ofgem e-serve Making a positive difference for energy consumers

Offshore Transmission: Non Developer-Led Wider Network Benefit Investment

Consultation

Publication date:	10 January 2014
Response deadline:	7 March 2014

Contact:	Pete Wightman
Team:	Offshore Coordination Policy
Tel:	0141 331 6031
Email:	offshore.coordination@ofgem.gov.uk

Overview:

Investment in offshore transmission is an area of considerable focus for Ofgem. In December 2012, we consulted on a framework to support the coordination of future offshore transmission assets. Following responses to that consultation, we have further developed policy on a framework for non developer-led wider network benefit investment (WNBI) in coordinated offshore assets. In this consultation we set out three alternative tender models for this type of investment. We are seeking views on these models, including an indication of potential market interest in them. These views will help inform our future decisions on policy for non developer-led WNBI.

Context

Electricity generated from offshore renewable energy sources is expected to make an important contribution towards the UK achieving its renewable energy targets by 2020. In the government's publication of Contracts for Difference (CfD) strike prices earlier this year, it was estimated that CfDs could support the development of 8 to 15 gigawatts (GW) of offshore wind capacity by 2020[1]. There is also substantial scope for further growth, with Round 3 zones leased by The Crown Estate representing up to 32GW of offshore generation. Accommodating such capacity will require timely, coordinated, cost-effective and secure development of the transmission network in Great Britain (GB).

The Office of Gas and Electricity Markets (Ofgem) and the Department of Energy and Climate Change (DECC) have collaborated on designing and implementing the regulatory regime for offshore electricity transmission. Under these arrangements, Ofgem is responsible for granting offshore transmission licences through a regulated competitive tender process. In July 2009, Ofgem began the first transitional tender round for offshore transmission licences, attracting almost £4 billion of investment appetite and generating substantial savings for generators and consumers.

We have run, or are in the process of running, 13 competitive tenders for Offshore Transmission Owner (OFTO) licences under the offshore transmission regime. We have granted nine OFTO licences and appointed a further three preferred bidders. Now that the Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2013 (the "2013 Tender Regulations") are in force, we are ready to start running tender exercises under the enduring regime. We anticipate launching Tender Round 3 (TR3), the first tender round under the enduring regime, in early 2014.

To date, offshore transmission assets have been developed as standalone connections to shore ("radial" connections). However, many planned offshore wind projects will be larger, more complex and further from shore than those that have been developed so far. As a result, there is potential for efficiencies from greater coordination of offshore transmission infrastructure. This could include coordination between connections and for the strategic development of the wider GB transmission network.

[1] Electricity Market Reform Delivery Plan, December 2013, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/268221/181213_2013_EMR_Delivery_Plan_FINAL.pdf.

Associated documents

- Joint Ofgem/DECC OTCP Conclusions Report, March 2012
- Offshore Transmission – Consultation on potential measures to support efficient network coordination, March 2012, Ref 26/12
- Offshore Electricity Transmission: Updated proposals for the enduring regime, May 2012, Ref 72/12
- Open letter: Offshore Transmission – update on Coordination policy developments, July 2012, Ref 102/12
- Consultation on a proposed framework to enable coordination of offshore transmission, December 2012, Ref 164/12
- Statement on the proposed framework to enable coordination: An update to our December consultation, July 2013, Ref 123/13

Contents

Executive Summary

The coordination of offshore transmission assets could reduce the costs of asset development and thus the costs ultimately faced by consumers. Since 2011, Ofgem has been developing a framework to help enable this.

One category of investment under this framework is non developer-led wider network benefit investment (WNBI): offshore transmission investment that supports coordination of the development of offshore transmission assets and wider GB transmission network reinforcement, but is not limited to a specific connection offer and where offshore generators are unwilling or unable to take forward the works.

