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Dear Kersti,

Integrated Transmission Planning and Regulation (ITPR) project: draft conclusions

This response is on behalf of National Grid Electricity Transmission plc.

We are supportive of the development of a clear and effective framework for the delivery of an integrated GB transmission system. As GB System Operator (SO) we believe that we are well placed to play a key role both in the further development of these proposals and in delivering an excellent service as an enhanced SO, such that existing and future consumers benefit from ITPR.

In summary, we support:

- The advisory enhanced SO role and believe that these proposals are consistent with the public interest and that the SO should be properly remunerated, incentivised and held to account in relation to its enduring management of the enhanced SO. We look forward to exploring further how this might work, in the coming months;
- The principle that investment decisions should remain with the relevant asset owner and that this decision making should continue to be underpinned by user commitment or price signals and subject to Ofgem oversight;
- The implementation of the new Network Options Assessment (NOA), Offshore gateways, and the additional role proposed for the enhanced SO in ensuring greater interconnection;
- Further consideration of the introduction of competition to establish the extent to which it is in the interests of consumers (i.e. where the potential benefits can be shown to outweigh the full potential costs) and consider that the 'early' model is more likely to possibly deliver value to consumers than the 'late' model;
- The principle of developing clear criteria for assets, which could be delivered onshore via a competitive process, to provide a framework that delivers sufficient clarity for the industry and value for consumers, given the inherent complexities of the integrated electricity network; and
- The proportionate proposals for mitigating any conflicts of interest that may arise from the new enhanced SO role. We will continue to take a proactive approach to managing conflicts and implementing any necessary changes.

Whilst the consultation provides additional clarity regarding ITPR, we believe that a substantial amount of work remains to be done. Our four principal areas of concern are resourcing and capability, timescales, ensuring the public interest is protected and that cost and benefits are fully considered. These points are addressed in more detail within this response, but in summary our points and the key interactions between them are as follows:

- This enhanced SO role is in addition to our existing duties and we will require additional resources, with appropriate funding, to undertake these responsibilities to the standards our customers and stakeholders will rightly expect. We expect that decisions will be made in a timely manner to enable us to build the capability to deliver the additional obligations and processes within the desired timescales. Ensuring the enhanced SO is appropriately resourced needs to be recognised as crucial to the success of ITPR;
- The high level proposed timetable causes concern because of the interaction with existing processes (such as ETYS and TYNDP) that are widely used across the industry. We currently lack clarity on go-live timings and there is a risk that the implementation of ITPR will inadvertently cut across annual processes mid-cycle. Therefore, more clarity around timings, transitions and implementation is needed;
- The public interest has to be the overriding consideration in the development of onshore contestability proposals. For example the true measure of success in relation to the introduction of contestability is not the number of new entrants that are created, but whether demonstrable value to end consumers can be shown. To give one important example, due to the complexity inherent in defining clear criteria, we propose that "clearly separable" projects such as new radial lines and HVDC projects are used as the pilot for the introduction of competitive tendering. As we note again later in this response, we believe that it is essential that the additional complexity of both construction and operation of the assets should not erode the potential benefits to consumers. Whilst Ofgem's initial work on the separability criteria is helpful, significant further work is needed here;
- Many participants at Ofgem's ITPR stakeholder workshop expressed concern at the lack of cost benefit analysis in relation to contestability that has been undertaken to date. We share this concern and believe there is scope for further work to be done. Later in this response we highlight the mixed success rate of contestability in other markets. It is vital that all potential costs are properly explored and understood when developing any future model. The interaction of both the further potential cost benefit analysis and detailed work on the contestability criteria with the overall timings for ITPR implementation is something that could potentially be considered further.

Detailed responses to the questions set out in the consultation document are contained in the appendices to this document. The following sections focus on four main areas, namely:

1. Enhancing the SO role in planning the network;
2. Establishing a more consistent approach to the delivery and regulation of different types of transmission assets (including competitive tendering);
3. The management of conflicts of interest; and
4. Implementation and interactions.

1. Enhancing the SO role in planning the network

We welcome the proposed enhanced SO advisory role, acknowledging that key activities and decision making such as running tenders and selecting CATOs will be undertaken by Ofgem. We believe that we are able to offer the high quality support, analysis, information and coordination that will be required of the enhanced SO, in a way that will provide value to the

consumer. We support the principle that investment decisions should remain with the relevant asset owner (TOs or the relevant developer for offshore and interconnector projects) and that decision making should be underpinned by user commitment or price signals.

A key factor for the success of the enhanced SO role will be ensuring all parties act in a co-ordinated and collaborative manner. The processes by which this can be achieved are as yet unclear, but could include new licence conditions, code obligations and/or new incentives on the appropriate parties. We are happy to discuss this further and as highlighted above we are actively encouraging stakeholder involvement.

Network Options Assessment (NOA)

We are supportive of the need for the enhanced SO to coordinate option development across all types of investment for GB. Developing and implementing a new NOA methodology with active stakeholder engagement that is transparent and includes annual reporting obligations is a sensible approach. We are again happy to work with a wide range of stakeholders, to ensure that what we develop ultimately meets the needs of all parties and complements existing published information and processes such as the Electricity Ten Year Statement (ETYS) and Ten Year Network Development Plan (TYNDP). As a starting principle we consider that the NOA should be focused on strategic options and the SO should not undertake detailed designs but use the information provided by the TOs. Such development, design and consenting should ideally be undertaken by the TOs and developers that will ultimately construct the assets. To aid discussion on this subject, a high level process proposal for the NOA is detailed in appendix 2.

Interconnection, Strategic Wider Works, Offshore & power quality

We are happy to provide greater information, assistance and analysis in relation to the development of new interconnection. We will support existing and future interconnector projects via the cap and floor process and assist DECC with the assessments of Projects of Common Interest (PCI). We consider new interconnector projects should be included as options within the NOA process, but the onus will remain with developers to fully justify their investment decisions in line with the principles Ofgem has set out in the consultation document.

In order to undertake this role and produce the level of analysis required, we will need to develop European scenarios and enhance our European modelling capability. The outputs of this analysis would need to look at different connecting markets (within Europe and possibly wider), different capacity levels, a variety of onshore connection points and the impact on the onshore network. Work is already underway to further develop and improve our interconnector modelling/assumptions for the Future Energy Scenarios (FES) and Electricity Market Reform (EMR) processes and we aim to incorporate the requirements for ITPR within these developments to minimise costs. Further detail of this process is also contained in appendix 2.

The proposed deeper role in coordinating and supporting the identification and assessment of options for Strategic Wider Works (SWW) need cases is something we are supportive of. We agree with the approach identified whereby the SO would provide information to Ofgem utilising the information from the NOA process. Ofgem would then consider it and take the lead on the subsequent phases of project assessment.

The gateway assessment process in relation to offshore Wider Network Benefit Investment (WNBI), coordinating with TOs to identify solutions (on and offshore) and leading the option development where a TO has not yet been identified, are all aspects of the enhanced SO

role that we support. However, the depth of this role will depend upon the detail of any regime developed for competitively tendered onshore projects. This role may also include offshore projects that provide wider network benefits, but are not being taken forward by a developer.

We agree that the Connection Infrastructure Option Note (CION) could be formalised. We also note that the "*interim NETSO process for the treatment of requests for interconnection to the National Electricity Transmission System,"* that was finalised in January 2014 will also require formalising within the codes. This may require a more in depth review of the treatment of interconnectors within the codes but is not a requirement for the implementation of the ITPR project.

The requirement for the enhanced SO to coordinate information and provide improved power system quality information to TOs, DNOs and developers to enable them to undertake effective network studies is consistent with our expectations in relation to the enhanced SO role. Power system quality issues should remain with the asset owners to fully assess and resolve. However, there is a role for the enhanced SO to improve information exchange (subject to the resolution of confidentiality issues) and support developers with their study capability.

There are a number of ways in which this role could be developed and there are also close interactions with current codes such as the Grid Code and Distribution Code, in addition to the Engineering Recommendations. We are happy to continue to work with the industry to develop processes in this technically challenging area and to identify enhancements. We look forward to working with stakeholders and Ofgem and welcome views on our suggested approach.

There is potential for the enhanced SO to take further steps to improve the long term outage planning process through increased coordination and management of the process. This could help minimise system costs and result in lower costs for end consumers.

Under current arrangements, the SO is incentivised to manage operational costs under various SO incentive schemes. TOs construct and maintain assets and are exposed to the costs and risks of investment under their funding arrangements. The identified scope to make trade-offs between SO incentive costs and TO investment costs is currently limited. However, steps are being taken to review and improve these trade-offs via the Network Access Policy (NAP) and other arrangements. There is a clear linkage between outage planning and the SO and TO incentives to appropriately assign operational costs arising from long term investment projects. We suggest a similar approach to that described above for power system quality and we will continue to work with the industry to develop processes and to identify areas of improvement.

2. Establishing a more consistent approach to the delivery and regulation of different types of transmission assets

We note that Ofgem believe that the introduction of competition in onshore transmission has the potential to provide benefits and value for the consumer. However, the possible benefits for consumers of increased competition are yet to be quantified. As previously outlined, we believe that there is further scope for more cost benefit analysis and we will provide assistance, where possible, if this would be beneficial. This cost benefit analysis should be based upon a range of appropriate scenarios for present and future consumers.

In the event Ofgem deem onshore competition is appropriate, we agree there needs to be a *"clear, predictable and fair regulatory framework for infrastructure development,*" which needs to be implemented in a manner that enables effective competition. In order to achieve

this objective the following key principles should be considered to ensure that any introduction of competition in onshore transmission is a success:

- Transmission customers and consumers should not be exposed to undue delay or significant additional costs or heightened project risk as a result of any change in delivery approach;
- All risks / rewards and accountabilities across the different elements of the design, delivery chain and ongoing operation should be clearly defined;
- All new transmission entrants should have the right incentives to coordinate in order to drive overall system performance and allow system wide optimisation. This is required to ensure that assets are delivered which are operable now and in the future to ensure ongoing safe, reliable and efficient network operation;
- There should be due consideration that the assets will form part of a large network and new assets should not unduly impact existing transmission users and assets – i.e. reduce existing asset life or increase risk of faults;
- The SO is provided with a range of services/tools to operate the system (now and in the future) which is underpinned by an appropriate framework to manage the risk for the consumer and the asset owner; and
- Clarity on the timing for any tender process and the activities included.

The introduction of clear criteria to identify the nature of onshore transmission projects that could be competitively tendered with limited discretion would be helpful to all parties. In principle we support the high level criteria proposed by Ofgem – new, high value and separable. However, we believe that significant further work is needed to fully develop these criteria to minimise ambiguity and uncertainty. This is because there will be significant complexity in practice due to the highly interconnected nature of the transmission systems. Some very large projects may also have significant impact across many licences spanning transmission and distribution which could be a complicating factor both technically and contractually. Due to the complexity of defining clear criteria, we propose that new radial lines and HVDC projects are used as a pilot for the introduction of competitive tendering. This is due to the nature of the assets being clearly separable and therefore the additional complexity of both construction and operation of the assets should not erode the potential benefits to consumers. We explore the principles that we have considered in relation to contestability in more detail in Appendix 1 paragraph 5.

The consultation proposed two tendering models for consideration, termed ‘early’ and ‘late’. We support Ofgem’s principle that the onshore TOs would not be responsible for the development or pre-construction of options that they would not ultimately construct or own. Both models pose challenges but in our view the early model should be favoured as a basis for exploring further whether benefits to consumers can be realised. Significantly more work is needed to explore the detail, as we discuss further in Appendix 1 question 5. Our favouring of the early model relative to the late model is predicated on the following:

- Higher levels of scope for innovation;
- A single party being responsible for detailed design, pre-construction, delivery and maintenance of assets;
- Minimising duplication of resource and activities across industry parties.

As stated within the consultation, the early model could bring “*competitive and innovation pressure to the design stages of a projects development, which the late model does not*.” We believe the early model provides the greatest opportunity for innovation in the broadest sense. This goes beyond technical design and technology choices and also encompasses procurement and consenting strategies and working practices.

In our previous responses to ITPR and Offshore consultations, we have stated that the party responsible for design and delivery is best placed to manage the risks of that project. The consultation notes the iterative nature of project development within the pre-construction stages. The early model allows the Competitively Appointed TO (CATO) to manage those risks and delays by running pre-construction activities in parallel (i.e. early engagement with the supply chain, or letting contracts for critical assets due to long lead times ahead of consent) and to fully understand the critical path of their project to avoid unnecessary delays. While in theory, the conditions tied in with any granted consent should be delivered by the party that builds the infrastructure, it is possible that, in a late model, the constructing party would see those conditions committed to by the SO as limiting their ability to deliver the project in a way they consider optimal, once they have engaged in more detailed design and supply chain engagement. In these circumstances, the building party may need to alter the original consented conditions, creating not only significant potential programme delays, but also additional cost and duplication of activities.

With an early tender model the SO does not undertake 'TO like' activities such as detailed design, consenting and early stages of the procurement process therefore the amount of work undertaken by multiple parties is limited. The CATO will undertake the detailed design and pre-construction activities. We believe that the role of the SO in the early tender model is in the interests of consumers and industry as it avoids the duplication of resource of detailed design and pre-construction capabilities which currently reside within TO organisations.

The early model perhaps has a higher level of uncertainty than the late model, with costs at the bidding stage being indicative. However, this is not substantially different from the challenge facing Ofgem when setting regulatory allowances with the incumbent TOs (e.g. for SWW projects). Whilst the early model could be perceived as having higher barriers to entry due to the requirement of a CATO to have design and consenting capability, equally, the increased scope for innovation in the early model has the potential to be more attractive to a number of potential entrants than the late model would be. As such we believe that if onshore competition is shown to be in the best interests of consumers, the early model provides a better basis than the late model for further exploratory development.

