SP ENERGY NETWORKS

Network Planning & Regulation

James Norman
Head of Transmission Competition
Ofgem
9 Millbank
LONDON
SW1P 3GE

Date:
11th January 2016

Contact / Extn:
Scott Mathieson
0141 614 1612

Dear James,

Consultation on extending competition in electricity transmission: proposed arrangements to introduce onshore tenders

SP Transmission plc (SPT) is the electricity Transmission Network owner in central Scotland. The transmission network consists of the extra high voltage infrastructure that conveys electricity from power stations and interconnectors to distribution system entry points or, in certain cases, direct to end users' premises, and is generally regarded as critical national infrastructure.

In the UK we enjoy an efficient and secure transmission system underpinned by effective regulatory oversight from Ofgem, which has ensured:

- stable and predictable conditions to encourage investment;
- efficient participant behaviour;
- efficient grid development;
- public good reflectivity; and
- effective stakeholder engagement

The RIIO-T1 framework was developed to help deliver three core objectives of a Transmission Owner business:

(1) Energy Security;
(2) Affordability;
(3) Carbon and greenhouse gas emission reductions (including facilitating Renewables).

The RIIO framework set out to encourage companies to deliver these objectives in a coordinated fashion, efficiently and innovatively, under guidance from a GB System Operator.

The BETTA regime is predicated on partnership and close working relationships between the System Operator (SO) and Transmission Owners (TOs). In an environment which is seeing unprecedented investment in the GB transmission network, we believe it is in the best interests of consumers that the key issues detailed in this response are addressed to ensure that such relationships are not jeopardised.

Where value is delivered for consumers, SPT supports initiatives that efficiently lower the cost of transmission and the promotion of competition. However, there are several areas within the current ITPR proposals which are insufficiently detailed or developed to allow them to be properly assessed at this stage. If these areas are not addressed, SPT believes that there is a risk that the onshore competitive tendering regime, as currently envisaged, could negatively impact the best interests of consumers in both the longer and shorter term by undermining the three core objectives of an efficient and coordinated Transmission Owner.

The remainder of this letter sets out these considerations and others in greater detail; fuller information follows in Appendix 1.

1. Potential for delays to development of key infrastructure

Two tender models have been proposed by Ofgem and are referred to as Early and Late, relating to the point in the process at which the Competitively Awarded Transmission Owner (CATO) takes ownership of the project.

In both models there is a minimum 9 months period required to run the process compared to the existing arrangement and no proposals to recover this time have been presented by Ofgem.

Depending on the model chosen, the introduction of new steps and interfaces into the design and construction process will substantially reduce the scope for parallel working and take longer than Transmission Owner (TO)-only involvement, even when processes have bedded down. Currently TOs can deliver these activities in parallel, minimising risk and maximising efficiency. The impact of the additional steps and interfaces will mean that delays are likely to be between 12 and 24 months - and perhaps longer for very complex projects or projects with very high community impact.

The approach envisaged for the Late Model of the SO obtaining detailed s37 consents and land rights on behalf of the (yet to be appointed) CATO, raises a number of practical problems that are likely to impact the design and construction process timescales. Land rights in particular depend on the detailed approach to the design and construction of the line. By the SO obtaining these in advance of the tender, the detailed design becomes highly constrained, limiting any remaining scope for innovation.

In addition, there are unknown legal consequences in Scottish planning. The legal consequences of the SO obtaining consents on behalf of an unknown 3rd party are unknown; this is an area which has yet to be explored.

These delays could be expensive if there are significant constraint costs to mitigate and/or could lead to reduced security standards until the upgrade is complete where replacement of an existing asset is within the scope. Given that the network is currently constrained, such increased costs to the consumer seem inevitable in the event of delays. In addition, where replacement of an existing asset is within scope, any uncertainty or extension of timescales will lead to additional maintenance and refurbishment costs to ensure security of supply is not compromised.

To mitigate such risks, it may be necessary to select schemes for tendering that are less likely to impact time critical projects or replacement of existing assets, especially in the early years of the CATO regime.

2. Local community impacts from dealing with multiple parties

Onshore Overhead Line Construction projects are environmentally sensitive and of considerable significance to the local communities we serve and within which we operate. TOs have invested significantly over the years in understanding community issues and taking steps to resolve them, for example, through landscaping or reducing impacts through related construction work. In addition, a critical activity required to deliver Transmission projects is gaining land access to enable construction work on any approved route; SPT has published a Grantor's Charter that explicitly assures land owners of the standards SPT will adhere to. If a CATO is unable to achieve the same level of community trust and engagement, significant unexpected additional delays may be incurred.