In December 2012, we noted that the existing offshore transmission regime offers no clear route for non developer-led WNBI to be taken forward. Our lead option at that time was for onshore Transmission Owners (TOs) to undertake preliminary works, followed by a late OFTO build tender to determine an OFTO to construct and own the assets. Responses to the 2012 consultation indicated support for this option subject to further policy detail, but some stakeholders thought we should consider other options for the development of these works.

As a result, we continue to consider alternative ways for such investment to come forward. These include project development and tender models where parties other than developers of offshore generation undertake the preliminary works, construction and ongoing operation of the assets.

Through this consultation we seek views on the following three models, including market interest in bidding for WNBI works under them:

- **Split OFTO Build**: an initial tender to determine a party to undertake preliminary works, followed by a late OFTO build tender to determine the party that will construct and operate the assets.

- **Early OFTO Build**: an early OFTO build tender to determine the party with responsibility for preliminary works, construction and ongoing operation of the assets.

- **TO Initiated Late OFTO Build:** enabling TOs to undertake preliminary works ahead of a late OFTO build tender to determine the party who will construct, own and operate the assets (lead option from the December 2012 consultation).

Under each model there is also the question of who should have responsibility for identifying the need or opportunity for non developer-led WNBI. We seek your views on potential roles and responsibilities in this regard, as well as the specific activities that parties would need to undertake.

Each model has strengths and drawbacks. At this stage we do not have a preferred model. Following the close of the response period, we will undertake further analysis which will take into account stakeholder views and potential impacts of the models.

We will also undertake further analysis of the legislative frameworks ahead of taking forward any option; it is possible that some options may have significant and uncertain implementation timelines if legislative change is required. Future decisions to progress policy for non developer-led WNBI will take account of the potential project pipeline as well as interactions with other regulatory developments, such as the Integrated Transmission Planning and Regulation (ITPR) project.

1. Introduction and issues to be addressed

Purpose of this document

1.1. We seek your views on potential tender models for non developer-led WNBI. Non developer-led WNBI is one category of investment for potential coordinated transmission assets. We consulted on a possible approach for this category in 2012 as part of a proposed framework to support the coordinated development of offshore transmission to form a more economic and efficient transmission network[2]. Through this framework, our aim is to protect the interests of existing and future consumers in relation to the development of the GB transmission network.

1.2. Following responses to the December 2012 consultation[3], we are consulting on alternative models for non developer-led WNBI. In particular, we are interested in hearing whether there are parties that would bid for tenders under the potential models, as well as any suggestions on how the potential models could be improved.

Background on offshore coordination

1.3. Ofgem and DECC have developed a regulatory regime for offshore transmission assets. The regime's key premise is that Offshore Transmission Owners (OFTOs) are selected and licensed through a competitive tender process run by Ofgem. Developers of offshore generation projects ("developers") may choose either the generator build option or the late OFTO build option[4] for each competitive tender. Under the generator build option, the generator will construct the transmission assets, and the OFTO will operate, maintain and decommission the transmission assets. Under the developer-led late OFTO build option, the developer will undertake the preliminary works (including consenting) and high level design of the transmission assets. The OFTO will undertake the detailed design work, procurement and delivery of the build programme, and be responsible for the operation, maintenance and decommissioning of the assets.

---

[2] *Consultation on a proposed framework to enable coordination of offshore transmission* (Ref 164/12), https://www.ofgem.gov.uk/ofgem-publications/51533/consultationonaproposedframeworktoenablecoordinationofoffshoretransmission.pdf.

[3] Responses to the December 2012 consultation can be found on the Ofgem website: https://www.ofgem.gov.uk/publications-and-updates/consultation-proposed-framework-enable-coordination-offshore-transmission?docid=101&refer=Networks/offtrans/pdc/cdr/2012.