We would welcome further clarity on the timings and the potential need for primary legislation to bring these proposals to reality. Many large projects are currently being developed by the incumbent TOs within this price control period and we will need to consider the impact on transmission users and costs when developing and implementing the framework. Further clarity on the regulatory framework in which any newly appointed CATO would operate and how this will interact with the existing transmission asset frameworks, would also be helpful.

Interconnector regulation, Multi-purpose projects and non GB connections

In our previous responses we have championed the benefits greater interconnection can provide the GB consumer and have remained open minded as to the best way to get interconnector projects moving to ensure that these benefits are realised. We welcomed Ofgem's decision earlier this year to provide an additional option for developers by extending the cap and floor regime to qualifying near term projects. We support the draft conclusions that provide clarity to both developers and the enhanced SO in supporting interconnection.

Ofgem's default position that non-GB generators should pay for their connections without consumer underwriting, so that consumers aren't exposed to undue risk, is a sensible approach given the potential complexity of such projects and the possible interaction with other interventions, such as Contracts for Difference (CfD). A flexible 'project by project' approach is likely to be required due to the amount of uncertainty and in the future it may be possible to develop a framework building on project specific experience.

Multi-purpose projects can be complex in nature but removing uncertainly at the point of investment whilst allowing future opportunities for integration for such projects is both pragmatic and sensible. We support Ofgem's conclusions in this area but note as with non-GB generators, a flexible project by project approach will be required due to the level of uncertainty with such projects.

3. Management of conflicts of interest

We are generally supportive of Ofgem's proposals in relation to the management of conflicts of interest. We take a proactive approach to ensuring both our potential conflicts of interest and the associated mitigation measures are closely scrutinised which has been demonstrated with the implementation of our new role under EMR. The enhanced SO role poses new challenges across a broader area. We continue to believe that transparency is the key in terms of information, processes, methodologies, compliance statements and stakeholder engagement with regulatory oversight. We provide further detailed proposals in our response to questions 10 and 11 within the consultation document in appendix 1. Appendix 4 provides a table that highlights areas of our current licence obligations, the conflicts of interests areas raised in the consultation document and offers a starting point as how to possibly address the conflicts raised within our licence. Appendix 5 is the latest version of NGET's approach to business separation following feedback from Ofgem.

4. Implementation and interactions

The enhanced SO will be delivering a range of new information services to the industry, which will be underpinned by new processes. These have the potential to be of benefit to the industry and consumers.

We have already highlighted our concerns that the lack of certainty on go-live dates creates, both in relation to our resourcing strategy and the interactions with existing processes such as Future Energy Scenarios (FES), System Operability Framework (SOF), ETYS, and TYNDP. These issues and the implementation of the EU codes need to be properly considered, to ensure that all new offerings (and the timing of their launch) are such that they do not undermine or conflict with existing work.

Appendix 3 maps the timelines of key process in 2015 and 2016 with further examples of the interactive nature of the processes. The diagram highlights the overlapping nature of current processes and the importance of timing when implementing the new enhanced SO role. Every new process will require adequate time to undertake meaningful stakeholder engagement to ensure it best meets the needs of all parties and timescales for delivery will need to be appropriate to ensure that high quality outputs are delivered, without adversely impacting other stakeholders and processes.

For example, FES data is provided on a ring fenced basis in spring ahead of the final FES publication in July, to the ETYS team to start the analysis for the publication of ETYS in the November of the same year. Any delay can impact the ability to publish ETYS in line with this deadline and licence condition. ETYS is then used as the starting point data for FES the following year.

We are committed to ensuring the development of the enhanced SO role and its implementation is undertaken at the highest quality to meet the needs of our stakeholders. Given the wide range of potential activities the SO may be required to undertake as part of the proposals, there will clearly be a resource requirement over and above current levels. We have provided some further thinking on resourcing requirements in appendix 6, taking into account our more detailed proposal provided within this response. There are many aspects of the enhanced SO role that we do not undertake today and others that we only undertake

in part or on a voluntary adhoc basis to provide additional technical support. ITPR will result in the delivery of new outputs from the enhanced SO role, that fall outside the scope of RIIO-T1. It is essential that these outputs should be funded in a timely way to allow the SO to fulfil its new role.

We look forward to continuing to work with Ofgem and the industry throughout the development phase and beyond. We have started a process of engagement with the industry and interested parties and would welcome further debate on the details contained within this response to help reach the most robust conclusions for all parties. The potential benefits to consumers from the ITPR process will be underpinned by greater co-ordination and cooperation between all parties. In addition there could be potential benefits from increased innovation and competition between solutions and solution providers, where this can be shown to outweigh the downsides of additional cost and complexity and increased timescales.

We are happy to discuss our views contained within this letter and appendices further should that be helpful. For further details, please contact Ben Graff ben.graff@nationalgrid.com. This response is not confidential and we are happy for it to be placed on the Ofgem website and for it to be shared more widely for the purposes of the ITPR project.

Yours sincerely

[By email]

Mark Ripley
Director, UK Regulation

Appendix 1: Questions raised within the Integrated Transmission Planning and Regulation (ITPR) project: draft conclusions

1. ***What are your views on our proposed enhancements to the SO role in system planning, including the specific roles we have proposed the SO would undertake for onshore, offshore and interconnection planning?***

   We welcome the enhanced SO proposals and have set out our high level thinking in our covering letter above. In this and the other included appendices, we provide further detail on the questions that have been set out within the consultation document. Appendix 2 details some of our ideas in relation to the development and implementation of the new NOA process.

2. ***Are there other roles that you think an enhanced SO could or should undertake in order to better support the development of an efficient transmission and interconnector network?***

   At this stage in the process the consultation covers all the key areas. However, we look forward to working with the industry and other stakeholders through the implementation phase and beyond, to ensure that the enhanced SO is always best placed to act in the best interests of consumers.

3. ***What are your views on the specific obligations for TOs that might be needed to support our proposed enhanced SO role?***

   As previously noted within our covering letter, improved coordination and collaboration will be crucial in underpinning the success of ITPR. We believe that there is scope to consider whether there are further mechanisms that might improve this coordination and collaboration. These could include new licence conditions, code obligations and/or new incentives and we would envisage that the details of these could be explored further in the implementation phase. We consider parties who need to provide information and to coordinate with the SO, such as the TOs, DNOs, Offshore and interconnector developers, might need an obligation or incentive to ensure early engagement, the sharing of information and a requirement to coordinate.

   In addition, we believe clear guidance to support the proposed ITPR licence conditions will also have an important part to play in improving transparency (there are a number of current precedents including guidance for Strategic Wider Works (SWW) and Offshore). The enhanced SO role is advisory in nature, but it is possible that there will be times when the SO and TO or developer do not agree. Whilst we would hope that these will be few in number a clear dispute resolution process should also form a part of the new arrangements.

4. ***What are your views on our proposal that, as part of its enhanced role, the SO should lead gateway assessments for offshore projects that include investment to provide wider network benefit?***

   We are happy to take on the role of leading gateway assessments for offshore projects. However, we do wish to clarify certain aspects of the associated process and the potential depth of the role.

   We consider that gateway assessments will need to be timed such that regulatory decisions are aligned with project timescales where possible, both in terms of pre-agreed gateway assessments and where gateway assessments are triggered following a change to the need case. This is particularly important where a developer is progressing works and changes to the scope of these works could introduce delays or additional costs into the process.

We also believe that the gateway assessment process will require all parties involved in the offshore project (onshore TOs, OFTOs and developers) to coordinate activities and to collaborate. This is to ensure that the need case for Wider Network Benefit Investment (WNBI) is continually reviewed across the project lifecycle, from initial agreement on the need identified by the SO through to construction and commissioning, to ensure consumers are protected from inefficient costs and stranded assets.

We have set out our understanding as illustrated in Figure 1, of how the offshore gateway assessment process could be incorporated within the CION. We welcome any comments on this and will look to develop our CION process in consultation with the industry as further clarification on offshore WNBI models and onshore competition models is agreed.

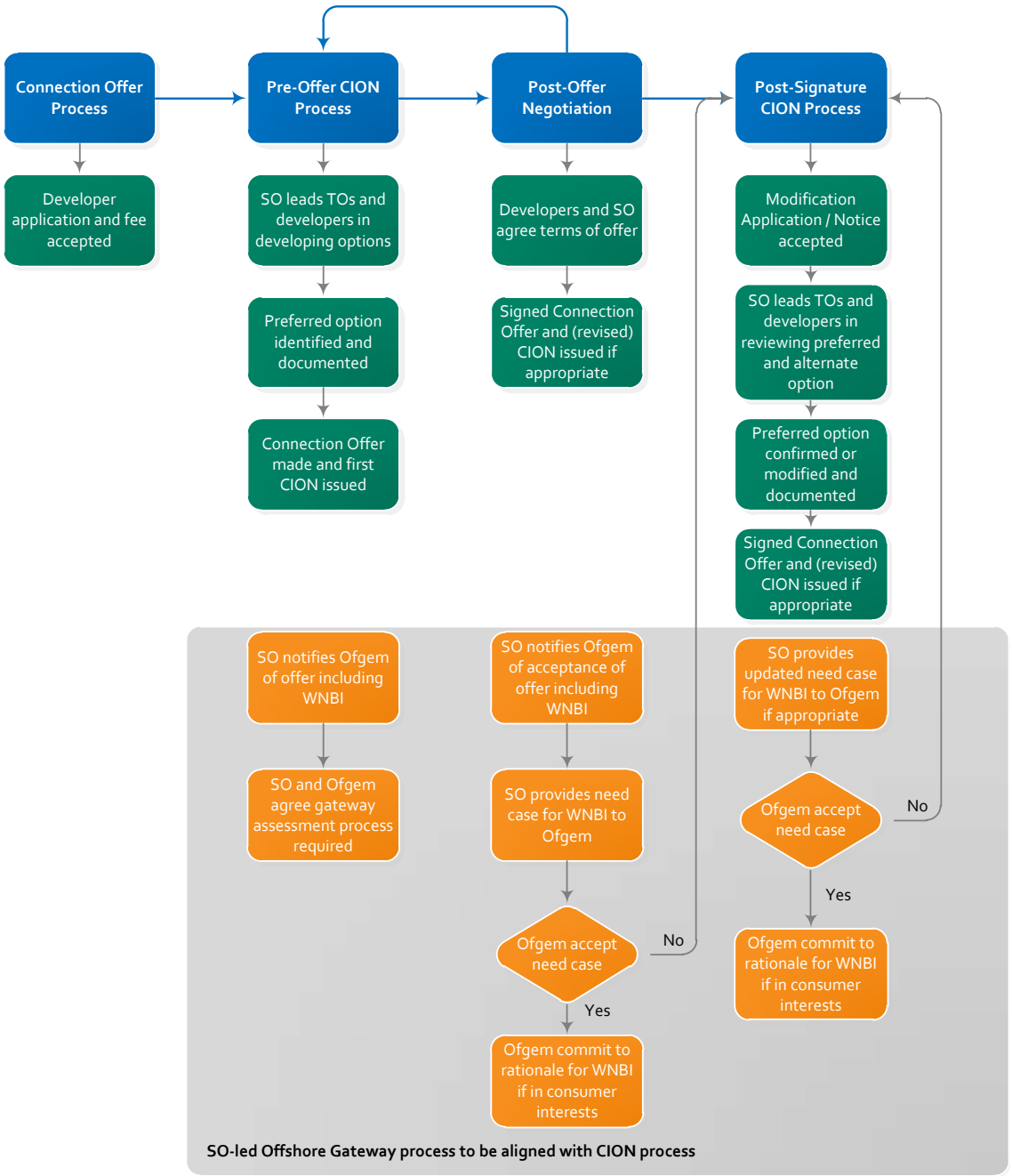


Figure 1: CION and gateway process

Connection Offer Process and Pre-Offer CION Process

For the avoidance of doubt the current connection process as per the Connection Use of System Code (CUSC) remains unchanged and developers will continue to make an application for connection to the SO.

As per the current connections process the enhanced SO will lead and coordinate the relevant TOs, OFTOs and developers to ensure that a full range of options are considered across the onshore and offshore networks. The enhanced SO may provide potential offshore transmission design options where developers are not in a position to do this (including where WNBI could be delivered). The most economic option is selected, based on an assessment of capital costs and technical, environmental, planning consent and deliverability issues. This assessment and the preferred option is documented in the CION document and a Connection Offer is made to the developer.

Under the gateway assessment process proposals, if WNBI has been identified and the developer has agreed to include this in their offshore project ('developer-led WNBI'), the SO will notify Ofgem that a Connection Offer including WNBI has been made. At this point the SO will work with Ofgem to develop a gateway assessment process that will be followed based on the project complexity and scale. This ensures flexibility in the process and ensures that a proportionate approach relative to the investment required is taken.

Post-Offer Negotiation

Under the CUSC, the developer has a three month period to review and sign their offer. During this stage there may be further iteration of the CION documentation and Connection Offer.

Under the gateway assessment proposals, where developer-led WNBI has been identified, the SO will notify Ofgem of the acceptance of the offer and provide a need case for the WNBI. Ofgem will consider this WNBI need case with support from the SO and, where the WNBI is in the interests of consumers, Ofgem will commit to the rationale for progressing WNBI. This gives developers assurance that the rationale for WNBI is accepted. If Ofgem do not accept the WNBI need case, the SO would need to amend the Connection Offer using the Post-Signature CION Process.