The SO or CATO will need to achieve a similar level of community trust and engagement. At the least, this will take some time, but if it is not successful, significant unexpected additional delays may be incurred.

It is important to note that planning permission is only the upfront aspect of local community engagement, since land rights and/or land acquisitions are also needed. This activity is resource intensive and if insensitively handled can add further delay to any project.

The competitive model will need to resolve how best to protect the interests of local communities and land owners who will have to deal with an even more complex situation. In the Early Model, landowners and local communities will need to deal with the CATO (in respect of new infrastructure) in addition to the developers (e.g. generators) and the TO (in respect of existing infrastructure). In the Late Model, additional complexity is introduced to these parties by the transition from the TO that has developed the project, via the SO, to a CATO that will construct and own the project thereafter.

3. Ofgem's preference for a Late Model

Late Model bids will be fixed price, reflecting the greater certainty of scope. Early Model bids will be indicative with unit cost provisions. In the enduring case, the TOs will have no involvement in the process but in the RIIO-T1 period they may need to share pre-construction information. Successful CATOs can recover their tendering costs but unsuccessful parties cannot.

In considering which model should be preferred it needs to be understood that the role of an existing TO is to plan, design and develop their network, in accordance with direction from the System Operator (SO). Whilst the TOs have responsibility for construction, between 90-95% of the total expenditure on projects is currently fully competitively tendered. In our view, the Late Model approach leaves little potential for further realisation of value through competition, and severely limits the scope for innovation by a third party. In SPT's opinion, it is in the earlier planning and design phases that competition can potentially drive the most material economic value.

Whilst both models will be developed, Ofgem currently has a preference for the Late Model as it is seen as lower risk and will enable more entrants to participate. However this will be after a design has been sufficiently developed for a scheme to allow planning to proceed. Any value that can be created through competitive tendering is unlikely to come from innovative designs that deliver lower costs, but rather from opportunities to achieve lower project financing costs when market conditions are favourable.

For the Late Model, the SO will be responsible for obtaining consents. This will lead to duplication as the National Grid TO business will have a similar function for non-tendered works in England and Wales. As yet, this has not been factored into any assessment of benefits.

As we highlight at the outset of this section, in large scale Transmission projects, the Design phase is the most critical phase in realising the greatest savings and managing overall risk. The true potential for competition will therefore only be revealed under the Early Model which should have the greatest scope for costs savings.

SPT believes this model should be the focus for Ofgem since the Late Model is post design and preliminary works by the TO, so the benefits are limited to any efficiencies in procurement and management of schemes and finance, which may not in some cases be sufficient to justify the cost of tendering (including costs incurred by reason of delay) together with the ongoing operational costs of having a separate CATO.

4. The Offshore Regime is not a realistic basis for comparison

We understand from a briefing call with Ofgem on 22 October 2015, that a detailed cost benefit analysis has not been carried out. The projected savings of 15-20% are based on the OFTO regime and comparisons with competition in other countries; the credibility of these projections has been questioned by many consultees during the early stages of the ITPR process.

The OFTO regime has a number of major differences. In particular, the assets have in practice all already been built and commissioned by the developer before the tender takes place. This means that an OFTO bidder does not need to make any allowance for construction risk or delay. Such investments may be attractive to investors favouring low risk/low yield investments. There is no reason to suppose that a CATO would have the same investment profile or that OFTO experience is a useful pointer as to how CATO auctions would run.

Ofgem's assessment is that savings of 6% are required to offset costs associated with the tender process. Ofgem estimates that projects in the order of £1bn per annum will be tendered, giving benefits of four or five times those estimated by DECC in the Budget statement (£350m over ten years). Similarly, there is no analysis presented to define how the time to tender projects will be recovered.

It is essential to ensure that any tender process requires new entrants to include the costs associated with operating a TO business in their bids.

