feedback may be related to 'bid bonds' due to the potentially confusing way in which we described our views on this topic in our Phase 2 consultation.

From this point in the section we refer to 'bond' or 'performance bond' as it more accurately describes what we are proposing for early competition.

Stakeholder feedback

Cost Assessment

Most stakeholders seemed to support some form of economic and efficient review process. It was noted this could be supported by benchmarking or indexation and stakeholders noted several views on a cost assessment mechanism for fixing underlying costs. Suggestions included:

- That it must avoid unduly penalising the developer for costs beyond their control, at least for large value projects
- That established cost assessment processes are in place under the Offshore Transmission Owner ("OFTO") and interconnector regimes and these demonstrate how costs can be evaluated objectively on a case-by-case basis; and
- That all participants involved in the development of the onshore transmission network should be subject to identical processes for fixing underlying costs after preliminary works are completed. Thus, a similar process to a Strategic Wider Works process could be adopted where, following Electricity System Operator ("ESO") recommendations to Ofgem, all cost assessment is undertaken by Ofgem on a consistent basis to Transmission Owner ("TOs").

For one stakeholder, the economic and efficient review within the OFTO regime has proven lengthy and contentious and their preference would either be for cost containment or a pain/gain share mechanism.

Another stakeholder felt that a pain/gain share mechanism could expose consumers to excessive costs without scrutiny.

One stakeholder suggested fixing costs where there is competitive tension and noted that introducing a cost assessment at a later stage may lead to inappropriate benchmarks and assumptions being taken from the initial competition event which are later adjusted. Therefore, certain points need to be given consideration during cost assessment such as robust checks and an appropriate level of process assurance. They also noted that it is important that bidders are not asked to commit to anything which undermines the consenting process so fixing costs at the tender stage would seem to be at odds with this position.

One stakeholder felt that appropriate payments following successful completion of post-tender milestones will incentivise efficient delivery of the selected projects and that post-tender milestone payments should clearly be laid out in the ITT stage.

In workshops stakeholders expressed a range of views - these included:

- That they generally felt that it is important that some form of guidance or methodology is published pre-tender in respect of the PPWCA process (including risk allocation) to inform bid strategies
- That they agreed with some of the proposed principles in relation to risk sharing in respect of what should and should not be a permissible adjustment, as well as mostly agreeing with there being some form of economic and efficient review; and
- That some had significant concerns about market attractiveness if risk allocation and the PPWCA process resulted in bidders potentially being exposed to additional costs through the preliminary works stage which could not be recovered e.g. if there were to be a cap or if there was to be some form of economic and efficient review. Those stakeholders also suggested that these concerns could be much more pronounced for the first tender process and reduce over time as bidders become more familiar with the process. As such it might be prudent for consumers to take more risk in initial tender processes.

Performance Bond

Stakeholders expressed a range of views on bonds - these included:

- That some do not support the requirement for bonds being needed from the point of contract award but that others do support the concept of such a bond for additional assurance
- Those not supportive of bonds suggested that our concerns can be efficiently managed through the requirement for post-tender milestones and the reputational impact of non-delivery
- Requesting the ESO to review when it expects a bond to be placed and some stakeholders asked for clarity on what would happen to the project where the successful bidder is not able to deliver
- That bonds may be prohibitive to new entrants, small developers and/or new technologies and that a bond requirement could negate the value of making preliminary works payments; and
- That the cost of bonds is ultimately passed on to consumers so should be carefully considered - there was a suggestion the value should be in the order of £250k.

Risk Allocation

Whilst several stakeholders agreed with our proposed risk allocation some did not and raised a number of points to be considered - these included:

- That risk allocation should be subject to independent assessment, be based on the type of solution being progressed and be undertaken on a case by case basis as is the current model for network investment
- That in a truly competitive market, it would be up to bidders to determine the allocation of risks
- That clarity is needed on what extent the successful bidder would be taking consenting risk
- That bidders would be willing to shoulder some of the upfront risk of developing potential projects prior to contract award
- That prior to and after award risk allocation must be unambiguous to enable debt financing and a lower overall cost to consumers
- That the ESO clarifies how those risks identified should be managed to shield consumers from price fluctuations as well as the risk of stranded or sub-optimal assets and solvency issues
- That if change of need risk sits with consumers there need to be appropriate checks and reviews undertaken on costs incurred and the efficient management of those costs
- That a 10% re-opener threshold would be a significant risk to take for bidders and may lead to inappropriate outcomes in bid prices
- That grid connection risk should be shared or harmonised to ensure a more level playing field for non-network solutions; and
- That assessment mechanism robustness will be important in managing and allocating key risks.