Post-Signature CION Process

The post-signature CION process continues to keep the selected option under review and to manage changes as more information becomes available. The enhanced SO will lead the review of the option being progressed with the relevant onshore TOs, OFTOs and developers to consider whether it is still the most economic, efficient and feasible option. Where a more appropriate option is established through this review process, modifications to the Connection Offer and CION are agreed. The developer will continue to progress works under the revised Connection Offer.

Under the gateway assessment proposals, the enhanced SO will provide an updated need case to Ofgem and support Ofgem in a review of whether the WNBI still delivers value for consumers. We consider that the timing of this review and assessment of the need case and how it fits with the CION should be discussed further, to ensure that unnecessary delays are not introduced to the project and that developers have an understanding of how previous commitments made for the rationale behind WNBI are impacted.

There is a clear linkage with the models being developed for the delivery of onshore competition in transmission assets. We need to ensure that our role in both processes is consistent and remains advisory in nature.

5. What are your views on our proposal to extend competitive tendering to new, high value, separable onshore assets?

We note Ofgem believe that competitive tendering has the potential to bring benefits to consumers. It is vital that any such competitive tendering works in the best interests of consumers and this is an area where extensive further work will need to be undertaken. The consultation is not particularly detailed and we focus here on trying to highlight some of the key principles that the industry will need to work through, along with our initial thinking on what seem to us to be the most important questions. We look forward to revisiting this initial thinking in the light of further detail from Ofgem as this process progresses.

As we highlighted in the main body of our response, we believe that radial and HVDC projects are best suited to serve as the pilot for the contestability regime. Other projects are not as clearly separable and the increased level of complexity in trying to progress these projects, relative to any potential benefits, mean that they would not form a good basis on which to trial a new regime. As highlighted by Ofgem at RIIO T-1, SWW could be contestable. We note Ofgem's pragmatism in paragraph 3.53, that the suitability of these projects for tendering is dependent on the progress of pre-construction activities such that any costs do not outweigh the potential benefits of competition. We believe that the initial approach to introduce competition only to SWW and that "*no changes are proposed to the funding of outputs specified in the price control baseline (i.e. those for which funding was granted up front)"* is reasonable.

Within our covering later we consider that a number of key principles should be considered to ensure any introduction of competition in onshore transmission is a success. These are summarised again below:

- Transmission customers and consumers should not be exposed to undue delay or significant additional costs or heightened project risk as a result of any change in delivery approach;
- All risks / rewards and accountabilities across the different elements of the design, delivery chain and ongoing operation should be clearly defined;
- All new transmission entrants should have the right incentives to coordinate in order to drive overall system performance and allow system wide optimisation. This is required to ensure that assets are delivered which are operable now and in the future for ongoing safe, reliable and efficient network operation;
- There should be due consideration that the assets will form part of a large network and new assets should not unduly impact on existing transmission users and assets – i.e. reduce existing asset life or increase risk of faults;
- The SO is provided with a range of services/tools to operate the system (now and in the future) which is underpinned by an appropriate framework to manage the risk for the consumer and the asset owner and;
- Clarity on the timing for any tender process and the activities included.

Should competitive tendering be used to deliver transmission assets, the benefits to consumers need to be clearly demonstrated for a range of appropriate scenarios. Equally, consumers should also not be exposed to greater risks than they are today. We note the sentiment that some risks should be shared with the consumer (such as where external factors change the need case for the investment). In practice, however, this could put consumers in a worse position than they are today given the current incentives which are in place to manage (rather than transfer) such risks.

In terms of initial questions, clarifications and observations at this stage, these are set out below. In summary they focus on 5 key areas and include:

1. Criteria for competition;
2. Our initial thinking on the pros and cons of the early and late models;
3. Total lifetime cost;
4. International case studies; and
5. Further considerations for competition.

Criteria for competition

Ofgem's predominantly rule based approach to identifying projects, which may be suitable for competitive tendering, feels like the right starting point. However, extensive further work is needed to fully develop these criteria to minimise ambiguity and uncertainty. At a high level the rules based approach is helpful and provides a degree of certainty to the industry, whilst allowing for some discretion to be taken into account depending on the specific nature of the project. However, this is clearly an area where the "devil is in the detail," which we haven't seen yet. For this reason, we are exploring this area through the prism of principles and look forward to discussing in more detail with Ofgem and other industry participants during the course of this process.

The criteria proposed, (new, high value and separable) are a reasonable starting point. However, there will be significant complexity in practice due to the highly interconnected nature of the transmission systems. Some very large projects may also have significant impact across many licences spanning transmission and distribution which could be a complicating factor. This is why we favour radial and HVDC projects being the first to be treated as contestable on a pilot basis. We explore the principles in relation to the criteria in more detail below.

New: Completely new transmission infrastructure projects, including asset upgrades that involve transmission towers.

The definition of new is reasonable. We support the view that working on or requiring purchase of an incumbent's existing asset is complex and could lead to potential delays and additional costs. As such any project which materially impacts on existing assets would not be deemed as meeting the definition of new.

The table below highlights some principles which could determine which assets we consider to fall within and outside of the scope for this criterion.

Projects classified as new	Projects excluded
New greenfield substation New transmission lines New transformers	Innovative developments to existing assets e.g. dynamic line ratings Expansion of existing assets Refurbishment or replacement of existing substations, lines with towers, transformers etc.

High Value: A £-threshold. We will consider further what minimum threshold would be appropriate, but think it is likely to be between £50m and £100m.

We agree that it is reasonable to have a materiality threshold to ensure that there is a benefit of competitive tendering to the consumer. With this in mind the £50m lower limit of the value

threshold may be too low. With £14m tender costs for round 1 Offshore and an expectation for higher tender costs due to the increased size and complexity of onshore projects, these costs could quickly erode any consumer benefit of a £50m project. We would propose a higher value threshold (e.g. at least £100m) to ensure that the benefits of competitive tender outweigh the associated administrative costs and to attract new entrants. How best the principle of value versus benefit is developed in this context is something we are very interested to hear other parties views on. We noted at Ofgem's ITPR launch workshop that a number of participants also felt the values were potentially too low.

Separable: Point-to-point or a low number of interfaces with the existing network and can easily be identified as a discrete construction project.

In general we agree with the principle and the sentiment behind the separable criterion. This criterion, however, needs further definition and clarification to understand which projects might be included. As noted above, a key principle is that due to the complexity of defining clear criteria for separability, we propose that new radial lines and HVDC projects, which due to the nature of the assets are clearly separable, are used as a pilot for the contestability regime.

When considering what constitutes separable assets, the definition needs to evaluate factors such as ensuring that the assets deemed as separable do not materially impinge on the reliability or performance of other parties' existing assets or property, that the extent of the impact on wider system performance is considered and that the added complexity caused by separate ownership has also been properly weighed up. This can be further clarified by considering two key areas; electrical separability and interface complexity.

For an asset to be defined as electrically separable, it requires the ability to be electrically isolated and for faults to be attributable to a specific parties' assets. Interface complexity relates to the number of interfaces of a particular project, both the number of parties involved and electrical interfaces. The maximum number of interfaces it is possible to have before a project can no longer be separable is very difficult to quantify. The principles that will need to underpin this form of determination need considerable further work. There are several complexities of operating the system when multiple asset owners and electrical interfaces are introduced such as co-ordinating outages and system flexibility where the new assets form part of a key system boundary across a strongly meshed part of the network. Another example is the ability for a third party to provide network security on behalf of a DNO during the execution of a project, e.g. when it is necessary to take over an existing DNO way-leave in order to obtain planning consent and provide replacement capacity for the DNO. These can be managed through negotiations with all parties and a variety of contractual arrangements; however the additional complexity from having more parties involved is likely to come at a cost to consumers. We believe that it would be beneficial to undertake further cost benefit analysis to demonstrate this complexity does not outweigh benefits to the consumer and we are happy to provide assistance, where possible, if this would be helpful.

Overview of models

Table 1: Summary of the advantages of the early model and the disadvantages of the late model

Model	
Early	• Highest levels of innovation – possible in technology choice, design, pre-construction and construction strategies and processes • CATO has responsibility for design and delivery of investment therefore best placed to manage the risks • CATO has ability to manage iterative nature of the project including risk and delays by running pre-construction activities in parallel • Globally tested model delivery of competition in electricity networks in other countries
Late	• Longer end to end delivery – limited ability to overlap activities in the pre-construction phase (will be post consents process if there are any changes to the original consents) • Greater challenge in the separation of end to end accountabilities • Duplication of resource capability between SO and all of the TOs therefore additional costs for the consumer • Multiple parties engaging with the supply chain for the same project • Tender process more complex and time consuming therefore likely more expensive

We consider, in principle that the early model has the greater potential to provide benefits for the consumer. This is predicated on the following key areas which are detailed further below:

- Higher levels of innovation;
- Single party is responsible for design, pre-construction, delivery and maintenance of asset;
- Minimising duplication of resource and activities.

Higher levels of Innovation

The early model, as stated in the consultation in Ofgem's view, could bring "*competitive and innovation pressure to the design stages of a project's development, which the late model does not*". We believe that the early model provides the greatest opportunity for innovation in the broadest sense. This is not just in the technical design and technology choice but also in procurement and consenting strategies, in addition to work practices and financial backing. Greater levels of innovation can bring benefit to consumers, allows for true benchmarking between TOs and the ability to apply greater regulatory scrutiny. With ownership of the project from an early stage, the appointed party has significant opportunity to innovate across the whole project lifetime.

Single party responsible for design, pre-construction, delivery and maintenance

In our previous responses to ITPR project and Offshore consultations, we have stated that the party responsible for design and delivery is best place to manage the risks of that project. This consultation notes the iterative nature of project development within the pre-construction stages. The early model allows the Competitively Appointed TO (CATO) to manage these project risks and delays through the ability to run pre-construction activities in parallel (i.e. early engagement with the supply chain, or letting contracts for long lead time assets ahead of consents) and to fully understand the critical path of their project to avoid unnecessary delays. Our experience on the Western HVDC Link has demonstrated that it was ultimately in the consumers' interest to award the main construction contract before all consents were granted. This allowed the construction party the freedom to innovate without being constrained by agreed consent conditions, and minimised consequential increases in operational costs. This, therefore, represented the best deal for consumers.

If, as in the late model, the SO were responsible for the pre-construction activities, it would be expected that the project would result in longer end to end delivery due to the limited ability to overlap activities in the pre-construction phase. Even if the tender process begins before consents are granted, contracts could not be let until the consents are granted and the CATO appointed. This will add additional time delays when compared to the early model. Further it is inherent in the nature of the consenting and way-leave process that it creates legal conditions that need to be carried through to the subsequent construction phase. There is scope for this to become problematic in situations where a different party has secured the consents, from the party which is going to undertake the subsequent construction work as in the late model. Under these circumstances further consideration needs to be given to the management of liabilities and the separation of end to end accountabilities. This will ensure that subsequent parties (who will be responsible for delivery and operational liabilities) do not re-work activities already completed by others thereby wasting time, resources that could impact upon delivery.

Minimising duplication of resource and activities

With an early tender model the SO does not undertake 'TO like' activities such as detailed design, consenting and early stages of the procurement process therefore the amount of work undertaken by multiple parties is limited. The SO will undertake system studies to identify the need for capacity across a boundary and provide a high level functional specification for TOs to provide options to address the need. We believe that the role of the SO in the early tender model is more likely than the late model to be in the interests of consumers and industry as it avoids the duplication of resource of detailed design and pre-construction capabilities which currently reside within TO organisations. If the SO were to take on more 'TO like' activities for competitively tendered projects, such as undertaking pre-construction activities, there would be an overlap of capability not just within NGET (to enable both SO and TO functions to undertake pre-construction activities) but also with all other TOs. The more significant the involvement of the SO the greater the potential for conflicts of interest arising and mitigation measures required. There is also a potential risk of the CATO revisiting the pre-construction and consenting stages undertaken by the SO which could increase costs or lead to delays. However, this risk could be mitigated during the tendering process.

The bidder in a late model needs to have confidence in the tight specification that they are bidding for. Due to the large volume of data and the separation of pre-construction and construction activities the tender process for the late model will require significant due diligence. This will make the tender more complex, time consuming and therefore more expensive. The potential for more bidders in a late model will result in multiple parties engaging with the supply chain for the same project which will impact the supply chain parties.

Total costs

The introduction of competitive tendering can have many benefits; however we must consider all the costs, some of which may initially be obscured. This principle applies to any item or service which can be procured and where selecting the lowest price option might not prove to be the lowest cost in the long term.

When determining whether competitive tendering delivers value for the consumer a total lifetime cost approach needs to be adopted and this should include project delays, legal fees, increased contract complexity, the levels of service, flexibility and reliability.

International case studies

Competitive tendering is utilised in several global markets. However, it is not without its risks and there are important lessons relating to ensuring that these risks and the full costs of competition are properly understood. The most significantly quantified risk which has been experienced with competitive practices in other countries is the delay to projects. As well as "pure" costs, these delays clearly also have the potential to impact on security of supply in the relevant markets and the full costs of delay to the end consumer whilst harder to quantify are potentially more significant. Even where tenders have specific penalties for delay, delays have still occurred. For example, Table 2 shows indicative and actual project construction durations for competitively tendered projects in Chile. Here, the shortest project delay was 12 months and the longest 19 months despite strong penalties for late delivery. Penalties in themselves were not a sufficient mechanism to protect end consumers from the identified risks and it is important that we are mindful of this, when considering the more complex GB market arrangements. The largest contributor to project delays is underestimation, particularly by new entrants, of the time required to obtain planning consents. Project delays increase constraint costs due to the delay in delivering the transmission capacity, costs are passed to the consumer and could erode the saving provided by the competitive tender process.