We estimate that if onshore competition were to deliver 6% savings on £2bn Projects in 2014/15, the impacts would be around 15p on a typical domestic customer's annual bill. Actual Scottish constraint costs on 17 February 2015 were £1.8m for one day. This consultation recognises potential delays of 9 to 18 months to incorporate a tender process, our analysis indicates longer for some projects. Applying this delay to CATO transmission projects will increase constraint costs over 2 years that could result in a net cost to the consumer and erode any potential benefits. Taking only the average weekly constraint costs into account, the potential 15p saving to a consumer's annual bill would be removed completely should only 3 Scottish SWW projects be delayed by an average of 18 months. To address this issue, particularly in the early stages of CATO, our recommendation is to avoid projects with high constraint benefits within their business case and focus on the Early Model.

Given the risks to the projected savings and, the importance of the UK Transmission system and security of supply, we believe Ofgem should conduct further more refined cost benefit analysis based on more specific project type criteria. We would be happy to provide assistance, where possible, to establish the benefits so that these can be measured and audited going forward. This

cost benefit analysis should be based upon a range of appropriate scenarios for present and future consumers.

5. Requirement for a level Playing field

CATOs will be licensed TOs and it is not yet clear formally if SP Transmission could hold a CATO licence together with its existing Transmission licence. The concept of a 'bidding business' has been introduced which may be an indication that incumbent TOs may require separate entities to hold a CATO licence. We acknowledge that there has been some clarification that the intention is that existing TOs should be allowed to compete but how this will be achieved remains to be clarified and firmed up.

Ofgem have accepted that there is a significant risk to the fairness of the process due to conflicts of interest within National Grid.

These can be summarised as arising because the SO, which is meant to play a role in holding the ring in the ITPR process, is owned by a group that has a major interest both as a TO and a CATO. This conflict could manifest itself, for example, by National Grid:

- favouring their TO business by manipulating in-area project definitions to exclude competition;
- favouring their bidding business by manipulating out of area project definitions to allow competition;
- favouring their bidding business by sharing costs or other information;
- favouring their TO business by providing preferential system access.

The question of whether conflicts of interest can be managed through behavioural rules or whether ownership separation is required depends on how deep in practice the conflicts are. We consider that these conflicts, together with those around the role of the SO in relation to interconnectors (which National Grid may have an interest in) are sufficiently deep as to put the question of SO ownership on the table. Some potential TO conflicts have been identified, the principal issue being cross-subsidy of competitive activities from price control funding. An example of this would be excluding operations and control room costs from bids, where new entrants may require to make provision for these costs in full.

Ofgem proposes that, during the RIIO-T1 period, only Strategic Wider Works (SWW) projects can be delivered through tendering ("the transition regime"). As each TO has a differing SWW project trigger threshold monetary value, there will be inconsistencies in the transition regime. For example, a project which may be competitively tendered in SPT's licence area may not be competitively tendered in NGET's licence area due to the differing project trigger values.

6. Need for consistency in licence, incentives and overall framework

To ensure that the three core objectives of a Transmission Business can be met, (outlined at the start of this document) a number of additional factors need to be addressed within the tendering and licensing regime to ensure consistency:

- CATOs should be required to comply with the System Operator Transmission Owner Code (the STC) and be expected to develop and offer connections to their assets in accordance with the industry codes and practice to ensure customer (Load and Demand) interests are protected;

- Primary outputs should be based on availability and timely delivery, with secondary incentives on asset condition (similar to RIIO-T1 Network Output Measures) also being required to ensure adequate asset management processes and procedures are in place. This would be necessary to ensure that the asset life exceeds the 25 year cost recovery period;

- There is a need to ensure the SO process mandates coordination of substation and equipment standards in the interest of developing a secure Transmission system. A weak or incomplete specification (produced by the SO) designed to maximise innovation could lead to a degradation of system security. Without addressing this, these two factors could lead to a 'race to the bottom' in a tender exercise; should the local TO be forced to adopt these assets after the 25 year financing period, there are obvious implications for network management;

- The removal of new build work from the incumbent TOs is likely to increase the costs associated with the remaining works as benefits of scale are lost; and

- We also agree that CATOs should be eligible to participate in innovation incentive mechanisms as long as any learning and information is shared, as per the existing principles of the mechanisms.

7. The potential risks associated with a 25 year fixed price contract.

An essentially fixed 25 year contract will provide less scope for Ofgem to operate incentive regulation, fine tuning the rewards at successive price control reviews. Incentive regulation both encourages companies to innovate to cut costs and subsequently transfer the benefits to the consumer. This approach has been instrumental in facilitating the achievement in GB of some of the lowest transmission costs worldwide, without compromising on quality of supply.

While the past is not necessarily a good guide to the future, it is at best unclear that 25 year contracts signed in 1990, even after a competition, would have been below the cost achieved after 25 years of incentive regulation.