Stakeholders also suggested a variety of additional risks for further consideration when developing the early competition proposals.

Be transparent where possible

In September 2020, we held workshops to discuss our views on risk allocation and the PPWCA process to gain insights prior to our Phase 3 consultation. We heard some support but also some concerns in relation to certain aspects of our emerging thinking on these topics.

Updated preferred option

Cost Assessment

Based on stakeholder feedback we continue to believe that underlying costs remaining 'indicative' (or 'adjustable') at point of award and becoming fixed (for the most part) through a PPWCA process remains appropriate. Our current view based on stakeholder feedback is that the most appropriate mechanism for the PPWCA process will be a form of 'economic and efficient' review process with some form of upward adjustment cap to contain costs. We have provided further information on our thinking in the next section.

Whilst we agree that an economic and efficient review could take more time and effort than other options we feel it provides a suitable level of flexibility whilst also making sure consumers are adequately protected. We think lessons can be learned from other comparable processes but that a new process will need to be developed to reflect some of the aspects which are more specific to early competition.

Performance Bond

Based on stakeholder feedback and noting concerns raised by stakeholders we continue to believe that a performance bond or an equivalent form of acceptable security will be needed. We have however updated our views on the duration. We now think that as well as a performance bond being needed for the preliminary works period this security will also be needed for the solution delivery/construction period i.e. until the solution is commissioned. We have provided further information on our thinking in the next section.

We do not yet have a view on the appropriate value of a performance bond (or an equivalent form of acceptable security) but we expect that the value could be different throughout the preliminary works stage than it would then be in the solution delivery/construction stage.

Risk Allocation

Based on stakeholder feedback we have updated our views on risk allocation as per *Table 1* in the next section where we have set out these additional views. In respect of the additional risks which stakeholders suggested are considered we have included them in *Table 1* or they have been considered in another relevant section within our consultation.

New issues for consultation

This section considers the new issues for consultation in relation to the PPWCA, the performance bond, risk allocation and post-PPWCA TRS adjustments.

Preferred option

PPWCA

Regarding the PPWCA we agree with stakeholders that it will need to be clear up front how such a process would work so that this could be factored into their bid TRS. We therefore see a need for the Contract and Licence Counterparties to 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 economic and efficient review process would be undertaken by the relevant party or parties.

In respect of the PPWCA, we are proposing a three-stage process whereby any underlying costs within the scope of the cost assessment are considered on a case-by-case basis, whether they relate to an increase or decrease to the relevant costs. This process will be triggered on a given date towards the end of the preliminary works stage and the successful bidder will have an obligation to provide details to the relevant counterparty in relation to any cost changes within the scope of the PPWCA including supporting information. Therefore, there is no minimum trigger threshold proposed for the PPWCA.

1. A test to see whether the cost (and so TRS) adjustment is permissible. For example, is it a cost which falls into scope and was the cost change for a reason which could not have reasonably been foreseen by a competent bidder following good industry practice.

2. 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.

3. 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.

It is 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.

As we are proposing a cap but not a collar there is also a question on how any downward cost (and so TRS) adjustments are accounted for in the PPWCA. We propose that the same process as above is followed but with downwards adjustments being considered separately to upward adjustments. The reason being that if downward adjustments are netted off any upwards adjustments this would give the effect of providing greater headroom and potentially reducing the effectiveness of the cap as a tool to drive robust bids.

In relation to 'roles and responsibilities' (as per Chapter 2) we foresee the Licence Counterparty leading on the PPWCA for network solutions and the Contract Counterparty leading on the PPWCA for non-network solutions. However, as well as the proposed common methodology/guidance as referred to above, 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 can be referred to Ofgem for determination in the event the dispute cannot be resolved.

The Procurement Body and Network Planning Body will also have a role in the PPWCA supporting the relevant counterparty. 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.

We acknowledge that some potential bidders will have concerns in relation to the above proposals, but 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. Therefore, setting an appropriate cap to make sure that sufficient flexibility to adjust the costs (and so TRS) upwards because of risks which are suitable to be shared with consumers is important. As a result, when the value of an appropriate cap is being considered it would be prudent to consider whether the cap should be a higher value, at least for the first tender round(s), to try to find the right balance between adequate consumer protection and potential market attractiveness.

There is also a question on whether the cap should be uniform for all bidders. We think this should be the case as a common cap, set as a percentage of the TRS amount bid, will 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 bidders are best placed to manage this risk.

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 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.

It is worth noting that as risk margin (or contingency) and cost of equity is proposed to be fixed and not within scope of the PPWCA, then if bidders wish to participate but are uncomfortable with the TRS adjustment cap set for the tender, then they would still have options to adjust for their risk appetite. 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.