Table 2: Indicative and Actual project construction duration in Chile

Project Name	Length (km)	Transmission Owner	Project Duration Decree (months)	Actual Duration (months)
Charrúa-Cautín 220kV	200	Transchile	37	56
El Rodeo-Chena 220kV	20	Transelec	31	49
Nogales-Polpaico 220 kV	90	Transelec	24	42
Ancoa-Alto Jahuel 500kV	260	Elecnor	39	51

A further risk is that there are either no or insufficient bidders for a competitive tender which has occurred in other markets. For example, in the auction rounds held in Brazil in 2012, there was limited interest from bidders and one project which repeatedly failed to attract enough interest[1]. At present there are currently no provisions under the proposals to mitigate this risk. We are happy to discuss the risks further and support the development of

mitigations, if deemed beneficial. Project costs of course are only part of the picture, the wider impact of delays and uncertainty on the end consumer is both harder to quantify and potentially more significant.

Looking to the global market for best practice it is worth noting that the model used by all the international examples in the Imperial College and University of Cambridge report[1] is the early model. While there are varying degrees of "early", in all cases it is the party delivering the assets who is responsible for obtaining planning consents rather than the SO. In some markets the tender specification is more detailed than others, which pushes some models into a later version of early, however consenting remains with the delivery party. This is summarised in Figure 2 below.

Further considerations for competition

The introduction of competitive tendering is a significant change to the current regulatory and commercial framework for onshore electricity transmission. There are many questions and many costs need to be understood. In order to ensure that the introduction is a success we also need to ensure there are clear safety and technical standards which all parties must follow. Clear obligations and incentives on all parties are required to ensure availability and reliability of their assets over its lifetime to ensure effective operation. This may require a more detailed review of the standards, codes, licences and incentives to ensure the transmission rules are transparent and well defined. We would be happy to work with Ofgem and industry to ensure this is the case.

This exploration of potential principles forms our latest thinking in this area. We are convinced that radial and HVDC projects should form the pilot for contestability and that the devil is truly in the detail when it comes to ensuring that arrangements work in the best interests of the consumer. Considerably more detailed work needs to be undertaken and we look forward to helping to support this work.

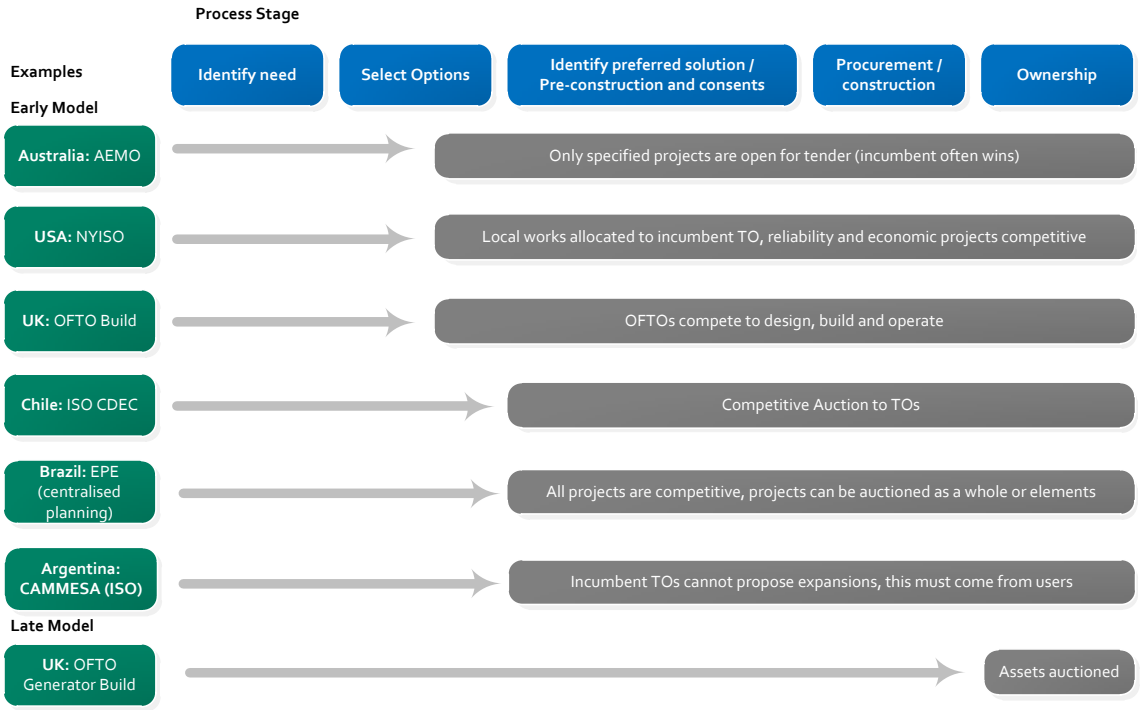


Figure 2: High level overview of international competitive tender models

[1] Imperial College London and University of Cambridge Electricity Policy Research Group, Integrated Transmission Planning and Regulation Project: Review of System Planning and Delivery – June 2013

6. ***What are your views on our proposals to maintain a developer-led approach to interconnection and to extend the cap and floor regime?***

   As previously noted we have continued to encourage greater interconnection as the benefits this can bring to the GB consumer in our view are clear. Whilst we have remained open minded as to the best way to stimulate the development of interconnector projects, we welcomed Ofgem's decision earlier this year to provide additional options for developers by extending the cap and floor regime to qualifying near term projects. We support the draft conclusions that provide clarity to both developers and our role as SO in supporting interconnection.

7. ***What are your views on our proposal that non-GB generators pay for their connections, without consumer underwriting?***

   As previously noted we support the default position that non-GB generators should pay for their connections without consumer underwriting so that consumers aren't exposed to undue risk. We agree that a case by case approach should be taken and will be driven by an inter-governmental agreement between GB and the corresponding country. A flexible approach to regulation is the most appropriate at this stage. In the future there could be projects that also provide benefits to the system and hence may be appropriate for consumer underpinning and the regulatory approach should not act as a barrier to or delay such projects.

8. ***What are your views on our proposal to provide regulatory continuity when the purpose of a transmission asset changes?***

   Multi-purpose projects can be complex in nature but removing uncertainly at the point of investment whilst allowing future opportunities for integration for such projects is both pragmatic and sensible. We support the conclusions in this area but note, as with non GB generators, a flexible project by project approach will be required due to the level of uncertainty with such projects.

9. ***What are your views on our assessment of conflicts of interest?***

   As a business we are committed to doing the right thing. We take seriously our responsibility to ensure conflicts of interest arising from the SO role are appropriately managed as demonstrated by the conflict mitigation measures introduced for EMR. In terms of this consultation we agree with Ofgem's assessment on the conflicts of interest which may arise. However the opportunities to exploit and the value is limited which was considered by DECC in their Impact Assessment of measures to address potential conflicts of interest arising in relation to the choice of National Grid as the delivery body for EMR[2].

10. ***What are your views on our proposals for mitigating conflicts of interest?***

    We generally support the measures as they ensure that we act in the interest of consumers and that industry is treated equally. By working with Ofgem and industry, we can develop the ITPR conflict mitigation proposals further to ensure that all TOs / developers are treated equally and that transparency is maximised. We provide some further detail below of how the measures suggested in the consultation could work in practice.

[2] https://www.gov.uk/government/consultations/proposals-for-implementation-of-electricity-market-reform

Maximising Transparency

We agree that our methodologies and assumptions used should be published and consulted on. Whilst we will be restricted as to what data we can make available due to commercial sensitivities, by having the processes and methodologies open to public scrutiny we aim to give stakeholders confidence that, if they were provided with the same data, they would arrive at the same decisions. This is consistent with our current approach for the FES and ETYS where stakeholder engagement is a crucial part of the process.

Stakeholder consultation is important to ensure that our methodologies and assumptions continue to be relevant and to ensure continuous improvement.

Enhancing Ofgem's scrutiny

By publishing an annual report on the NOA, we have the opportunity for our assumptions and methodologies to be in the public domain and open for comment. We can build on any feedback received through this process to continuously improve the NOA year on year. Further detail is provided in appendix 2 on our initial thinking regarding the development and implementation of the NOA.

Obligations on the SO's conduct

As previously stated we are committed to doing the right thing and support the development of clear obligations on NGET to ensure equality between all TOs and developers. There are many protections already in place between NGET and other associated delivery interests; however there is room to develop conditions around certain functions of the SO specifically, as outlined in appendix 4 and 5. We can build on current conditions to ensure industry is confident with the enhanced SO role.

We are happy to produce and publish a compliance statement to demonstrate how we are meeting our obligations. We propose to use a similar style and format to the compliance statement produced for EMR, a link to this statement can be found here. Once the specific obligations have been developed in more detail, we can begin to draft a compliance statement, which will then be subject to industry scrutiny and Ofgem approval.

Ring-fencing and business separation measures for NGET

We understand the importance of commercially sensitive information remaining confidential within the SO to avoid providing an advantage to any TO / developer.

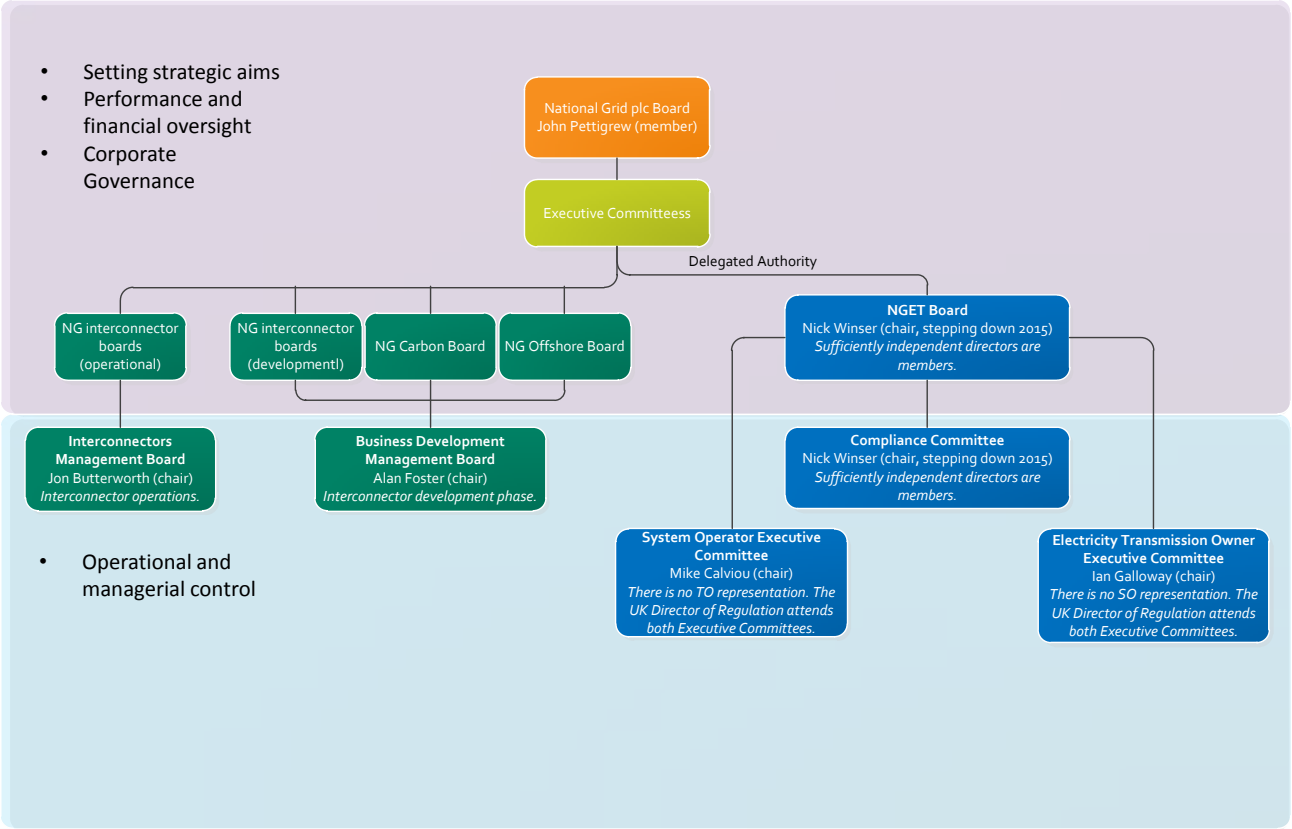


Figure 3: National Grid Organisation chart

Following the development of clear processes for the enhanced SO role, we can develop the way in which ring-fencing could work in practice. A range of measures could be targeted at specific teams, which might include restrictions on sharing and use of information, use of secure systems and restrictions on transfer of employees. We would like to publish the organisational structure of the SO following development of the enhanced SO role to highlight which teams require ring-fencing and how this will work most effectively.

We have recently evolved our UK operating model. This has further strengthened business separation by ensuring independence at the executive committee level. Each of the operating company executive committees are responsible for the operational and managerial control of the relevant business unit, and are led by strong and independent “Chairs”. Figure 3: sets out, in a simplified form, the relevant governance structures.

We have a Business Separation Compliance Committee, which is made up of NGET directors, including the Sufficiently Independent Directors. This committee is in place to oversee NGET’s compliance with business separation obligations contained in its licence, and to review and approve the annual compliance report and certificates to Ofgem. The Director of Transmission Network Service is a member and is lead director for business separation for offshore transmission. The Director of Market Operation is a member and is lead director for separation with interconnectors and carbon capture and storage and compliance with the EMR information ring-fence.