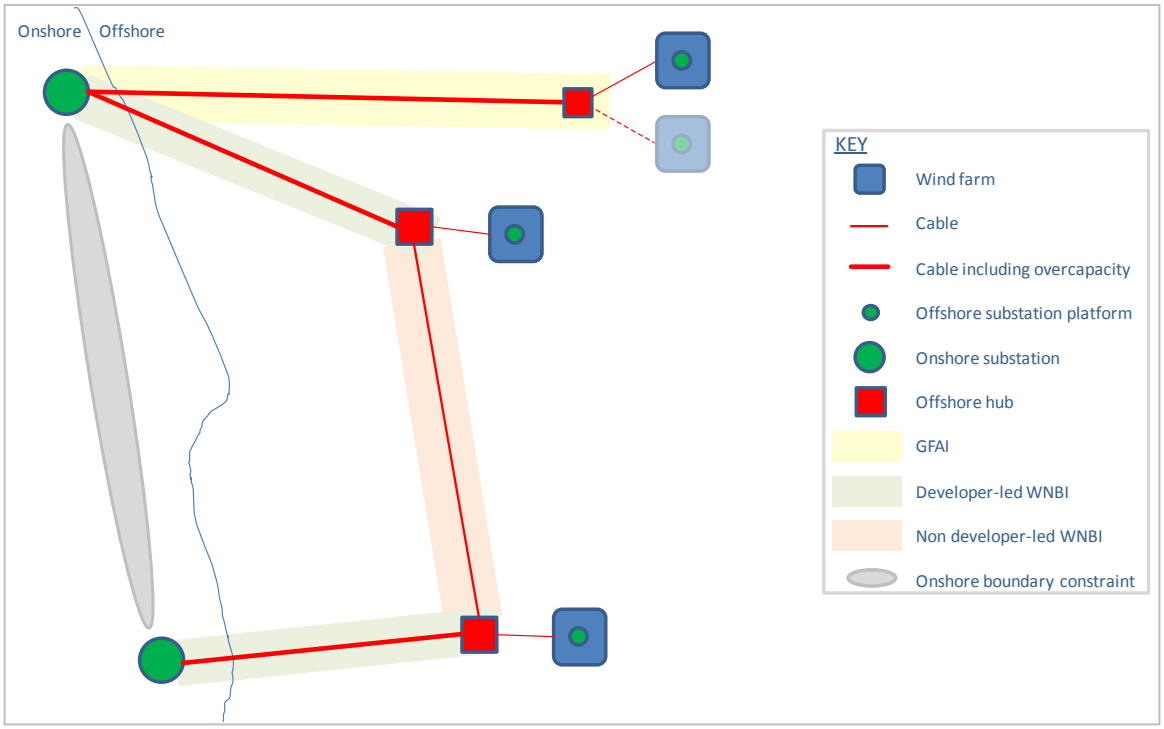
[4] For reference, in this document where we refer to 'late OFTO build', this relates to the late OFTO build model set out in our May 2012 consultation, *Offshore Electricity Transmission: Updated proposals under the enduring regime,* and reflected in The Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2013 (the "2013 Tender Regulations").

1.4. In future, offshore wind projects are likely to be larger, more complex and located at a greater distance from shore than those developed to date. As a result, there are potential efficiencies to be gained from greater coordination in the development of transmission infrastructure. Our work on offshore coordination aims to develop measures that will help to enable coordination of offshore transmission networks while retaining the benefits of the competitive offshore transmission regime.

1.5. In previous publications we set out three categories of investment in coordinated offshore transmission assets, illustrated in Figure 1 below.

- Generator Focused Anticipatory Investment (GFAI): Anticipatory investment that provides offshore transmission capacity for specific future offshore generation projects.
- Developer-led WNBI: Investment in transmission capacity to provide wider network benefit, led by developers (whether generator or OFTO build) and identified for the developer to undertake as part of their Bilateral Connection Agreement (BCA).
- Non developer-led WNBI: Investment to develop offshore transmission assets that would support reinforcement of the wider transmission network, onshore or offshore, being taken forward by a party other than a developer.

Figure 1: Example of coordinated transmission projects



1.6. This consultation focuses on non developer-led WNBI. Our current policy positions on GFAI and developer-led WNBI can be found in our July 2013 publication[5].