Performance bond

Whilst we acknowledge that some stakeholders have concerns about the fairness and efficiency of any requirement for a performance bond we believe that one is necessary (or an equivalent form of acceptable security) until the conclusion of the PPWCA and when both the Debt Competition and Financial Close have occurred. Further to our Phase 2 consultation, we now also believe it would be prudent to require appropriate security for the solution delivery period. Further consideration on the appropriate value is needed but at this point in time the offshore arrangements in respect of 'OFTO Build' (which are the most comparable) appear to be suitable i.e. 20% of the capital value of the solution secured via an acceptable means in accordance with the relevant industry codes. The appropriate value requires further consideration (including in relation to the potential for any doubling up of security such as in relation to debt provision) and could potentially be a lower value but as a principle we feel security will be required for this process stage to ensure the successful bidder demonstrates sufficient commitment to deliver the solution and to protect consumers in the event they fail to do so.

Further details can be found in our proposed Heads of Terms in Chapter 8.

Risk allocation

We have expanded and refined our risk allocation thinking in *Table 1*. This table shows (at a high-level) where risk might sit as standard and so which risks are potentially sharable between bidders and consumers through the PPWCA process - the most relevant shared risks are bordered in black. We agree that 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 in future as part of pre-tender planning and in respect of each tender process.

Table 1: Risk allocation

Topic	Preliminary Works	Solution Delivery	Operations	Explanatory Note
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 proscribed reasons e.g. Income Adjusting Events ("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 proscribed 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 proscribed 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 other than for proscribed 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 proscribed 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 Chapter 5, End-to-End Process.
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 so the bidder takes 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.

Topic	Preliminary Works	Solution Delivery	Operations	Explanatory Note
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 proposed 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.
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) 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 proposed 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.

Topic	Preliminary Works	Solution Delivery	Operations	Explanatory Note
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 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.

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
- Late Delivery Penalties
- Refinancing Gainshare Mechanism
- Indexation
- Incentive Performance

Whilst we referred to the 10%-20% threshold to trigger IAEs in our previous consultation we agree with stakeholder feedback that this would not be suitable for early competition. We therefore think trigger thresholds of a similar scale to those which exist for OFTOs would be more suitable as a basis for the IAE trigger threshold(s) for early competition. These range from £0.5m for projects with a transfer value below £100m to £4m for projects with a transfer value which exceeds £1000m. A value other than the offshore asset transfer value would be needed 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 being that these lower trigger values are likely to be more appropriate where the solution is not part of a wider portfolio of assets and where the TRS is the primary or sole source of revenue.

Questions

4. Do you agree with our revised views and preferences in respect of the PPWCA, Performance Bond and IAEs? Why?

3.2 Margins and Overheads

In our Phase 2 consultation, we set out our preferred option that margins and overheads on construction and operating costs would be fixed at the ITT (stage 2). This was to provide some element of cost certainty and help protect consumers.

While we did not ask a specific question on this topic in our Phase 2 consultation, an opportunity for further stakeholder feedback was provided in the subsequent workshops. Based on this our preferred option remains unchanged. Below we highlight some of the key items that would be fixed at ITT (stage 2).

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 a 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).

Questions

5. Do you agree with our preferred option regarding margins and overheads? Why?

3.3 Debt

The terms on which a solution can raise debt finance will have a significant impact on the level of the TRS. In our Phase 2 consultation we noted that debt would be unable to commit to terms at ITT (stage 2). Given the potential length of the preliminary works period, and the cost uncertainty prior to its completion, bidders would be unable to fix debt at this point.

This section reviews our preferred option of 1) the Procurement Body providing debt assumptions for bidders to use at bid stage and 2) a debt competition (followed by Financial Close) to fix terms after the PPWCA. We go on to set out our current thinking on what assumptions the Procurement Body would need to provide and the principles for running a debt competition.

Phase 2 consultation

Our questions in our Phase 2 consultation focused on how indicative debt terms should be set, the ability of a debt competition to drive competitive debt and how a positive or negative impact on the TRS should be shared.

Stakeholder feedback

Stakeholders broadly supported a debt competition as a means of securing competitive pricing. Several noted that for a properly structured project there should be no shortage of potential lenders, though others noted that it depended on prevailing market conditions.

Several stakeholders stated that debt assumptions should be consistent between bidders and should prevent a bidder from being overly aggressive in their structuring. One stakeholder suggested that the successful bidder should be incentivised to run an efficient debt competition through a gain share mechanism.