It is important that the financial standing of prospective CATOs (and the durability of that standing) is stress tested within the tendering process to provide confidence that the winning CATO will be able to discharge its obligations and deliver the required outputs over the 25 years – particularly in cases where bidders are very highly geared. This will also include taking account of what happens to residual asset values should an incumbent CATO fail to renew their contract after 25 years.

8. Conclusion

SPT has responded to each of Ofgem's consultation questions in the attached Appendix 1 to explain its position in more detail. In summary, SPT's responses highlight the risk and complexity of delivering the Late Model, issues with respect to securing consents and land rights; the requirement to ensure equipment and design standards are not eroded and the inconsistency in the transition regime.

SPT supports competition where it is appropriate and in the best interests of consumers. However, much work has to be completed to demonstrate that there is a robust framework in place for onshore competition.

SPT will continue the work it is doing to implement the enhanced SO role and will make every effort to ensure a competitive regime is developed that works in the best interests of consumers. Should you require any further clarification on any of SPT's responses in Appendix 1, please do not hesitate to contact me.

Yours sincerely,

Scott Mathieson
Network Planning and Regulation Director
SP Energy Networks

Appendix 1: Responses to the Consultation Questions

Chapter 2: What will be subject to competition and how will those projects be identified

Question 1: What are your views on the proposed detailed interpretations of new, separable and high value (the 'criteria')?

We believe that the criteria for selecting projects for tendering should go beyond, new, high value and separable to take account of important complexities and risks in particular the impact of delays associated with the inclusion of the tender process, see our response to question 4 below.

High Value

SPT believes that the costs and complexities of competitive tendering for onshore transmission have been underestimated, potentially eroding the value of any savings which may be achieved. SPT will explore this in the remainder of this Appendix 1. The minimum value of £100million is not consistent in respect of the transition regime for RIIO-T1 Strategic Wider Works (SWW) projects which have various threshold values across the three onshore TOs. As the threshold for SWW in England and Wales is £500m, the majority of projects open to tender up to 2021 will be in Scotland (the SWW threshold for SHETL is £50m and £100m for SPT). This inconsistency undermines Ofgem's stated intention to establish a level playing field for the onshore competition regime.

The basis for establishing the £100million is predicated on savings made in the offshore regime. Ofgem's consultants BDO/CEPA in their report on the Round 1 benefits concluded that "in reading across to what might be implied for the onshore regime, it is important to recognise that TR1 OFTOs are of a materially different scale and risk profile", the savings relate to the operation of existing assets and not their construction. This would suggest that using the savings made in the offshore regime as a reference point is not appropriate.

Separable

Inclusion of projects involving the complete replacement of assets would require the development of an additional process for the SO to assess the non-load related investment plans of TOs. SPT does believe that the blanket inclusion of asset replacement projects will need to be carefully thought through in terms of clear delineation of ownership boundaries. Electrical contiguity should be a prerequisite for tendering.

New

SPT agrees that substantially new assets should not be considered a relevant category.

Question 2: Under what circumstances do you think asset transfer from an existing asset owner to a CATO would be required, recognising the principle that projects identified for tendering should be new?

SPT believes that the circumstances where asset transfer would be required are rare, very specific to each project and thus not easily defined at this stage of the process which is lacking in detail. It should be noted that many of the circumstances detailed in the consultation (2.8) are currently managed by temporary transfer of control responsibilities, rather than by transfer of ownership.

In Scotland, consent under Section 37 of the Electricity Act 1989 will be required for any new assets which are subject to this regime. The transfer of Section 37 Consent is largely untested in Scotland and therefore inherently uncertain territory. The process for transferring such a consent will need to be clarified and potentially changes will need to be made in the planning and consenting process. We do not believe that the difference in planning rules in Scotland have yet been considered by Ofgem. Transfers will be required between the SO and CATO under the proposed Late Model

which would add unnecessary delays and costs which would not be required under the Early Model.

Even if these procedural issues can be resolved, the principle of securing land rights and consents for the CATO (which will be an unknown third party) will undermine what is already a very challenging process. We anticipate that landowners will be at best reluctant and at worst unwilling to grant rights in favour of or which are capable of being transferred to such an unknown third party. This will inevitably result in increased delays and costs. Ofgem do not appear to have assessed the impact of this or considered it in their estimated costs savings for consumers. The requirement for asset transfer of this nature is eliminated by use of the Early Model.