Issues to be addressed for non developer-led WNBI

1.7. To date, developers have constructed offshore transmission infrastructure. Existing assets are radial links, meaning they are only used to transmit power from the offshore generator to the onshore network, and are therefore built with this exclusive purpose in mind. In contrast, non developer-led WNBI is investment that would support reinforcement of the wider transmission network, but where developers are unwilling or unable to take forward the works, and as a result the WNBI has not been included for a developer to lead as part of their BCA.

1.8. In our December 2012 consultation we outlined that where WNBI is being taken forward by a developer, the existing generator build and OFTO build options could apply. However, there is currently no clear route for WNBI to be taken forward where it is not being undertaken by a developer. We set out our lead option: for onshore Transmission Owners (TOs) to undertake preliminary works[6] for non developer-led WNBI, followed by a late OFTO build tender to identify an OFTO to construct, operate and own the transmission assets.

1.9. Most respondents felt it would be appropriate for onshore TOs to take forward preliminary works for non developer-led WNBI, subject to further policy detail. Some respondents suggested that Ofgem should consider other parties and methods for taking forward non developer-led WNBI. For example, one respondent suggested that the opportunity to take forward preliminary works should extend to prequalified OFTO bidders. Another respondent suggested that any party should be able to take forward preliminary works for non developer-led WNBI.

1.10. The December 2012 consultation also noted that under our lead option, TOs might propose non developer-led WNBI projects to Ofgem, but there would be no obligation for them to do so. One TO respondent noted that their focus is to meet

[5] *Statement on the proposed framework to enable coordination: An update to our December consultation* (Ref 123/13), July 2013, https://www.ofgem.gov.uk/ofgem-publications/75429/statement-proposed-framework-enable-coordination-update-our-december-consultation.pdf.

[6] "Preliminary works" is a defined term in the 2013 Tender Regulations. Generally, it includes project development activity ahead of construction and does not include construction activities. For the purposes of this consultation, the definition of preliminary works within the 2013 Tender Regulations may be used as a guide, recognising that the scope of preliminary works under different non developer-led WNBI models may ultimately vary from the current definition depending on the most appropriate scope of works for non developer-led WNBI projects.

commitments under RIIO-T1[7] and hence they may not have resources to dedicate to non developer-led WNBI. Another TO indicated they did not think it was appropriate for TOs to have responsibility for obtaining consents.

1.11. As a result of these responses, we have decided to consider other potential models for non developer-led WNBI, in order to develop a framework to enable this type of investment where it is in the interests of consumers. We are retaining the model outlined in the December 2012 consultation as an option.

1.12. The models we are considering are:

- **Split OFTO Build:** an initial tender to determine a third party to undertake the preliminary works, followed by a late OFTO build tender to determine the party who will construct and own the assets
- **Early OFTO Build:** an early OFTO build tender to determine the party with responsibility for preliminary works, construction and ongoing operation of the assets
- **TO Initiated Late OFTO Build:** enabling TOs to undertake preliminary works ahead of a late OFTO build tender to determine the party who will construct, own and operate the assets (lead option from the December 2012 consultation).

This document

1.13. In Chapter 2 we outline the potential non developer-led WNBI models in more detail, discuss the roles of the parties involved and provide our preliminary analysis of these models. In Chapter 3 we discuss links, interactions and next steps.

1.14. Responses to this consultation are invited by 7 March, 2014. Details of how to submit a response are set out in Appendix 1, which also includes a list of the specific questions on which we invite views. We welcome views on any of the issues raised in this consultation and any other issues that you consider relevant. We also welcome confidential responses, which should be clearly marked as confidential when they are submitted.

[7] RIIO-T1 is the first transmission price control review to reflect the Revenue = Incentives+Innovation+Outputs regulatory framework. It applies from 1 April 2013 to 31 March 2021.