Updated preferred option

Based on the above, our preferred option is for the Procurement Body to provide indicative terms at ITT (stage 2). We also prefer the option of a debt competition following the PPWCA as the best means of securing competitive finance.

We note that some bidders may be able to offer balance sheet funding of a solution. To ensure the best value to consumers it is our preferred option 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. We note some feedback that bidders should be incentivised to run an efficient debt competition. This could be by sharing in 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 preferred option 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). Below we set out how the Procurement Body could set assumptions to minimise this risk.

It also remains important that the successful bidder runs a debt competition that produces competitive debt terms.

Below we set out our initial thoughts on how the debt competition could be best set up to achieve this balance.

New issues for consultation

As above, our preferred option is for the Procurement Body to provide debt assumptions at the bid stage and for a debt competition (followed by Financial Close) to fix final debt terms. Below we consider what debt assumptions the Procurement Body would need to provide and set out our thoughts on the principles for running a debt competition.

Debt assumptions

Table 2 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 at the time. The Procurement Body would need to determine the appropriate level of market soundings it needs to undertake based on conditions in the market at the time.

Table 2: ITT (stage 2) key terms

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	Long term debt: based on market soundings for the construction and operating period, including potential step-ups. Equity bridge: based on market soundings, a range based on type and rating of security bidder is proposing to provide, as below.
Security	Equity bridge: bidders will need to specify the type and rating they are providing. 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. The cost of providing the specified security needs to be included in the bidder's financial model.
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.

Term	Considerations
Reserves	These may include: ▪ Debt service - based on market soundings. ▪ Change in law - based on the proposed sharing arrangements in the contract or licence. ▪ Major maintenance - based on market soundings.
Cover ratio/gearing	In our Phase 2 consultation we set out some options for setting the level of gearing and we have since developed our thinking in this area as follows: 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 operating and maintenance ("O&M") costs. 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. 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. 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.

The Procurement Body will require reassurance that bidders will be able to secure debt on terms substantially similar to the indicative terms provided. It is therefore our preferred option for each bidder, as part of their ITT (stage 2) submission, to include letters of support from several credible lenders.

If during market soundings the Procurement Body determines that liquidity is limited for the project (e.g. due to size) and proposed a funding route where a debt competition was not appropriate (e.g. public bond issuance) then an alternative process for debt would need to be set out at the tender stage.

Debt competition

As discussed above, 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, and
- Evaluation and selection criteria.

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.

In addition, 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 preferred option is to have 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.

Questions

6. Are there any additional measures a Procurement Body could take to further drive value for consumers in securing debt finance?

3.4 Equity

In our Phase 2 consultation, we set out our preferred option for bidders to fix their equity return requirements (in terms of the Internal Rate of Return ("IRR") at Financial Close) at ITT (stage 2) and provide letters of commitment with their bid. We set out how we thought this would help demonstrate that a solution had investor support and encourage bidders to make sure that financial risks had been fully considered and mitigated where possible.

Phase 2 consultation and stakeholder feedback

While we did not ask a question on fixing the equity return in our Phase 2 consultation, we asked for feedback on this issue during subsequent workshops. Some stakeholders noted that, given the nature of early competition, bidding groups may be led by a solution provider. Some suggested that equity (like debt) could be competed at a later stage. Others noted the importance of structuring bids to make them suitable for funding, and the central role that equity investors play in this process.

Updated preferred option

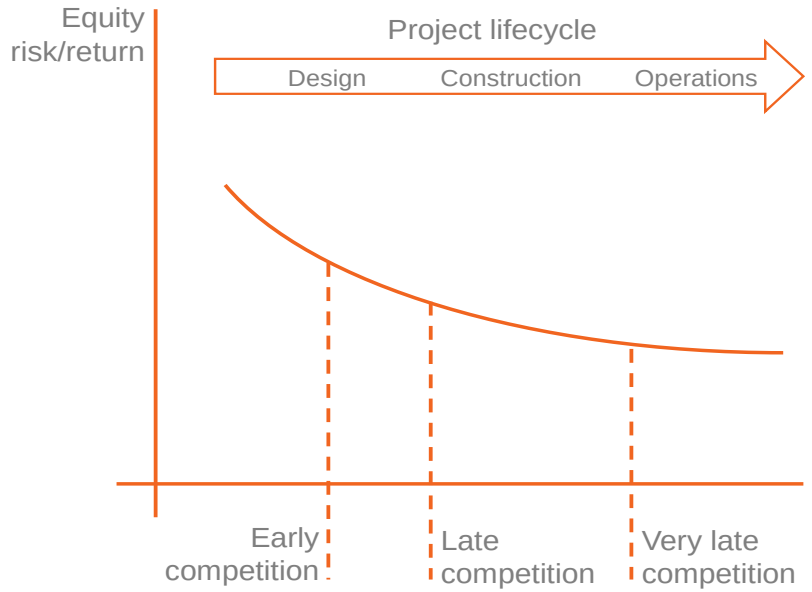
It remains our preferred option to fix the equity return at the bid stage. This approach is consistent with the objectives for early competition set out by Ofgem. In their open letter in March 2020, Ofgem noted that design-only competitions were best pursued outside of early competition.