Business separation between NGET and relevant associated competitive businesses has strengthened via EMR provisions. The main features are summarised below in Figure 4: National Grid Business Separation.

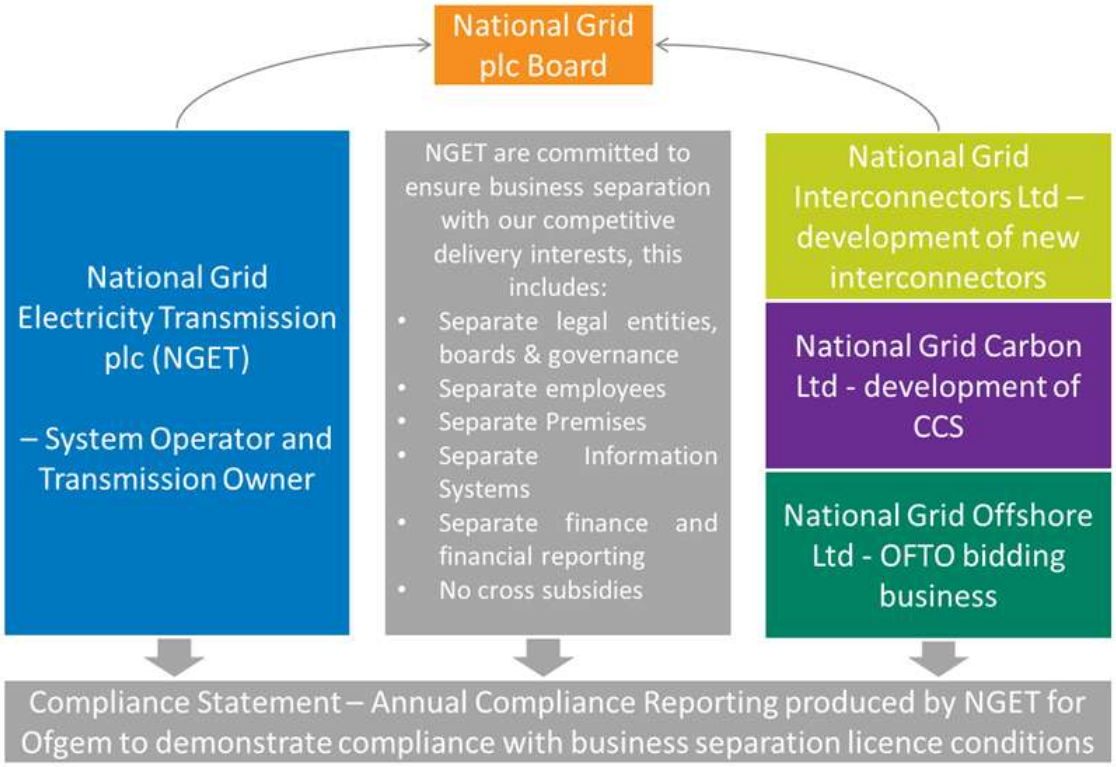


Figure 4: National Grid Business separation

11. Do you think independent scrutiny of the SO's activities (e.g. through an expert panel or auditors) would provide value for money?

We do not believe that further independent scrutiny would provide value for money. We believe that the range of conflict mitigation measures we have in place and those in the process of being developed will give the industry sufficient confidence that an expert panel will not be necessary. We are already regularly audited as standard. However, we welcome the views of customers and stakeholders as we go through the ITPR process, as to whether further measures might also be helpful. We will carefully review all suggestions.

Appendix 2 – Network Options Assessment – NOA Proposals

Background

The Electricity Ten Year Statement (ETYS) document is produced and published as part of our role as the SO working in conjunction with the TOs. The document sets out future user requirements and how the TOs expect to develop their networks over the coming 10 years and spot year 10 years on from the final year to meet these requirements. The ETYS also provides an overview of future operational challenges[3].

ETYS was developed with stakeholders to harmonise a number of our previous publications, including the Seven Year Statement (SYS) and Offshore Development Information Statement (ODIS). The objective was to provide stakeholders access to all relevant and timely information in a single document, which captures both the onshore, offshore and interconnected networks.

ETYS is intrinsically linked to the TO capital planning process for wider transmission infrastructure, which is reported in the document.

In the case of NGET TO, the Network Development Policy (NDP) outputs and Special Condition 6J, allowed expenditure for incremental wider works, are reported in the ETYS. The ETYS form and content is designed to show our customers what developments associated with the National Electricity Transmission System (NETS) are being undertaken and where there may be opportunity to connect or offer services.

As part of this process we produce a range of scenarios - Future Energy Scenarios (FES) to help us plan for the uncertainty regarding the future of the UK energy sector. The scenarios input to network planning and are analysed utilising the NETS Security Quality Supply Standards (SQSS) criterion to determine the future requirements. Based on these requirements, options are selected to solve the identified system boundary constraints. In England and Wales these scenarios are key inputs into the NDP, which is also published in the ETYS. See Figure 5: Overview of the Network Development Policy process below and further information can be found on our website[4].

In summary, the process takes the FES scenarios, identifies boundary capability requirements and undertakes an assessment of future requirements under each scenario. (Boundary capability requirement is defined as the power flow across specific transmission circuits that can be accommodated following the most onerous secured event without overloading transmission equipment and ensuring adequate voltage and stability margins). When boundary capability analysis identifies a deficit in transmission capacity a number of transmission solutions are identified to satisfy the shortfall requirements. All options are assessed and compared on the basis of the present value of build costs, congestion costs and transmission losses. When developing options we will also consider asset replacement priorities. In order to select a preferred option we undertake a least regret analysis. The aim is to minimise investment regrets against a range of credible scenarios and sensitivities. The regret analysis is undertaken for each of the current year options, (including do nothing), against each of the scenarios from FES. The regret against a particular scenario is defined as the difference in cost between the option and the best possible transmission strategy for

[3] Link to the current publications of ETYS on National Grid's website http://www2.nationalgrid.com/UK/Industry-information/Future-of-Energy/Electricity-ten-year-statement/Current-statement/

[4] See link above

that scenario. The preferred option is then selected based on the least worst regret and then published as part of ETYS.

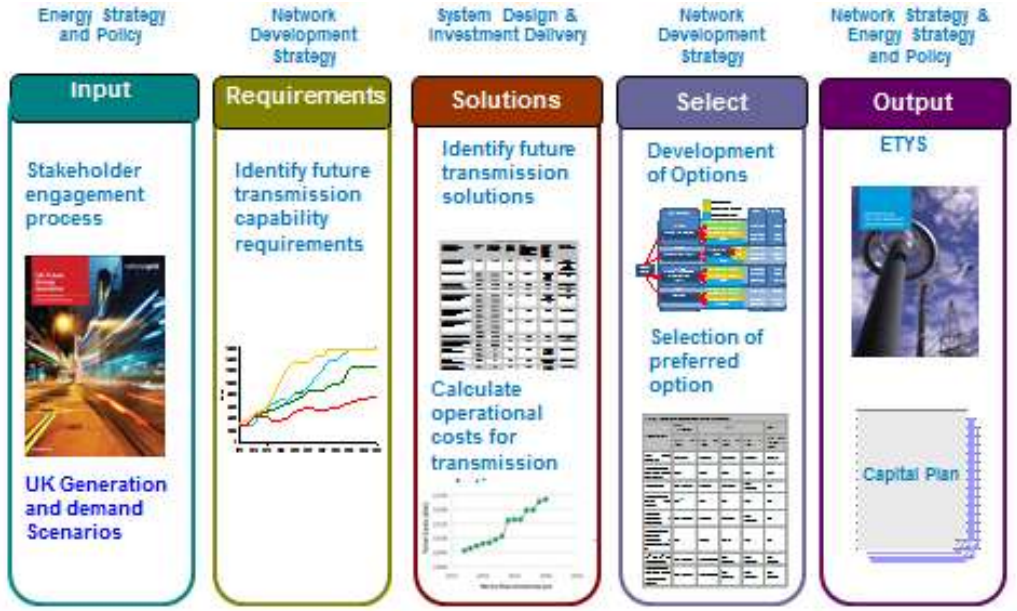


Figure 5: Overview of the Network Development Policy process

Proposal for the Network Options Assessment (NOA)

We believe there are significant merits and benefits in the least worst regret approach and consider the principles within the NDP process could be applied when developing the new NOA process. Figure 6: Proposed NOA process, details an approach for the development of the NOA and each stage within the process is expanded further below.

European market studies

As detailed within our covering letter, in order to undertake the new enhanced SO role to provide greater information and analysis for the development of new interconnectors and the NOA, we will need to develop European scenarios and our European modelling capability. Our current European modelling capability is limited and has been identified as an improvement area to support our current SO role with the FES and EMR processes. However, the development of full European modelling is currently not funded for FES and EMR purposes. This is expanded upon in appendix 6.

We are proposing to develop an European modelling tool and scenarios which will support all three SO purposes, enhanced SO under ITPR, FES and EMR and will request stakeholder inputs as our proposals develop in this area. Figure 7: New European scenarios and modelling interactions with current and new outputs below highlights the interactions of processes and feedback loops.

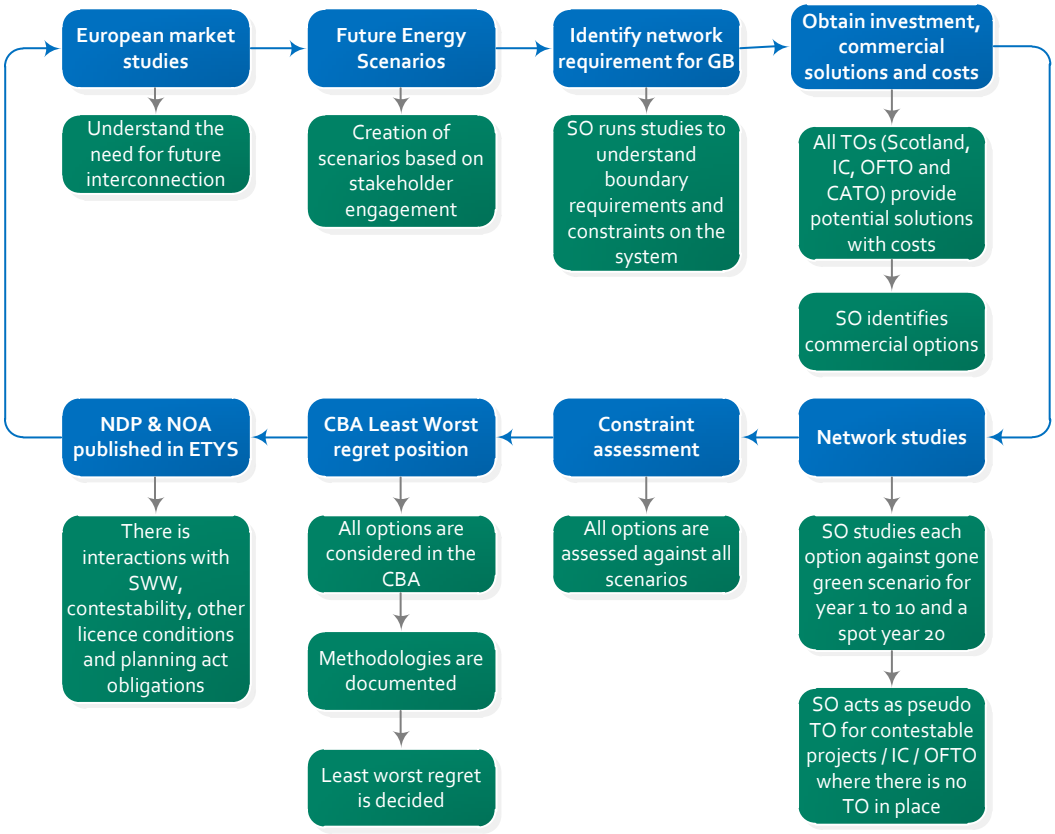


Figure 6: Proposed NOA process

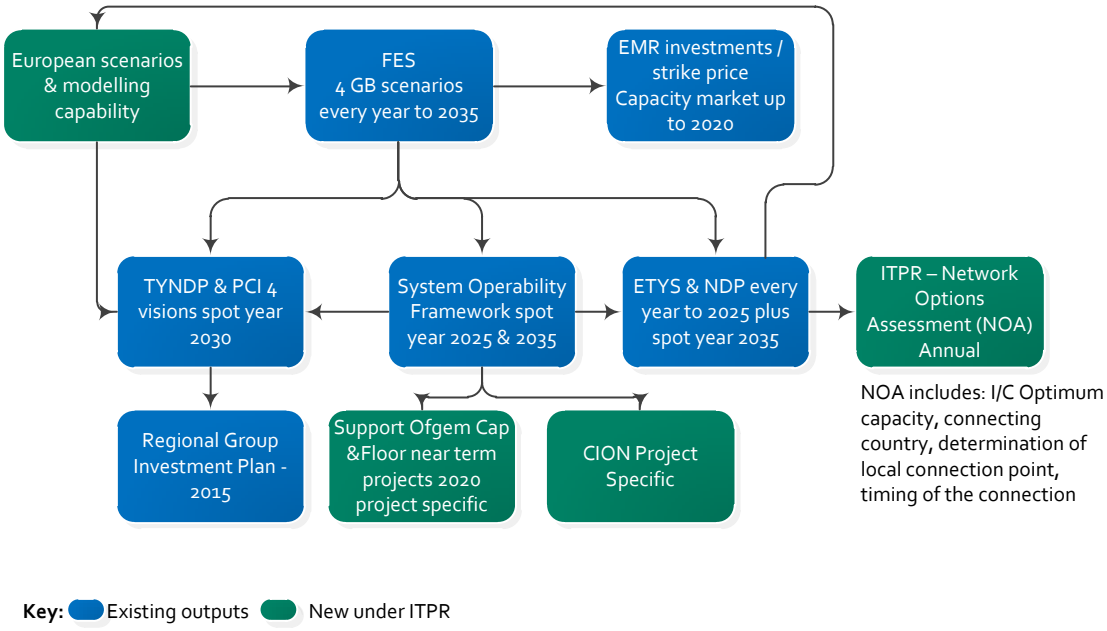


Figure 7: New European scenarios and modelling interactions with current and new outputs

FES

We consider that the FES process would not be impacted by the development of the NOA but its use in the development of the NOA may encourage greater stakeholder input.