2. Models under consideration

Question box

Question 2.1: Do you consider there would be market interest in tenders under these non developer-led WNBI models? Please state why or why not, including whether you would be an interested party.

Question 2.2: What are your views on the role that onshore TOs and the NETSO would need to undertake to ensure success of non developer-led WNBI projects under the different models?

Question 2.3: What are your views on the appropriate risk allocation between consumers and parties undertaking preliminary or construction works, and why?

Question 2.4: What are your views on the incentives and obligations that would be needed to ensure that the preliminary works, including consents, are completed in the interests of consumers and the economic and efficient development of the future transmission system?

Question 2.5: To what extent do you think the alternative models would help deliver the objectives set out in paragraph 2.32 of Chapter 2?

Overview

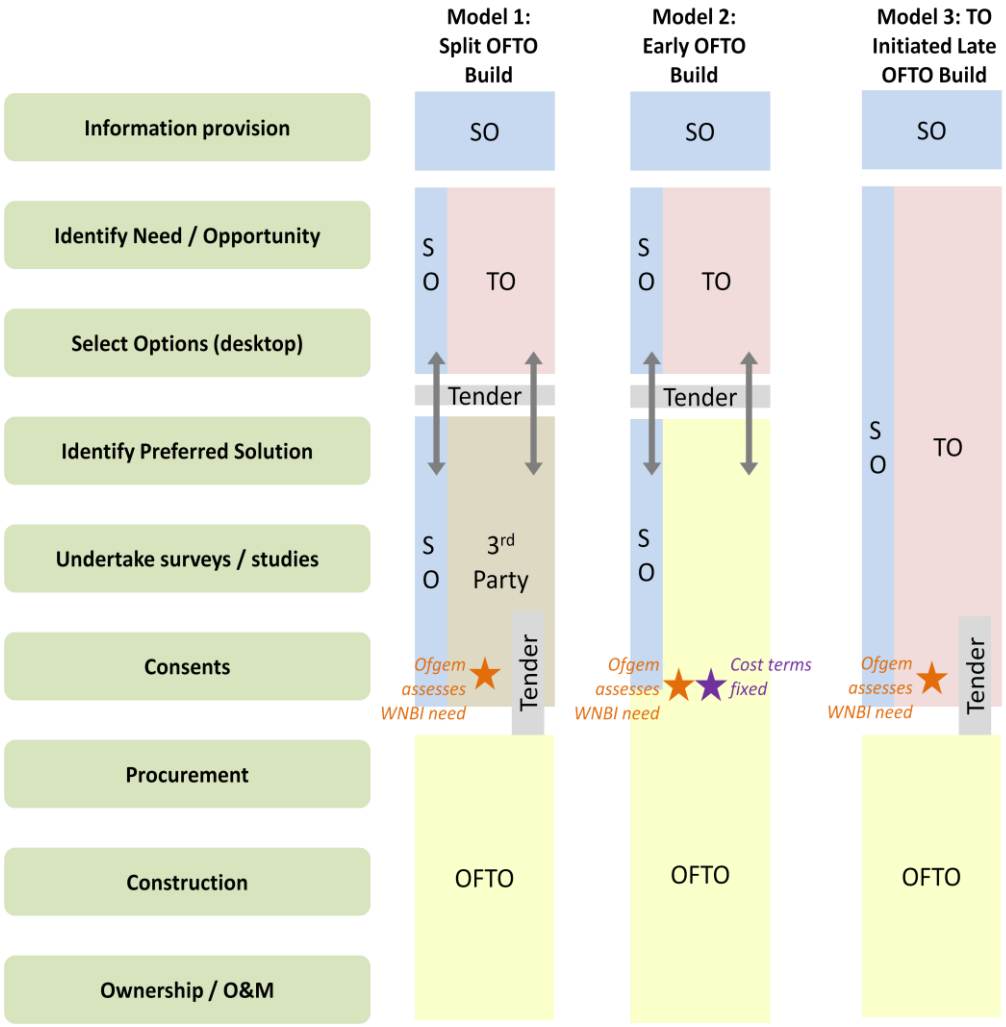
2.1. This chapter outlines alternative project development and tender models for non developer-led WNBI. Figure 2 summarises the models. These models are at an early stage of policy development, and further detail will be necessary before implementation decisions can be made. However, prior to detailed development, we consider it prudent to better understand market and stakeholder views on, and interest in, such models.