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.

We recognise that this may lead to higher equity return requirements in early competition than those seen in versions of late competition (e.g. Public Private Partnerships) 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. This is shown in *Figure 4*.

Figure 4: Illustrative diagram of risk through the project lifecycle



New issues for consultation

In our Phase 2 consultation, and in subsequent workshops, we focused on the issue of when the equity IRR would be fixed. In the process two related issues were raised which we consider below.

Preferred option

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, it is our current preferred option to ask 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:

1) The level of the cap set for the PPWCA, and

2) The minimum level of gearing indicated by market soundings.

Equity sales

As part of the workshop feedback, the question of when equity sales may be permitted was raised. Stakeholders identified that different types of investors may be looking to invest for different stages of the project lifecycle, for example for 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 most important.

It is therefore our current preferred option to look at permitting equity sales only once the solution has been successfully commissioned.

We are not proposing 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 there may be potential for windfall gains in future so we plan to continue to consider the need for an equity sale gain share mechanism.

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.

Questions

7. Do you agree with our current preferred option with regards to equity? Why?

3.5 Indexation

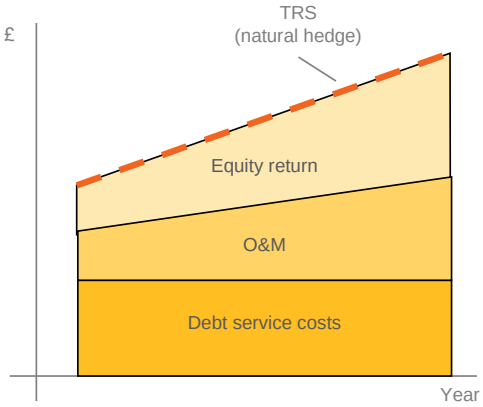
In Section 2.1 we set out that our current preferred option is to partially index the TRS to provide a natural hedge against inflation. Our Phase 2 consultation did not set out how this approach would work in the process for setting the fixed TRS.

Below we consider the issues raised by partial indexation and our current preferred option for how partial indexation is set - both in the bids submitted at ITT (stage 2) (to allow for direct comparison) and as adjusted in the contract or licence at the end of the preliminary works period.

Partial Indexation

As set out in Section 2.1, it is our preferred option to only partially index the TRS. 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 5*.

Figure 5: Partial indexation (illustrative)



As set out in the previous sections, final costs and therefore the proportion of costs subject to inflation will only be known once the debt competition is run. In turn, the debt competition can only be run once preliminary works are finished, and the PPWCA has been completed. This means that the proportion of TRS that needs to be inflation linked can only be determined just before the TRS is fixed. This raises the following questions:

1) What proportion of the TRS should be assumed to be indexed when bids are evaluated?
2) How should that proportion be updated following the debt competition?
3) How should any pain/gain between (1) and (2) be shared?

ITT (stage 2)

One option for ITT (stage 2) is that the proportion of TRS to be indexed should be set by the Procurement Body as a standard bid assumption. This would also be consistent with the current preferred approach 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 may be appropriate to require bidders to 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 documents 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, it may be appropriate for any resulting change (positive or negative) in TRS to be passed through to consumers.

Preferred option

It is our preferred option to try and achieve a natural hedge as set out above. In addition to being value for money for consumers, it will help ensure comparability between bids and minimise the potential distortions between bids.

As different bids may have different proportions of their TRS indexed, bids would need to be compared based on the Net Present Value ("NPV") of their TRS over the length of the contract or licence. This would require the Procurement Body to specify an assumed inflation rate and discount rate for the evaluation.

Questions

8. Do you agree with our views on indexation? Why?

4 Other Considerations

This section addresses three other considerations relevant to the commercial model. Below we set out our proposals regarding how the relationship with the successful bidder is governed, what would happen in the event a network need changed or disappeared, and arrangements in the unlikely event that an early competition failed.

4.1 Licence/Contract and Codes

In our Phase 2 consultation we set out our view that successful network solutions would require a Transmission Licence and that successful non-network solutions would enter into a commercial contract with a Contract Counterparty, although they might also have or require some other form of licence and where this is the case further consideration on any interactions would be required.