Asset transfer of civil structures or electrical apparatus may be necessary but should be minimised. Existing industry processes should be able to achieve this.

Question 3: What are your views on our proposal that electrical separability should not be required at each interface, but that the SO can propose it to us if it thinks there is a cost-benefit justification based on system operability? We do not believe that electrical separability between TO and CATO networks is essential to create a safe, reliable transmission network.

SPT considers separability is not essential; however, it will result in CATO and TO networks being interdependent for operations and maintenance. It is essential that the CATO licence conditions contain appropriate provisions for outage planning and co-ordination to ensure that, at the interface point, TOs continue to have access to their own assets in accordance with existing industry rules. Electrical interdependence also requires that consistent and minimum technical standards are applied to safeguard the enduring resilience of the transmission system.

Question 4: What are your views on the suggested process and roles for identifying projects for tendering? We have proposed specific roles for the SO – do you think there are any additional roles the SO could take on to support competition? What's the most appropriate way to ensure that the network options assessment (NOA) considers the widest range of network options, including those that would be tendered?

The development process for projects in advance of the potential tendering stage requires firstly, the need for the project to be identified. Secondly, significant development work is required to determine the viability of the options presented for assessment in NOA and engineering development, to a relatively detailed level, in order to produce cost estimates before the options will be proposed. Only then can these options be assessed against the tender criteria. All of these activities require the TOs' involvement and the TO needs to undertake this work to comply with its statutory and licence obligations to develop an economic, efficient and co-ordinated network. The description of the process in the consultation document (and in particular 1.42 of Appendix 2) does not reflect this and should be corrected to show the TOs' involvement in this process.

The consultation is written against the background of boundary reinforcements and large generator connections. The latter is not explicitly included in NOA and the consultation does not consider the requirements for non-load related projects. The requirement for the SO to identify potential projects for tendering within a TO's asset replacement programme through the NOA process has not been adequately detailed.

In addition to the new, separable and high value criteria, the process for deciding whether a project is suitable for a CATO should also take account of the following:

- The likely additional delay that may result from competitive tendering including the additional steps and interfaces that will need to be introduced into the design and construction process

- the impact on the pipeline of generation projects (e.g. 3.5GW of committed wind connections in SPT to 2021)
- the costs of delay to consumers e.g. constraints

any other demonstrable, material costs arising from using the CATO route (eg cost of coordinating additional parties). The NOA process, as per Licence Standard Condition C27 is limited to works that are defined as Major National Electricity Transmission System Reinforcements. It is possible that there will be reinforcement works within system boundaries that may meet the criteria for tendering but will be outside the scope of NOA. Clarity is required on the treatment of these projects.

The current NOA process is subject to the TOs' statutory obligations to develop economic, efficient and co-ordinated systems of electricity transmission. This already ensures that the fullest set of options is evaluated. The SO's new obligations to verify this and propose options that TOs could not, confirms that this obligation is fulfilled. The obligation exists independently of the delivery and ownership of new works by the TO or a CATO.

Question 5: What incentives and obligations should the SO and TOs have for undertaking preliminary works for tendered projects, and is there any value in considering a success fee incentive?

SPT does not agree that preliminary works carried out on behalf of a third party as required in the Late Model will be efficient or coordinated; rather, we believe they should be undertaken by the CATO as required under the Early Model for the following reasons:

- In the enduring model, the SO currently has limited capability to undertake detailed engineering design, environmental and consenting works to deliver preliminary works.
- The need for the SO to establish these functions and relationships within its business will lead to duplication which is inefficient and uncoordinated.
- The relationships established by CATOs or incumbent TOs with stakeholders, including landowners, consenting authorities and communities are critical to the timely and efficient execution of the project - and these do not currently lie with the SO.
- The interaction and iteration of design and consenting precludes the effective development of a fully certain tender proposition. Consents which are capable of being implemented are best achieved with the involvement of the designer, supplier, developer and delivery organisations i.e. a CATO/incumbent TO and its supply chain.
- The transfer of consents e.g. from SO to CATO, is uncertain territory in Scots law. Although this may not be insurmountable, the process for securing these, as noted above, requires to be clarified. This will make it very difficult to achieve an enduring process that will prevent delays and additional costs.

It should also be noted that 'preliminary' works relate not only to environmental and consenting activities, but also to system design, analysis, overhead line/cable and substation engineering.