2.2. Our decision on whether to take forward any of these models will depend on stakeholder views, an assessment of the impacts, and further examination of the legislative and tender policy framework that may be needed to support them. We will also consider the appropriate timing of taking forward any changes, taking into account the potential project pipeline and also interactions with other regulatory developments, such as the Integrated Transmission Planning and Regulation (ITPR) project. The discussion below represents our current thinking on the operation of these models. Upon further development, feedback and analysis, key areas of these models may change. Where appropriate to do so, the specific elements of an implemented model may also vary between tender rounds.

2.3. Following our description of the models, we discuss the role of onshore TOs, the National Electricity Transmission System Operator (NETSO), and Ofgem in all of

the models. We also set out our thinking on handing over the project lead when a delivery party is appointed, risk sharing under the models, and some preliminary analysis of the impacts of these models.

Figure 2: Summary of alternative models for non developer-led WNBI



Model 1: Split OFTO Build

2.4. *Summary*: Under the Split OFTO Build model, the preliminary works would be completed by a third party appointed through an Ofgem-run tender. If there is a needs case to proceed with construction, Ofgem would then run a late OFTO build tender. At the completion of the preliminary works, we would appoint an OFTO licensee to take ownership of the preliminary works and construct, own and operate the transmission assets.

2.5. Ofgem would run a first tender to license a third party to undertake the preliminary works and develop the project through to the securing of consents. We would select the successful bidder on the basis of the price it bids to complete the preliminary works as well as the evidence the bidder provides on its plans, capability and experience. As the arrows in Figure 2 indicate, it may be appropriate to have flexibility in when this initial tender would occur; in some cases it could be beneficial to hold the tender after some early preliminary work has been undertaken.

2.6. The successful bidder would complete the preliminary works and produce the relevant outputs needed to run a late OFTO build tender. The party undertaking the preliminary works would be expected to engage stakeholders and coordinate with other relevant parties, including affected developers, TOs and the NETSO. It would also be expected to support the eventual late OFTO build tender, undertaking activities such as populating the data room[8], responding to queries from bidders, and contributing to a smooth and timely tender process.[9] As further discussed below, Ofgem would assess the needs case for the investment before proceeding with the late OFTO build tender.

2.7. We anticipate that the late OFTO build tender would be similar to the approach set out in our May 2012 consultation on developer-led late OFTO build[10], but we would need to consider what adaptations would be needed to reflect that the preliminary works were undertaken by a third party rather than a developer.

2.8. In the December 2012 consultation we raised the possibility of third parties completing the preliminary works for non developer-led WNBI, but noted that there did not appear to be suitable methods of remunerating such a party. To enable such a model, we may need to explore whether the third party could receive a tender revenue stream, which could be linked to the completion of key deliverables and outputs. Similar to OFTO tenders that Ofgem currently runs, remuneration would be principally based on the price bid by the third party at the Invitation to Tender (ITT) stage.

[8] A secure electronic data room populated and maintained by Ofgem with information provided by the relevant developer. This information is made available to relevant qualifying bidders through the Ofgem portal.

[9] See Schedule 1 para 1, and Schedule 2, para 1 of the 2013 Tender Regulations, which set out the current requirements we place on developers as part of a late OFTO build tender. http://www.legislation.gov.uk/uksi/2013/175/pdfs/uksi_20130175_en.pdf.

[10] *Offshore Electricity Transmission: Updated proposals under the enduring regime* (Ref 72/12), May 2012, https://www.ofgem.gov.uk/ofgem-publications/51588/enduring-con-doc-may-12.pdf.