We set out that heads of terms would need to be created in respect of the Transmission Licence and the contract, and that these arrangements would need to be comparable. This section sets out our proposals around these topics as well as what further development will be needed following a decision to implement early competition.

Phase 2 consultation

As above, our Phase 2 consultation started to consider on what basis a successful bidder would deliver their successful solution. Our view was that solutions performing the function of Electricity Transmission are network solutions and require a Transmission Licence. Solutions not performing the function of Electricity Transmission do not require such a licence and would enter into a contract with a Contract Counterparty.

We noted that successful non-network solutions might be another form of licensable activity and still require another form of licence. We also noted that all parties should accede to any relevant codes. In addition, if Transmission Owners ("TOs") were to participate in an early competition and be successful there is a question on whether a new licence or a licence amendment would be most appropriate.

Stakeholder feedback

In our Phase 2 consultation we asked stakeholders whether they thought that the existing industry codes/process could incorporate both network and non-network solutions if there were to be minor adaptations. We also asked whether there could be any gaps or fundamental issues.

Stakeholders generally agreed that any successful party must accede to the relevant industry codes. They also generally agreed that existing industry codes and processes are suitable and can be modified. They however said that adjustments are unlikely to be minor adaptations - some examples were provided for consideration.

The Electricity System Operator ("ESO") was identified as the primary entity to identify and suggest the necessary industry code and process changes. Some stakeholders asked for more detail on the expected changes considering the proposals and reserved judgement until further information is available.

Stakeholders noted other frameworks which will require updates including

TO and ESO licences and the Network Options Assessment ("NOA") methodology for instance. One noted that codes covering network and non-network solutions will need to be aligned as different parties will be complying with different codes.

There were also concerns raised by some stakeholders about the provision of services under contracts to avoid 'inadvertent consequences' where a network need is being satisfied by a non-network solution.

Be transparent where possible

In September 2020, we held workshops to discuss our views on heads of terms and industry codes to gain insights prior to our Phase 3 consultation.

Some stakeholders agreed that we should further explore alignment of the tender process and the connections process and some stakeholders do not think that an incumbent TO should require a Competitively Appointed Transmission Owner ("CATO") licence.

Further points raised by individual stakeholders were:

- Non-network solutions should not be precluded from providing other services when they are not needed for the tendered service
- Closer alignment between CATO and incumbent TO licences would be welcomed; and
- Careful consideration is needed in relation to the System Operator Transmission Owner Code ("STC") and how changes might affect both the ESO and TOs.

In our webinars stakeholders generally agreed with the views presented in respect of the potential scope of industry code change and one stakeholder suggested that in future we differentiate between those changes which are consequential and those which are substantive.

Keep our stakeholders in the know

We attended Grid Code Development Forum, Transmission Charging Methodology Forum, Grid Code Review Panel and STC Panel in September 2020 to provide an overview of our Phase 2 consultation and to highlight our engagement activities including our Phase 3 consultation.

Some stakeholders informed us that as well as considering the industry codes and standards it is important that any engineering specifications are considered. For example, would a network solution need to comply with the engineering specifications of the incumbent TOs or could there be scope to diverge and if so how would this be managed and communicated.

Updated preferred option

Based on stakeholder feedback our views on this topic have not changed but we agree that changes to industry codes and processes will not be 'minor' and reviewing and updating industry codes and processes will be a significant undertaking for early competition. A more accurate way of describing the expected industry code changes might be that they are likely to be 'significant but deliverable'.

We also agree that the ESO is likely to be well placed to undertake more detailed code change analysis in future. We agree alignment between network solutions and non-network solutions requires careful consideration, but we would note that we are not seeking to fully harmonise arrangements. In some cases, we believe it is appropriate for non-network solutions to have different obligations under contract and code than network solutions have under licence and code. For example, in relation to the facilitation of new connections as is further discussed in Chapter 5, End-to-End Process.

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

Heads of Terms and Industry Code Changes

We have set out more detailed views on the Heads of Terms and potential industry code changes which are associated with our model proposals in Chapter 8.

It is worth noting that in some cases our proposed early competition model looks to the offshore regime as a comparison and in others the onshore regime. For the STC our current view 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 Offshore Transmission Owners ("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. The aforementioned example, in relation to facilitating new connections, is a good example where we are proposing that CATO obligations under licence and STC will be substantially similar to the arrangements in place for onshore TOs, rather than being similar to OFTO arrangements.

In both cases the content of Chapter 8 will need to be further developed with wider industry prior to 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 implemented in future.

In Chapter 6, we set out some of the proposals for how we would go about implementing changes to industry codes.