Identify network requirements for GB and obtain investment, commercial solutions and costs

We propose that the SO would identify network boundary requirements on a GB wide basis using similar principles and processes to that within NDP with stakeholder input. We would suggest a clear process is established to obtain input from all stakeholders in relation to the identification of the boundary requirements and a clear handover and documentation process when the TOs, interconnectors, developers, OFTO etc. provide their options for resolution of the identified boundary requirement.

Network Studies, constraint assessment and CBA least worst regret position

We would suggest that the network studies, constraint management and Cost Benefit Analysis stages of the proposed process would have clear methodologies / processes. These processes and methodologies would be developed with industry and be open to scrutiny and development. It was not envisaged that there would be stakeholder engagement at every stage of this part of the process due to the impact on time, interactions with other processes and resources for the industry.

Publication and transparency

We propose that the NOA could be published as a subset of ETYS on an annual basis. The report could contain:

- An overview of Network Requirements
- Analysis of all options provided
    - Incremental boundary Capability (benefit to system)
    - Required dates by scenario
- High level scope of options
- Least regret development to be taken forward in following year
- Instruction of phased development and next year's progress required

Wherever practicable, we will aim to make the analysis behind the NOA document available to allow industry to repeat and understand our logic. We would suggest throughout this process there would be significant stakeholder engagement.

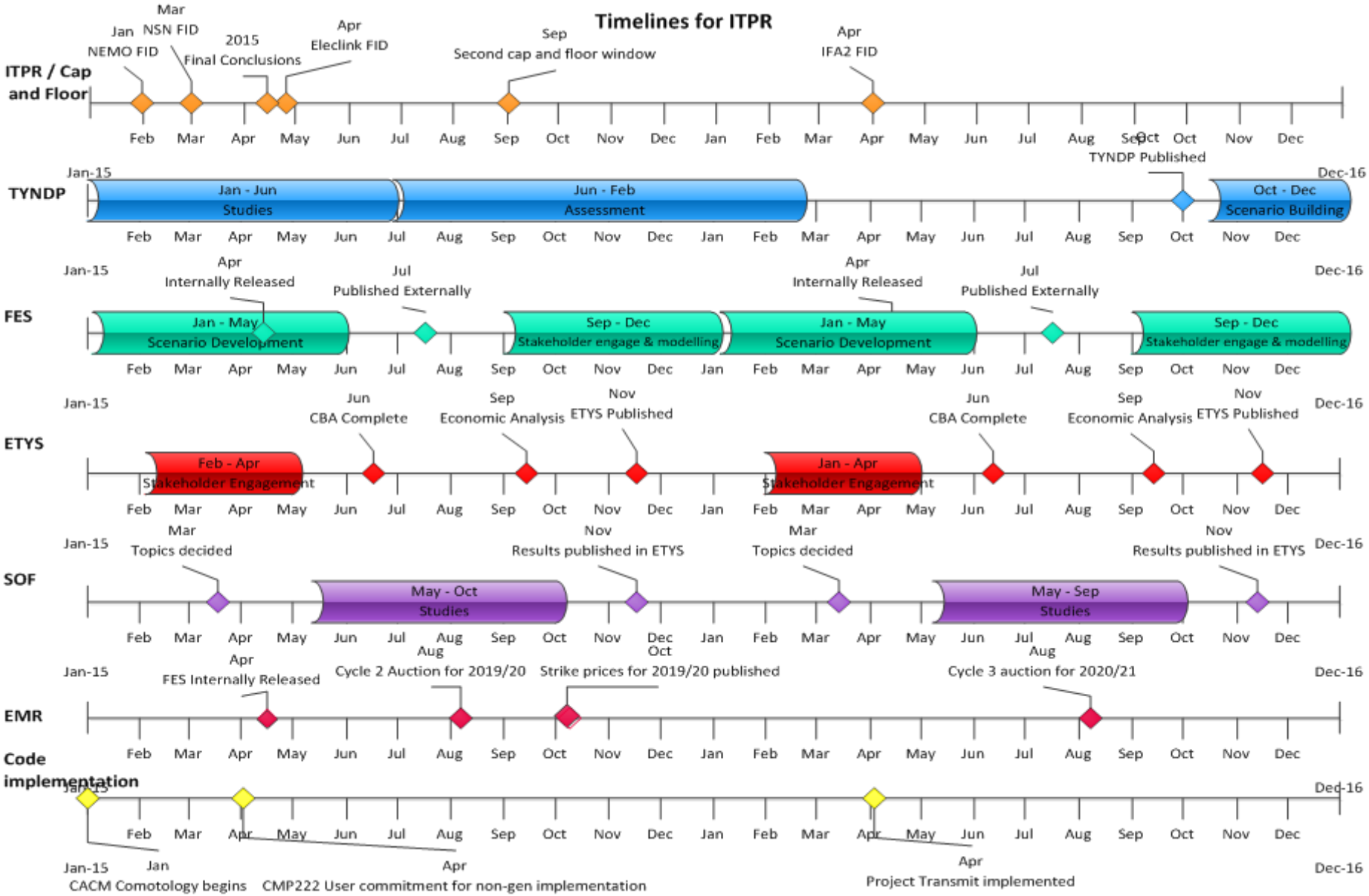
Finally, we consider that the output should feed back into the next year's annual process for FES, NOA and ETYS.

We would welcome stakeholder input and thoughts on our initial proposals for the NOA and European scenarios /modelling and note significant industry development is required.

Appendix 3 – Timeline and interactions with other processes

The timeline below shows key processes and deadlines during 2015/16 which have an interaction with the ITPR project. As previously noted there is a close interaction between FES and ETYS.

To further illustrate the interactions, FES also feeds into a wide range of other work including the Gas Ten Year Statement (GTYS), Winter Consultation Report, Winter Outlook Report, Capacity Assessment Report (for Ofgem), Electricity Capacity Report (for DECC), ENTSO-E Visions and TYNDP, ENTSO-G TYNDP and other system analysis and security of supply work we undertake. Hence, any delays would have a consequential impact. Therefore, we would like to work closely with Ofgem and the industry to develop a robust implementation plan for the ITPR project, which avoids any unintended consequences, impacts or delays.


Timelines for ITPR
ITPR / Cap and Floor
Jan NEMO FID
Mar NSN FID
Final Conclusions
2015
Apr Eleclink FID
Sep Second cap and floor window
Apr IFA2 FID
Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
TYNDP
Jan-15
Jan - Jun Studies
Jun - Feb Assessment
TYNDP Published
Oct - Dec Scenario Building
Dec-16
FES
Apr Internally Released
Jul Published Externally
Jan - May Scenario Development
Sep - Dec Stakeholder engage & modelling
ETYS
Jun CBA Complete
Sep Economic Analysis
Nov ETYS Published
Feb - Apr Stakeholder Engagement
Jan - Apr Stakeholder Engagement
SOF
Mar Topics decided
Nov Results published in ETYS
May - Oct Studies
May - Sep Studies
EMR
Apr FES Internally Released
Aug Cycle 2 Auction for 2019/20
Oct Strike prices for 2019/20 published
Aug Cycle 3 auction for 2020/21
Code implementation
Jan CACM Comotology begins
Apr CMP222 User commitment for non-gen implementation
Apr Project Transmit implemented

Appendix 4 – Conflicts of Interest

The table below highlights areas of our licence which already provide confidence to industry in relation to the potential conflicts raised in Ofgem's Draft Conclusions. These licence conditions may require some adjustment however they provide a starting point for the conflict mitigation proposals. It should be noted that business separation between NGET and associated delivery interests has largely been achieved through EMR as demonstrated by many ticks in the final column; however it is clear that there is room in the licence to develop conditions around the potential for the SO to bias solutions towards the incumbent TO.

		Conflicts of interest raised in ITPR Draft Conclusions					
Current NGET Licence Conditions	**Summary of conflict mitigation**	**Bias solutions towards associated delivery interests**	**Bias solutions towards incumbent TO**	**Supporting the development of interconnection – bias advice to advantage associated delivery interests**	**Onshore contestability – designing tendered projects to favour associated delivery interests**	**Share sensitive information with associated delivery interests**	**Business Separation NGET and associated delivery interests**
Condition B1 – Regulatory Accounts	Ensures transparent attribution of revenues/costs applicable to licensed business area are applied for that business and backs up the general prohibitions preventing misallocations of cost and revenues and the grant and receipt of cross subsidies						✓
Condition B5 – Prohibition of Cross Subsidies	This backs up the prohibition on favouring other businesses. Linked to obligation to report under Condition B1 together these provisions ensure costs/revenues of group companies are attributed to the business that gives rise to them						✓
Condition B6 Restriction on activity and financial ring fencing	Limits the scope of the licensees' activities and ensures that assets of the regulated business are not put at risk. It also ensures that NGET cannot engage in activities outside of the transmission business (except in a very limited manner or with the Authority's consent)						✓
Condition B7 – Availability of Resources	Seeks to ensure sufficient resources to allow the transmission business to be run (and so not at risk from other businesses)						✓

Condition B8 - Undertaking from ultimate controller	General "good conduct" obligation on behalf of the whole National Grid group that backs up all other obligations and bolsters "the other end" e.g. of non-discrimination /no cross subsidy obligations	✓		✓		✓	✓
Condition B9 – Indebtedness	Protects assets of licensed business for use in the licensed business and through imposing obligation to deal on ALBNCT backs up obligation not to give or receive cross subsidy (as this would not be normal commercial terms). Note the cash lock up provisions detailed in paragraphs 3 and 4 which would apply if the licensee does not hold an investment grade issuer credit rating or if the credit rating is on review for possible downgrade, on credit watch or rating watch with a negative description or has a negative rating outlook. As it is not limited merely to financial terms, this obligation also, therefore, prohibits NGET from favouring other group companies as such favouritism could not be achieved if NGET were acting on an "arm's length basis and normal commercial terms.	✓		✓		✓	✓
Condition B15 – Regulatory instructions and guidance	Ensures effective regulatory oversight can be maintained by the Authority						✓
Special Condition 2C: Prohibited Activities and Conduct of the Transmission Business	Prevents NGET or any subsidiary from holding an OFTO licence in order to prevent any discrimination between commonly held transmission licences and also imposes a wide obligation on NGET to conduct its transmission business in a manner that confers no unfair commercial advantage on itself, affiliates, transmission users and transmission licensees.	✓	✓	✓		✓	✓
Special Condition 2D Separation of NGET and	Bolsters 2C obligation by requiring licensee to have specific managerial and operational architecture to ensure compliance and a Compliance Statement approved by Ofgem	✓	✓	✓		✓	✓

Relevant Offshore Transmission interests							
Special Condition 2E – Appointment and duties of Business Separation Compliance Officer	Bolsters 2C obligation by requiring licensee to have a Business Separation Compliance Officer who will report annually on the level of compliance achieved to the NGET board and to Ofgem.	✓	✓	✓		✓	✓
Special Condition 2B – Restriction on the use of certain information	Role designed to ensure that the licensee does not favour its own asset owning activity over that of the Scottish licensees by sharing of information. Targeted rule to deal with specific concern dealing with concurrent applications from one user for alternative connections in England & Wales and Scotland.		✓	✓	✓	✓	
Special condition 2H	Requirement for a compliance statement describing how the licensee shall ensure compliance with special condition 2B.		✓	✓	✓	✓	
Special Condition 2G – Prohibition on engaging in preferential or discriminatory behaviour	Imposes a broad prohibition on undue discrimination between transmission licensees or itself when conducting the transmission business.	✓	✓	✓	✓	✓	✓
Special Condition 2N – Electricity Market Reform	Requires NGET to perform EMR function in a manner to ensure that none of NGET's businesses nor any business of any Associate of the licensee obtains an unfair commercial advantage. Includes requirements for legal and functional separation of NGET from other National Grid businesses operating in interconnectors, offshore or carbon capture and storage. Includes .ring-fencing of specific					✓	✓

	teams and restrictions on the use of confidential information.						
Utilities Act (Section 105)	General statutory prohibition on the disclosure of information that relates to a particular business whether confidential or not. Prohibits information exchanges that could give rise to concerns for example around discrimination.					✓	
Competition Law	General rules relating to conduct of all businesses provide ex post regulation to deal with problems should ex ante sectorial legislation have failed to deliver appropriate behaviour	✓	✓	✓	✓	✓	✓
Industry Codes - CUSC, Grid Code, STC or BSC	The codes, in general, provide that information NGET receives as part of the regulated business must be treated as confidential, and only used to enable NGET to perform its respective regulated activities.	✓	✓	✓	✓	✓	✓

Appendix 5 – NGET Approach to Business Separation

The manual below demonstrates NGET's approach to business separation, which has been shared with Ofgem.