It is not possible to determine if the preliminary works are eligible for tendering until a number of possible options have been designed, developed and cost estimates produced. Only at this stage (when these options are submitted to the NOA process) can the SO recommend projects for tendering.

At present, preliminary works are undertaken by the TO in the expectation that the asset will be constructed and provide revenue when complete. This provides an inherent incentive to deliver preliminary works that is only present in the Early Model.

SPT does not consider there can be an effective incentive for incumbent SO and TOs to deliver preliminary works in the Late Model that will offset the risk of increased costs and delays for consumers and is therefore not supportive of a success fee mechanism.

Question 6: Should CATOs pay for the preliminary works at the point of transfer?

In relation to the payment of the preliminary works, SPT would agree that the CATO should pay for the preliminary works at the point of transfer. SPT would however stress that the preliminary works should be delivered by the CATO to avoid increased costs to consumers.

Chapter 3 Who will the tender work and what will CATOs get?

Question 1: What are your views on our proposed late CATO build tender model? Do you have any views on the basis of bids, use of cost-sharing factors or what risks, if any, it would not be efficient for a CATO to manage during construction?

There is very limited scope for innovation in design or delivery in this model as in order to obtain consents and land rights, the SO will have been required to undertake design and development activities to a detailed level. This includes substation designs and layouts, overhead line tower design, construction techniques, access arrangements and traffic management. This level of detail requires suppliers to be engaged and in some cases, contracts placed, in almost all high value and complex transmission projects. The proposed Late Model does not acknowledge this aspect of delivering works and the timing of the tender process. SPT believes that the SO will not be able to obtain all consents and land rights without knowledge of the detailed design or construction techniques. Even if the SO does obtain such consents or land rights without knowledge of the detailed design or construction techniques it is likely that such consents or land rights would need to be varied before they could be implemented. The process to obtain consents can be lengthy and complex and the requirement to amend such consents or land rights before implementing them is inefficient. Furthermore, the need to obtain consents on behalf of an unknown party will add to the complexity and difficulty. It is not clear whether the increased time that this process will entail has been included in the analysis of benefits. SPT does not believe that there is appreciable value to be derived for consumers under the Late Model and it presents risks when compared with present arrangements.

SPT also considers the need for the SO to establish its own consenting function to be a duplication of the TOs' functions. This is a key function in transmission projects and does not end when consents are granted. SPT does not believe that the impact of this has been included in the benefits assessment.

SPT believes that the time to tender projects will lead to delays in the delivery of vital infrastructure including generator connections. Whilst delays are possible in the delivery of complex transmission projects, Ofgem's recently indicated preference to commence tender processes once consents are granted introduces an additional 18-24 months delay in delivering critical infrastructure. The costs of constraints and other adverse impacts such as associated loss of business, which could result from tendering delays, could be more significant than any savings made by competition. SPT does not believe that it has been demonstrated how the time required to tender will be recovered to ensure timely delivery. SPT is concerned that there has been no assessment presented of the risks of failing, due to the additional time the tender process will require, to deliver infrastructure by the optimum in service date.

SPT is notes that Ofgem has not explored the need to establish standards for equipment, substation, cable and overhead line designs. This is essential to ensure that the transmission system can be operated and maintained to provide the level of service required by stakeholders and to ensure that the assets are suitable for the long term.

Question 2: What are your views on our proposed early CATO build tender model? Do you have any views on what tender specification would best facilitate innovative but deliverable bids, and how we can best manage cost uncertainty after the tender?

As explained above, there is limited scope for innovation in design or delivery utilising the Late Model. It is SPT's opinion that the Early Model may offer greater value to consumers relative to the Late Model and is the most likely to be deliverable. While the design solutions developed by the TO and assessed by the SO in the NOA process will have been refined to a preferred option, there is likely to be some scope for a CATO to influence the design and delivery of works.

The Early Model allows the CATO to take ownership of the consents process from the outset. As a result, any risk associated with the SO's involvement under the Late Model is eliminated.

Cost uncertainty after the tender may not always easily be managed. The timescales from bid to tender award to delivery can be very significant. Certain factors beyond the control of the bidder may create significant cost increases. This type of uncertainty needs to be accommodated within the framework. Approaches adopted in the onshore price control regime such as cost sharing, asset adjusting events and re-openers could be effective. An option could be to require proposals for such mechanisms, to be included as part of the tender bid. This would allow flexibility, and project specific aspects to be considered.