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. At this point in time, we have not fully considered the potential interactions between European legislation and European Network Codes and early competition. Based on our initial research we believe there will be some interaction but none which will be a material issue. A handful of examples which require further consideration (including in relation to EU Exit) 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 Chapter 3 (Identifying Projects) would be restricted by the European legislation and European Network Codes but this requires more detailed consideration in future.

Unbundling Provisions

There are unbundling provisions which will interact with the early competition model as licensees will need to consider unbundling provisions when considering all solutions to make sure that their proposals would be delivered in a compliant manner. For example, a licenced TO would be restricted from bidding and providing a non-network solution which is classified as licensable generation as 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 the development of their Ten-Year Network Development Plan) an exercise will be needed to determine the appropriate relationship between CATOs and ENTSO-E.

Questions

9. Do you agree with our updated views on licence/contract and industry codes? Why?

4.2 Needs Change or Disappearance

As set out in Chapter 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 entirely disappears. While such circumstances are expected to be rare it is appropriate to have a policy to cover the eventuality.

Our Phase 2 consultation identified a change in need as one of the potential risks that would need to be allocated under a licence or contract to the party best able to manage it. As the risk of a change in need is entirely outside the control of the successful bidder, we considered 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.

Preferred option

Preliminary works period

As set out in Chapter 2 (Roles and Responsibilities) the network need will continue to be assessed annually through the NOA and associated 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 (as set out in the Heads of Terms in Chapter 8) would allow the Contract or Licence Counterparty, on the direction of the Approver, to ask the successful bidder to price a change in the agreed 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 licence. Again, this assumes permissible via the prevailing procurement legislation but noting we assume there will be new procurement regulations for early competition.

In the event of a termination or an agreed needs change, our proposal is for the successful bidder to 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 also potentially include reasonable margin but this requires further consideration.

Construction period

While no formal check points are proposed for reassessing the network need during construction, the ongoing NOA and 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 licence provisions would apply, as set out in the Heads of Terms in Chapter 8. These may be the initiation of the change process or a termination. In the event of a termination the relevant compensation provisions would apply and further information can be found in the Heads of Terms in Chapter 8.

Operating period

As during the construction period, there are no formal check points proposed 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 Chapter 5. End-to-End Process.

In the highly unlikely event it becomes apparent that the underlying need has disappeared in the revenue term, with Approver direction, the Contract or Licence Counterparty could then potentially look to terminate the operational project.

As above, the relevant contractual or licence provisions would apply, including in respect of compensation payments, as set out in the Heads of Terms in Chapter 8.

New issues for consultation

Our Phase 2 consultation did not address the possibility of a needs change or disappearance after a tender was launched but before a licence or contract was awarded at the conclusion of the process. In this event 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 need.

Preferred option

It is our current preferred option 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 we will explore alternative options.

Questions

10. Do you agree with our views on need change or disappearance? Why?

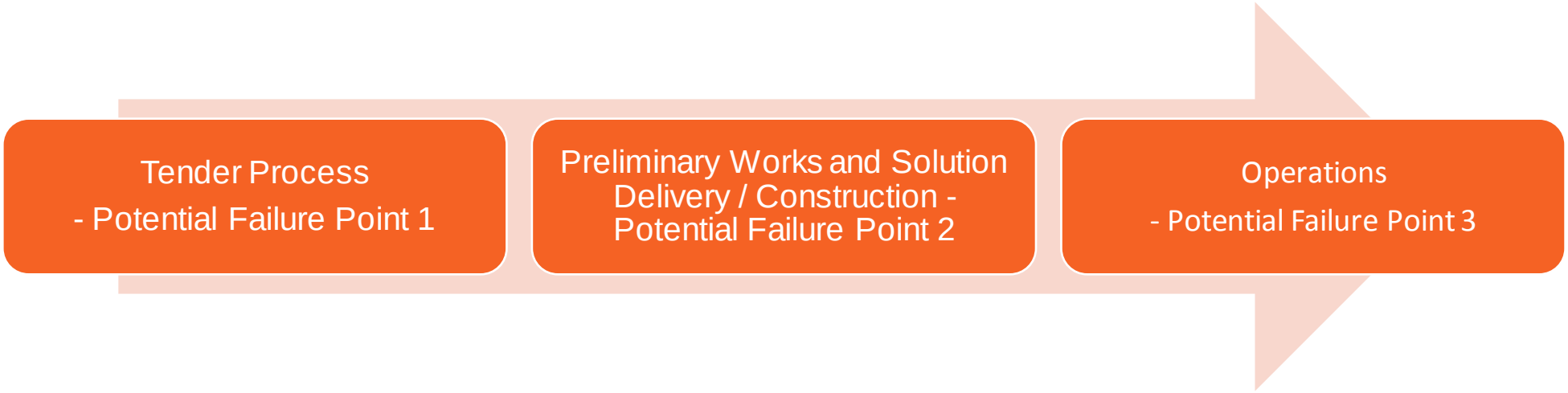
4.3 Provider of Last Resort

We need to consider what happens in the unlikely event an early competition process or outcome fails.