National Grid Electricity Transmission plc
Approach to Business Separation

Introduction

National Grid Electricity Transmission plc (NGET) manages the flow of electricity to homes and businesses throughout Great Britain. The parts of the NGET business which manage these activities of balancing and operating the national electricity transmission system are called the "National Electricity Transmission System Operator" functions (NETSO). NGET also owns and maintains the high voltage electricity transmission network in England and Wales. The parts of its business which deal with these activities are called the "Transmission Owner" functions (TO).

NGET is regulated by Ofgem which is governed by the Gas and Electricity Markets Authority through the Electricity Act and through its Electricity Transmission Licence.

Through its position at the heart of Great Britain's energy systems, the NETSO is in a powerful position, as it receives confidential and commercially sensitive information about the activities and future plans of other industry participants and takes actions to manage and balance the system, which may impact on other industry participants.

Conflicts of interest could potentially arise between NGET and other companies within the National Grid group which operate in competitive UK markets, in particular in interconnectors, offshore transmission and carbon capture and storage.

This document sets out the regulatory and statutory rules to mitigate conflicts of interests which may arise for NGET and its directors. These rules also protect consumers and other stakeholders from any adverse effects to efficiency or competition which might ensue. It also describes NGET's approach to business separation compliance, through its corporate and governance structures and its culture of "Doing the Right Thing".

Regulatory and Statutory Framework

NGET is subject to a number of regulatory and statutory rules which govern the way in which it undertakes its business. As a subsidiary company of National Grid plc, some of these rules relate specifically to separation from other companies within the National Grid group. They set out the framework for fair business conduct, control of confidential information and business separation including financial, managerial, physical, and legal separation. Together they provide a robust and effective protection against inappropriate behaviour by NGET in its role as NETSO, and in particular prevent NGET from acting in favour of its affiliate companies, should a conflict of interests arise. These can be summarised as follows:

Competition Act 1998

Like all other companies, National Grid plc and its subsidiaries (including NGET) is subject to the requirements of Competition Law in the form of the Competition Act 1998. Chapter 1 of that Act prohibits entering into anti-competitive agreements, while Chapter 2 prohibits abuse of a position of dominance in a relevant market.

These rules apply in addition to the specific regulatory regime applicable to NGET and, through the possibility of very substantial fines, provide a very strong disincentive to inappropriate behaviour by NGET or any member of the National Grid group of companies.

Electricity Act 1989 (EA89)

EA89 requires NGET, as a holder of an electricity transmission licence, to develop and maintain an efficient, co-ordinated and economical system of electricity transmission and to facilitate competition in the supply and generation of electricity. It also, through implementing the Third EU Energy Package, prohibits NGET and its group companies from carrying out any activities that would require either a generation or supply licence. NGET is prohibited under the EA89 from holding an Interconnector Licence and therefore cannot itself participate in the operation of an interconnector[5].

Utilities Act 2000

Section 105 applies to NGET as the holder of an electricity transmission licence and prohibits it from disclosing information obtained in the course of its licensed activities and which relates to the affairs of individuals or businesses to any third party including other companies in the National Grid group. This obligation lasts for as long as the person to whom the information relates carries on business and is not limited to confidential information. It extends to all information that NGET has obtained by virtue of its licensed activities. This obligation is backed up by criminal sanctions for breach.

NGET's Electricity Transmission Licence

NGET's electricity transmission licence controls the way in which it can operate, setting out rules relating to its financial management, regulatory accounts, management of information and business separation.

These obligations are summarised as follows:

- **Limitation on scope of activity and financial separation** which protects NGET's assets for the use of the licensed business, and imposes obligations to deal on an arm's length basis and on normal commercial terms with affiliates; (special conditions B6, B7, B9).

- **The requirement for economic and efficient behaviour** which also prohibits undue discrimination between any persons or classes of person in the procurement or use of balancing services; (condition C16).

    - **The prohibition of discriminatory behaviour** such that no unfair commercial advantage on itself, affiliates, transmission users and transmission licensees is conferred; (Special Condition 2C).

[5] National Grid Group does own interconnector businesses; however, these are separate legal entities to NGET and are subject to business separation.

- **An over-arching good conduct obligation** on NGET to conduct its transmission business in such a way to secure that NGET, its affiliates, any users of the transmission system and other transmission licensees obtain no unfair commercial advantage; (Special Condition 2C).

- **Prohibition** on NGET holding an Offshore Transmission Owner licence. NGET is not permitted to own offshore transmission networks; (Special Condition 2C).

- **Prohibition on cross subsidies** that prevents NGET from giving or receiving a cross subsidy (this complements the obligation to deal on an arm's length basis and normal commercial terms); (condition B5).

- **A general "good conduct" obligation** which extends the requirement to group companies. An undertaking is required to be given by the National Grid plc board to ensure that no conduct by either National Grid plc or any other group companies will place NGET in breach of its licence obligations; (condition B8).

- **General reporting requirements such as** regulatory accounts thereby ensuring transparency regarding revenues/costs attributable to the licensed business area, and prevents misallocation of costs and revenues and the grant and receipt of cross subsidies; (condition B1).

- **Requirement for independent directors to be members of the board of NGET.** The NGET board must contain at least 2 non-executive directors, to provide independent oversight on the activities of the NGET board, and external reporting obligations. (condition B22).

Restrictions within industry codes such as the CUSC[6], Grid Code, STC[7] and BSC[8], ensuring that information that NGET receives as part of its regulated business be treated as confidential and be used only for the purpose of performing its activities, and are backed up by licence conditions requiring NGET to comply with the codes.

EMR

A new special condition 2N has been introduced into NGET's transmission licence effective from 1st August 2014. This protects specifically against conflicts of interest which may arise out of NGET's new duties as the EMR delivery body. National Grid already operated its businesses which carry out interconnector, offshore and carbon capture and storage activities as separate legal entities from NGET, but special Condition 2N now makes it an explicit licence condition for NGET to be managerially, physically and financially separate from those companies. Special condition 2N also places an information ring-fence around all confidential information which NGET receives through carrying out its EMR duties, which means it can only be used for strictly limited purposes and cannot be shared, including with the NGET TO functions or other National Grid Group Companies involved in interconnectors, offshore transmission and carbon capture and storage activities. These restrictions are backed up by measures such as separation of certain EMR teams and controls on transfers of employees.

[6] Connection and use of System Code
[7] SO/TO Code
[8] Balancing and Settlement Code

Compliance Statements

NGET's licence requires it to have in place Compliance Statements which set out the controls and procedures which NGET has adopted to secure business separation compliance for certain activities where there is a high risk that conflicts of interest could arise. These activities are Offshore Transmission and delivery of the EMR functions. NGET is required to have in place specific managerial and operational structures, and a Business Separation Compliance Officer. Compliance Statements for both these areas have been approved by Ofgem and are publically available on the National Grid website, together with annual compliance reports.

http://www2.nationalgrid.com/UK/Industry-information/Compliance/

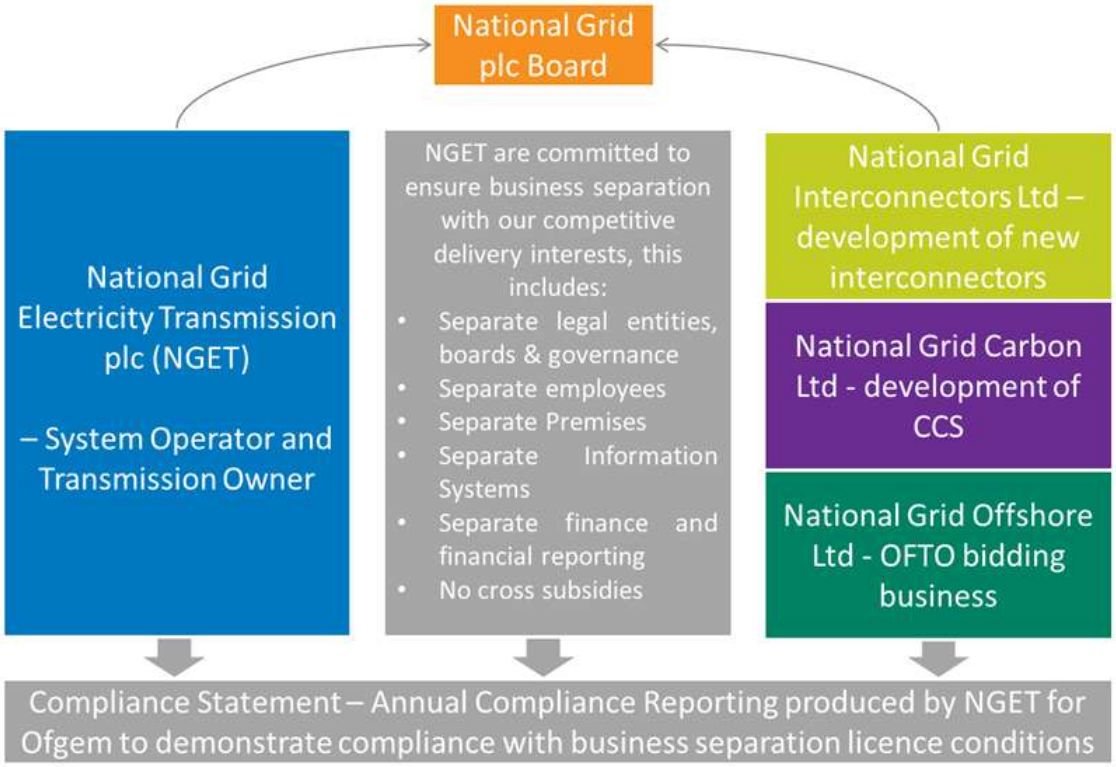
Sanctions

A breach of any of the NGET's licence obligations or Compliance Statements could lead to sanctions by Ofgem, which may include restrictions on activity, additional and more onerous licence conditions and fines. NGET would also suffer serious reputational damage.

Ensuring compliance with our regulatory and statutory obligations

Corporate Structure

Compliance with our regulatory and statutory obligations is an important cornerstone of day to day activities, and the National Grid corporate structure has been designed with this in mind. Physical, legal, financial and managerial separation of NGET from certain affiliate businesses is key to compliance with the regulatory and statutory obligations, with the main features summarised below:



Note that this diagram represents a simplified view of business separation which includes NGET and the key UK operating companies which are relevant for conflicts of interests. It is not a full representation of National Grid's UK operating structure.

In addition, NGET has in place systems of control and governance arrangements that ensure compliance with its licence obligations through the existence of separate board and executive committees to secure appropriate independence of operational and managerial control. National Grid Interconnectors, National Grid Offshore and National Grid Carbon are separate legal entities and have separate boards. None of the members of those boards are members of the NGET board. None of the members of the NGET board are members of the boards for National Grid Interconnectors, National Grid Offshore and National Grid Carbon.

Separation of the NGET SO and TO Functions

The board of NGET operates under delegated authority from National Grid plc to direct the affairs and take all substantial decisions for NGET. In turn, the board of NGET delegates authority to two separate executive committees for the NETSO and the TO. Each of these executive committees operates as a business unit, and is "chaired" by separate lead directors who have accountability for directing the affairs and taking all substantial decisions for that business unit. The Chair for the System Operator Executive Committee is the Director of Transmission Network Service, and the chair for the Electricity Transmission Owner Committee is the Director of Capital Delivery. Thus operational and managerial control of the NETSO and TO business units sits with their respective executive committee, under the leadership of the "Chair". The separate NETSO and TO business units have distinct identities and will drive internal performance, whilst at the same time maintaining external focus, to ensure they are delivering against stakeholder priorities in accordance with RIIO.

The members of the System Operator Executive Committee are:

Director, Transmission Network Service (Chair)
Director, Market Operation
Head of Process, Operate the System
Lead Finance Business Partner - SO
Director, UK Regulation
Legal Business Partner
Corporate Affairs Director
Head of EU Public Affairs
Head of UK IS

We believe that it would be beneficial to undertake more cost benefit analysis and will provide assistance, where possible, if this would be helpful

No members of the Electricity Transmission Owner business are members of the System Operator executive committee.