Appendix 3 states that benefits will be derived from procurement. Given that TOs already procure significant amounts of large scale transmission infrastructure equipment and services and have larger portfolios of works, with associated flexibility and economies of scale, it is unclear what the procurement benefits are that a CATO will add within the constraints of the Early Model.

Appendix 3 refers to benefits from different construction, asset management and risk approaches. It is not clear what these are or why they could not be employed under existing regulatory settlements and that competitive ownership arrangements are required to deliver these benefits. Notwithstanding these questions, given the lack of scope for innovation in design under the Late Model, the scope for CATOs to deliver such benefits is likely to be limited relative to the Early Model.

Question 3: Do you have any views on the best way to tender projects that use high voltage direct current (HVDC) technology?

The extended design and development time of HVDC projects, when compared with AC, would render the Late Model impracticable. The proposal for the SO to undertake such a major design, development and procurement activity is not practicable. The increase in resources required, duplicating that of the TOs, to undertake this work is not efficient. It should be noted that it is not possible to design and procure HVDC converters in isolation from the cable or overhead line designs; this would require the SO to also engage with the supply chain and contract for the cable or overhead line solution.

The issues around the supply chain mentioned by Ofgem are generally in line with SPT's experience. However, SPT does not agree that introducing competition to the UK is likely to cause other vendors to develop HVDC solutions. The number of HVDC solutions proposed for the UK, is likely to be the same, regardless of the regulatory regime and competitive framework established. Other vendors may come to market but this will be as a result of increased global demand as the GB market is relatively small globally.

SPT is also doubtful that the new construction management techniques that competition would bring that a large and growing global market for HVDC has not; recovering the tendering period will be crucial.

For avoidance of doubt, there are other long lead project plant items that also make the Late Model impracticable. This issue is not solely linked to HVDC technology.

Question 4: Do you have any views on our proposal to prioritise late CATO build? Do you have any views on specific circumstances where early CATO build might lead to better outcomes than late CATO build?

SPT's previous answers explain its concerns about the practicability of the Late Model with respect to consenting and the need to engage the supply chain. The Late Model does not provide opportunities to innovate in design as a very detailed design is required to secure consents, particularly for overhead lines.

SPT remains concerned that the Late Model introduces significant consenting risks as a newly-established function in the SO will require to operate on a GB-wide basis. This will duplicate similar functions in the TOs and will not benefit from the local experience and capabilities held by the TOs, and the associated confidence of the consenting bodies and local communities in the local TO area. This, with the additional complexity caused by the need to transfer consents and rights to an unknown party will, in SPT's opinion, introduce significant delays and inefficiencies into the consenting process.

The Early Model has the potential to expand the knowledge pool of design and analysis engineers as these skills are required by the CATO to effectively plan and develop their systems, and to actively participate in the advancement of standards, codes and policies (with ongoing development also being a requirement under the Late Model).

Question 5: Do you have any views on how we could mitigate the risk of a CATO not being in place?

The appointment of a CATO of last resort would be consistent with the Offshore regime but requires clear rules on how value will be assessed and obligations and incentives for asset condition and specification to be included within the tender requirements.

Question 6: What are your views on our proposed revenue package for CATOs? Do you have any views on the proposed duration of the revenue term, including how it links to the asset cost recovery period, and whether operations and maintenance costs can be fixed over this period? Do you have any views on our proposed approach to indexation, refinancing and enabling new asset investment?

An essentially fixed 25 year contract will provide less scope for Ofgem to operate incentive regulation, fine tuning the rewards at successive price control reviews. This both incentivises innovation benefits and subsequently transfers them to the consumer. This is why GB has some of the lowest transmission costs worldwide, without compromising on quality of supply.

The unequal asset lives and revenue term builds in risks for consumers that CATOs will be incentivised to provide specifications, standards and maintenance to meet the revenue term rather than the asset life. There need to be suitable asset condition incentives to ensure that the integrity of the transmission system is maintained for the asset life.

On expiry of the revenue term, one option is the transfer of the assets to the local TO which may align with a CATO of last resort process. Similarly, the incumbent TO requires to have confidence that adopted assets are suitable in respect of their specification, design, operating and maintenance histories. The benefits of competition may be eroded if lower financing achieved for the early part of an asset life results in higher costs in later years.

It is essential that the revenue package acknowledges the costs associated with the CATO's role as a TO, as highlighted throughout our response, and the associated criticality of the transmission network.