This could occur for three main reasons, shown in *Figure 6* below.

Firstly, if a successful bidder is not appointed through an early competition tender process. Secondly, if a successful bidder fails to deliver and commission the awarded solution. Thirdly, if a successful bidder is no longer able to fulfil their obligations once the awarded solution has been commissioned.

Figure 6: Potential failure points



Phase 2 consultation and stakeholder feedback

Whilst we did not include views on this topic in our Phase 2 consultation, nor have we discussed it specifically in our subsequent webinars, the concept of a 'provider of last resort' has occasionally been discussed with some stakeholders. This has included requests for clarity in respect of the early competition proposals. In our Phase 2 consultation we stated that we would provide further information in this Phase 3 consultation which is as follows.

New issues for consultation

As the underlying transmission need is likely to still exist in the unlikely 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. We expect 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 to this guidance. 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.

Non-network solutions

However, regarding non-network solutions there are further considerations, primarily in relation to the fact that 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 practicable to develop 'Non-Network Solution Provider of Last Resort' arrangements.

This is a potential issue for early competition as 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 solutions fails to deliver or can no longer provide the contracted service. *Table 3* sets out the options we have considered to resolve this issue.

The 'OFTO of Last Resort' process is a three-step process culminating (as a last resort) in licence revocation and transfer of assets to another Transmission Licensee. To resolve an issue this process first involves proactive engagement with the OFTO by Ofgem and subsequently the potential for enforcement action, Energy Administration, retendering of assets or the market sale or transfer of the assets. In the event the other options are exhausted OFTO of Last Resort powers would be used by Ofgem.

Table 3: Non-network solution provider of last resort options

Option and Overview	Observations	Position
Licence obligation extension: **Apply 'provider of last resort' licence conditions to non-network solutions whether with Transmission Licensees or with other licensees**	Whilst this would be the most comparable solution it has numerous challenges. The first challenge is that network owners are unlikely to be able to own non-network solutions due to regulatory policy and unbundling restrictions. 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. The third challenge is that some non-network solutions could have no other form of licence.	We do not feel that this option would be practicable.
Contractual step in rights: **Allow the contract counter-party to step into the contract to continue to provide the service**	Whist this would mitigate the concern it has numerous challenges. 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. The second challenge is that the Contract Counterparty is unlikely to have the necessary skillset to step into the contract to provide the service. 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.	We do not feel that this option would be practicable.
Enhanced risk management: **Enact an enhanced risk management approach e.g. enhanced monitoring or enhanced contract terms**	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. 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. For the avoidance of doubt, such measures would not include contractual step-in rights.	This is our preferred position.
Network solution only competitions: **Exclude non-network solutions from participating in certain competitions e.g. where non-delivery would result in significant operability issues**	Whilst this would mitigate the concern, we feel it conflicts 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. Therefore, this option would only be used as a last resort where 'enhanced provisions' would not be adequate. The means of exclusion would require further consideration.	In the event of unmitigated risk of a material nature then this is our preferred fall-back position.

Preferred option

Therefore, our current preference is for the 'OFTO of Last Resort' licence conditions and guidance to be extended to incorporate relevant 'CATO of Last Resort' provisions in respect of both tender process failures and issues with 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. Whilst 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) we feel that such differences can be justified due to the apparent incompatibility of the anticipated 'CATO of Last Resort' provisions and non-network solutions.

Whilst we are not stating non-network solutions are less reliable than network solutions the reason some network needs may only be suitable to progress through a network solutions (including a CATO) is due to the additional protection provided by the licence route and the associated arrangements which may not be sufficiently delivered via a contract route.

We do not foresee any 'enhanced provisions' being developed until necessary in any future implementation period for early competition but we have highlighted some potential areas where they could be potentially applicable in our proposed Heads of Terms in Chapter 8.

Questions

11. Do you agree with our views and preference in respect of the 'provider of last resort' arrangements? Why?

Next Steps

Thank you for taking the time to read this chapter of our Phase 3 consultation. We look forward to receiving your feedback which will help inform the final version of the Early Competition Plan. For full details on the range of options on how to respond, please refer to the Consultation Summary, Section 8.