The members of the Electricity Transmission Owner Executive Committee are:

Director, Capital Delivery (Chair)
Director of Electricity Transmission Asset Management
Head of Electricity Transmission Owner (ETO) Process
Delegate - Director Capital Delivery
Electricity Transmission Finance Business Partner
UK General Counsel
Head of Data and Technology
Director UK Regulation
Head of UK RIIO Delivery

Role of the UK Executive Director – UK Operating Model effective 1st October 2014

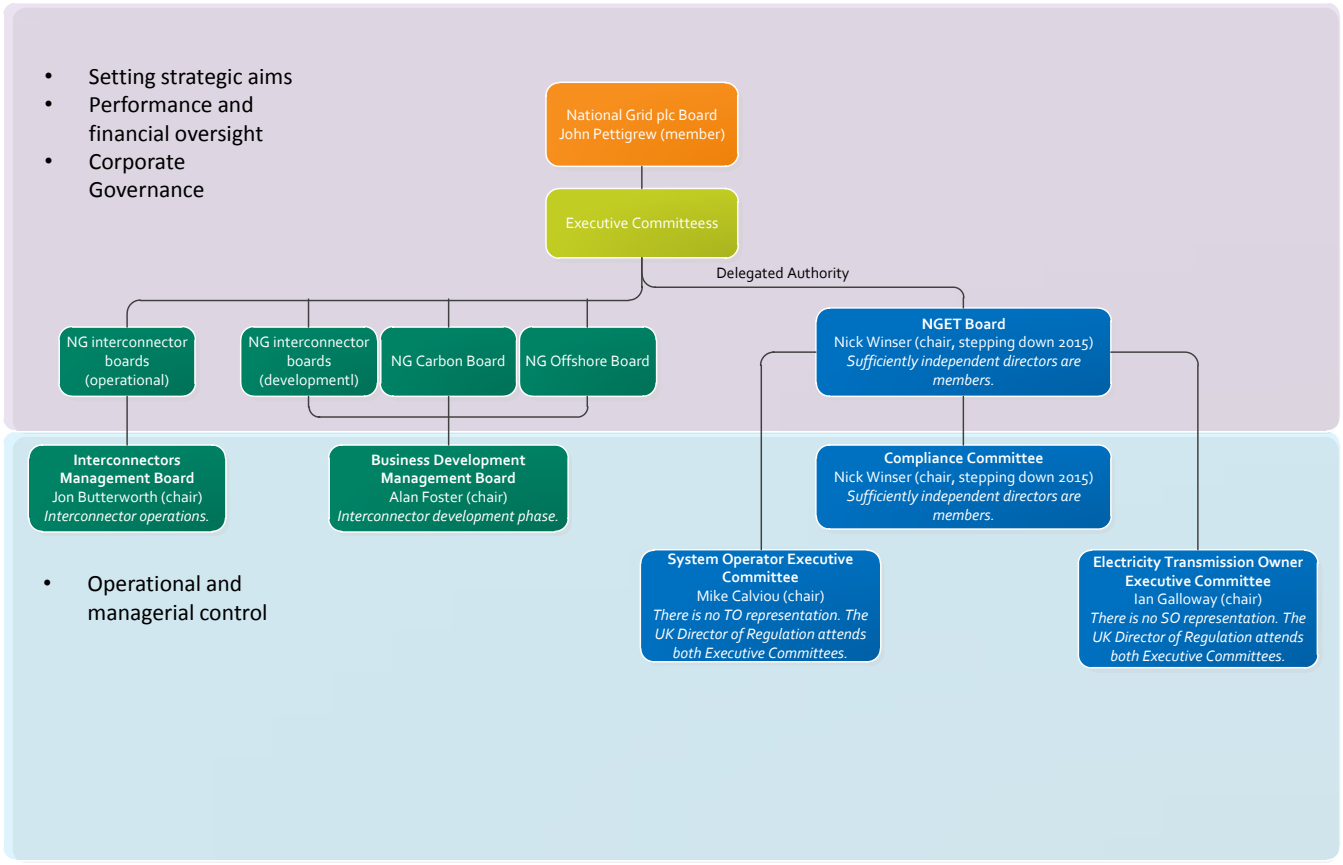
The role of the UK Executive Director (UKED) has been expanded so that all UK operating businesses (including the NGET NETSO and TO) ultimately report into the UKED, who represents those businesses at the NG plc board. The UKED operates at a strategic level and has accountability for strategic direction and oversight of performance for all UK operating businesses. However, he is not involved in the day to day financial or operational decision making for those businesses, and is not a member of any of the operating company executive committees. This removes any conflict of interests he may experience if he were involved in the operations any of the operating companies. As a member of the NG plc board the UKED is bound by the board undertaking not to cause NGET to breach its licence obligations, so he is prohibited from influencing any of his direct reports in NGET to act in a way which would breach NGET's licence.

This UK operating model underpins NGET's compliance with its licence obligations and strengthens business separation by ensuring independence at the executive committee level, so that all operating company executive committees are responsible for the operational and managerial control of the relevant business unit, and are led by strong and independent "Chairs".

The UKED chairs a Business Separation Compliance Committee for NGET, which is made up of NGET directors, including the Sufficiently Independent Directors. This

committee is in place to oversee NGET's compliance with business separation obligations contained in its licence, and to review and approve the annual compliance report and certificates to Ofgem. The Director Transmission Network Service is a member and is lead director for business separation for offshore transmission. The Director Market Operations is a member and is lead director for separation with interconnectors and carbon capture and storage and compliance with the EMR information ring-fence.

The governance structures in place are represented in simplified form as follows:



Note that this diagram represents a simplified governance structure for the key UK operating companies relevant for conflicts of interest for NGET effective at 1st Oct 2014. It is not a full representation of National Grid's UK operating structure.

Shared Services

NGET is permitted to participate in the provision of shared services to its affiliates in accordance with its licence. Shared services include functions such as transactional finance, HR, procurement and logistics, taxation and facilities management.

Certain shared services function work closely with businesses in a trusted adviser role and may therefore receive confidential information e.g. Legal, Regulation, Finance. Where this happens, Shared Services officers are appointed on a dedicated business partner basis, such that they would not work simultaneously for both NGET and another business where conflicts could arise (interconnectors, carbon capture and storage or

offshore transmission). These functions are very aware of the requirement for client confidentiality.

Promoting a culture of compliance

NGET has in place a Business Separation Compliance officer whose duties are to advise directors and employees on compliance with the licence obligations, and report to the Compliance Committee, NGET board of directors and Ofgem on the effectiveness of the compliance processes and procedures which NGET has in place. The independence of the Business Separation Compliance Officer is secured through an independent reporting line into National Grid's Legal Function.

National Grid promotes a powerful culture of compliance from the top down and this culture of "Doing the Right Thing" is evident throughout the NGET organisation. The approach to creating a compliant culture is through an interlocking framework:

Policies and Procedures are in place to set out the compliance processes and codes of conduct which employees must operate to and include:

- Employee Induction Policy – contains business separation requirements;
- Compliance Rules – code of conduct for all employees in relation to business separation;
- Code of Conduct – applies to NGET and Offshore TO Regime and to EMR;
- Employee Transfer Process – to ensure business separation compliance for employee moves between businesses – all sensitive moves are reviewed by the Business Separation Compliance Officer, and appropriate measures put in place;
- Pricing Governance Policy – to ensure consistent pricing is applied for services to group businesses and third parties;
- Shared Services Charging Methodology – cost apportionment for shared services, to avoid cross subsidy;
- Property and IS Policies – business separation rules;

- Information & Records Management Policy – guidelines on classifying information;
- Regulatory Reporting Code of Practice – code of conduct for regulatory reporting; and
- Detailed rules on confidentiality of information in the relevant industry codes (CUSC, Grid Code, STC and BSC).

Wilful breach of the above rules by an employee would be treated as a disciplinary matter.

Training and Awareness is seen as very important to promote a culture of compliance. An annual programme of communication is run which includes reminders on business separation, material for team meetings, posters and e-mail bulletins. Visible compliance leadership is paramount, and one to one meetings with directors are held to discuss risks in their area, with targeted briefings to teams, new starters and employees who are moving business area.

The principles of business separation are further reinforced through an e-learning module. Employees who have access to commercially sensitive information or who are involved in the pricing, negotiation or delivery of contracts are required to recomplete the e-learning training every two years.

Monitoring and Reporting make up the final aspect of the compliance framework. The annual monitoring process includes questions and interviews about how effective the compliance processes and education programmes have been. Monitoring provides assurance for the reports to the Compliance Committee and Ofgem, but also reinforces the importance of business separation within NGET, by visible compliance reporting up to director level, and ensures the appropriate rigour and focus on risk areas.

Further information on business separation compliance at NGET is available from the National Grid plc website or:

Business Separation Compliance Officer
National Grid Electricity Transmission plc
Legal Department
National Grid House
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

Appendix 6 – Resources

As previously stated the enhanced SO role, if fully implemented, has the potential to drive value for existing and future consumers. The draft conclusions propose a number of new activities which the SO will be required to deliver (such as the development of the NOA), in addition to the expansion of some current activities (such as the gateway process) which we have undertaken on an ad hoc or limited basis. Our established processes such as NDP, ETYS and SOF provide a great basis to develop the enhanced SO role, from which we can learn and adopt best practice. This is highlighted in appendix 2, in our proposals for the development of the new NOA process.

We have highlighted in appendix 3 the interactions the implementation of the ITPR project could have on other connected processes which will need to be managed. As a consequence of the new role there are likely to be further mitigations required between our SO and TO function. Taking this into account we will need to consider resourcing and funding of the enhanced role carefully to ensure we continue to provide our customers and stakeholders with the high quality analysis, support and information they expect from us.

In addition, to undertake this new role effectively, we will need to ensure that we engage with our stakeholders in the development of new process, methodologies, documentation etc. and to plan for ongoing stakeholder engagement to ensure we are continually challenged and improve. We look forward to developing the ITPR proposals further with Ofgem and the industry, including the funding arrangements, to ensure successful delivery.

Figure 8: Overview of SO activities below highlights the different areas to which the new SO activities within the draft conclusions align.

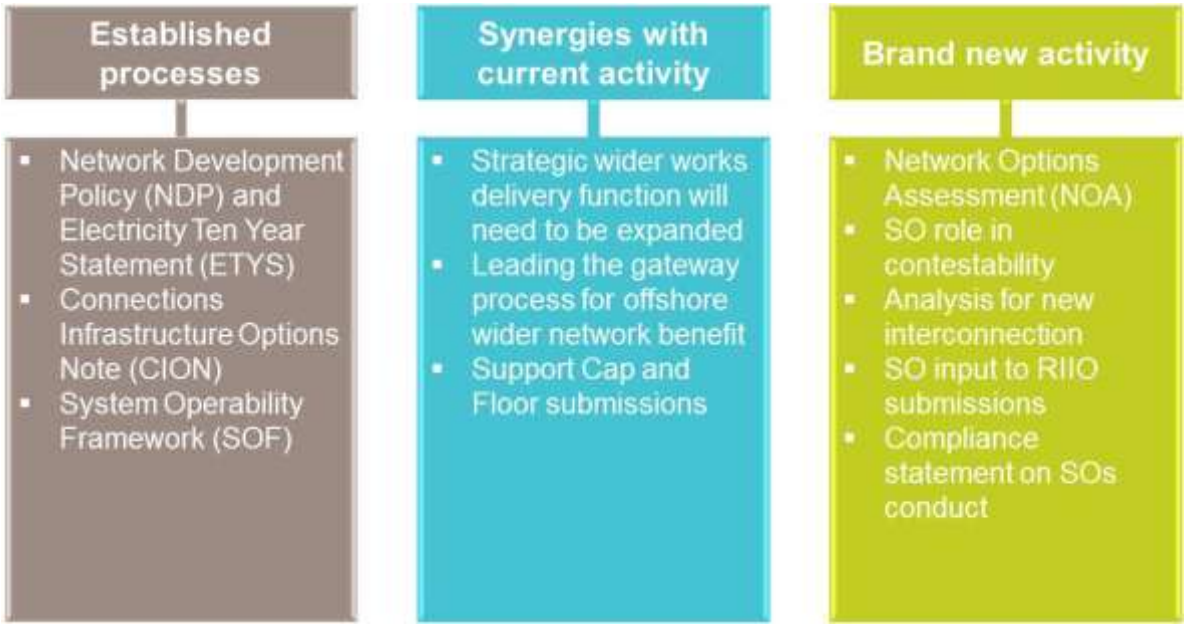


Figure 8: Overview of SO activities

Established processes

The CION process has evolved over time and stakeholders see the value in adopting a broader approach for determining the onshore connection point and having clear documentation to support the decisions and analysis that has been undertaken. This was recognised by the "*interim NETSO process for the treatment of requests for interconnection to the National Electricity Transmission System"* that was finalised in January 2014.

However, the extension of CION beyond offshore projects to interconnectors and other relevant parties is currently not funded. The benefit for the consumer is clear but resources are required to support the process.

Synergies with current activity

We have provided the TOs with support during the delivery of Strategic Wider Works (SWW) projects but this has been undertaken on an ad hoc basis or the TO has provided funding for the SO to undertake this activity on their behalf. As SO we have knowledge and experience in supporting offshore developers and the development of the need case when wider network benefit has been identified, but leading a gateway process would be an extension to our current activity in this area. In addition, we have provided support to Ofgem's current cap and floor process in addition to our existing activities on an interim basis, assuming future funding would be discussed and developed as part of the ITPR project. All these activities have synergies with our current activity therefore it is not a case of capability but additional capacity to sustain our high quality outputs.

Brand new activity

The NOA is a brand new activity and process. Appendix 2 provides our initial proposals for the NOA process. The NOA will need to consider all strategic projects across GB, including onshore, offshore and interconnector projects. This will require resources to develop the processes, methodologies etc. with the industry and will require resources on an enduring basis to manage the process, obtain stakeholder input, undertake the analysis and produce the annual documentation.

The introduction of competitive tendering for onshore transmission assets and the two proposed models will have an impact upon the SO in terms of resources required to support the process. The amount of resources required will depend upon the model adopted. The SO support and process facilitation costs will need to be taken into consideration when developing each model as detailed within our response to question 5 in appendix 1 of this document.

For the SO to fully undertake the required analysis to support new interconnection, we are proposing to develop our European modelling tool capability and development of European scenarios. We are currently looking to develop this capability to support not only ITPR but also FES and EMR processes. However, the FES and EMR processes do not have funding for the development of an European modelling tool or the resources to undertake the ongoing data analysis. We wish to explore this issue further with Ofgem and the industry.

The consultation suggests the enhanced SO will be required to provide support to Ofgem and the TO's for RIIO-T2 submissions. As detailed above we wish to understand our role further and to explore what resources will be needed to support these requirements.

Finally, the new role and activities present opportunities for conflict of interest. As previously stated we support all of the proposed mitigation proposals, however these will have an impact on funding, which we are happy to discuss further with Ofgem and the industry.