It is important that the financial standing of prospective CATOs (and the durability of that standing) is stress tested within the tendering process to provide confidence that the winning CATO will be able to discharge its obligations and deliver the required outputs over the 25 years – particularly in cases where bidders are very highly geared. This will also include taking account of what happens to residual asset values should an incumbent CATO fail to renew their contract after 25 years or what would happen in the event that the CATO suffers an event of insolvency during the 25 year period.

Question 7: What are your views on our proposed package of financial incentives for CATOs? Do you have any views on how we could structure an availability-based incentive to ensure CATOs operate their assets with a 'whole network' view? Do you have any views on whether there are circumstances under which 'payment on completion' would not be appropriate to incentivise timely asset delivery?

The use of an availability incentive must be balanced with an asset management incentive. This is to ensure that the CATO has an obligation to maintain its assets for the duration of the asset life, not the revenue term. In the absence of a material incentive on asset condition, the CATO may have a perverse incentive not to remove assets from service for maintenance and inspection in order to achieve shorter term rewards for asset availability.

An unintended consequence of an availability incentive could arise if electrical separability is not mandatory for a CATO as proposed. Maximising availability as well as seeking to avoid necessary outages on its own assets could provide an obstacle for adjacent TO's outage requirements. This would need to be accommodated within the incentive regime.

Question 8: Are there other types of incentives not covered in this chapter that you think should apply to CATOs?

As owners of critical transmission infrastructure, CATOs should be considered as TOs and that the full range of TO outputs and incentives should in principle apply to CATOs.

Chapter 4: Managing conflicts of interest

Question 1: Are there any risks or conflicts of interest arising from the SO's role that we haven't identified?

There is a potential conflict of interest in onshore TOs' price control submissions. The specified criteria for competition to include 'complete replacement transmission infrastructure' and packaging these as non-contiguous works, could require that non-load investment plans are considered for competition. The consequence of this is that the TOs' non-load investment plans may have to be shared with NGET (as non-load works are generally outside the scope of NOA) to enable them to recommend projects for tendering. SPT believes that this is a conflict of interest and has not been considered in the consultation.

We acknowledge that some of the conflicts of interest identified in relation to the onshore tendering proposals may be managed within the enhanced SO role. Nevertheless, taken together with potential conflicts associated with other functions now undertaken by the SO, we can see some merit in assessing whether an independent SO may be more effective going forwards.

Question 2: Are there any risks or conflicts of interest arising from the participation of incumbent onshore TOs that we haven't identified?

SPT is not aware of particular TO conflicts of interest that would undermine competition to the detriment of consumers. Only where an incumbent TO is responsible for the delivery of all preliminary works would a potential conflict of interest arise. This is significant tor RIIO-T1, where the transition regime requires the incumbent TO to deliver the full preliminary works in a Late Model.

We recognise that conflicts of interest may be mitigated by the provision of a detailed specification of pre-construction information that is to be provided to all tenderers. In doing so, the TO who has undertaken the works can provide all relevant information for the construction phase and this can be verified against an agreed minimum standard.

The TOs participation in the tendering process for in-area projects in RIIO-T1 will guarantee that the pre-construction works will be completed to a high standard.

Question 3: Are there any additional conflicts of interest that we haven't identified?

There is a possibility that new parties bidding to be a CATO may also hold a generation or OFTO licence. The conflicts which might arise have not been explored in the consultation so far.

Question 4: What measures do you think would be appropriate to mitigate the risks and conflicts of interest? What additional conflict mitigation measures would be needed if the SO takes on a broader role in supporting competition?

Policy changes in this and other areas are placing significant conflicts of interest on the SO in its role of holding the ring between market players when National Grid is a player in relation to an increasing number of functions. These include ITPR (as a TO and potential bidder) and also interconnectors. The deepening of these conflicts means that the ownership of the SO will now need to be considered.

Conflicts of interest are more difficult to manage in the transition regime compared to the enduring regime because the incumbent TO has delivered the preliminary works. There is no obvious means to establish a position of parity with any other third party seeking to tender for these works due to the knowledge and experience built up by the incumbent TO.

There is also an increased risk in the enduring regime for Late Model compared to the Early Model due to the increased complexity of securing consents and land ownership risk in the Late Model.

Many of these risks and conflicts of interest would be mitigated if Ofgem were to implement the Early Model as an enduring solution without using a Late Model transitionally.