Model 2: Early OFTO Build

2.9. *Summary*: This model would be similar in principle to the early OFTO build model consulted on previously[11]. Under this model the OFTO would undertake the design work, consenting, procurement and delivery of the transmission assets work programme, as well as being responsible for the operation, maintenance and decommissioning of the assets. We would appoint an OFTO through an Ofgem-run tender either before, or during, the early stages of the preliminary works. The successful bidder would be selected based on its plans, capabilities and relevant experience, as well as its proposed fixed and indicative costs.

2.10. The early OFTO build tender would be held on the basis of a high-level specification for the transmission assets, including associated preliminary works. As with Model 1, the arrows on Figure 2 indicate that it may be appropriate to be flexible in when this initial tender would occur.

2.11. The OFTO would complete all preliminary works associated with the assets, including securing consents. As part of these works, the OFTO would work with the NETSO and relevant TOs to ensure that the assets it would be developing would form part of a coherent network design that meets both the high level specification and network requirements.

2.12. At the ITT stage, bidders would be likely to bid their desired Tender Revenue Stream (TRS) based on a combination of fixed and indicative costs, with indicative costs possibly subject to a capped contingency or a sharing mechanism. The specifics of the bid requirement would be defined in the ITT document for each tender. We also envisage that the OFTO's revenue would be linked to the completion of key deliverables and outputs.

2.13. As the OFTO approached the completion of the preliminary works and ahead of construction, we would assess the needs case for the investment in more detail to determine whether proceeding to construction would be in the interests of consumers. If so, we would then engage with the OFTO to finalise its TRS to construct, own and operate the assets. As part of this process we would seek to fix the terms within the OFTO's licence (such as its TRS) which would have been set on an indicative basis during the ITT and licence award stage.

[11] We consulted most recently on the early OFTO build model under the enduring regime in the following consultations:

- *Offshore Electricity Transmission: Consultation on the Enduring Regime* (Ref 157/09), December 2009
- *Offshore Electricity Transmission: Further consultation on the enduring regime* (Ref 113/10), August 2010.

A summary of the early OFTO build model was included as an Appendix in the *Government response to consultations on offshore electricity transmission*, December 2010.

Model 3: TO Initiated Late OFTO build

2.14. In the December 2012 consultation, we set out (subject to further work) an option where onshore TOs could submit proposals for funding to undertake the preliminary works for non developer-led WNBI, followed by a late OFTO build tender to identify an OFTO to construct, own and operate the assets.

2.15. We stated that the TO would work with the NETSO to identify the WNBI opportunity and develop a corresponding needs case. There is the possibility that such a route would use a mechanism in the onshore TO licences (which would need to be introduced complementary to the onshore price control processes) to allow the TO to recover its cost of preliminary works for a project should Ofgem deem the works to be in the interests of consumers.

2.16. The TO would complete the preliminary works and produce the outputs needed to run a late OFTO build tender. The TO would be expected to engage stakeholders and coordinate with other relevant parties, including affected developers and the NETSO. It would also be expected to support the subsequent late OFTO build tender if it goes ahead, undertaking activities such as populating the data room, responding to queries from bidders, and contributing to a smooth and timely tender process. The late OFTO build tender would be similar to the approach set out in our May 2012 consultation on developer-led late OFTO build, with adaptations if necessary to reflect that the preliminary works were undertaken by a TO rather than a developer.

2.17. While previously we have stated that under this option we would enable TOs to bring forward proposals for such works, a potential variation of the model would be to oblige TOs to do so where non developer-led WNBI projects are in the interests of an economic and efficient network.

Role of onshore TOs and the NETSO

2.18. We discuss below three key functions that we expect the relevant TOs and the NETSO would need to undertake for these models. These are similar for each model, but there are key differences, in particular for the TO Initiated Late OFTO Build model.

2.19. *Identifying a need or opportunity*: As we stated in the December 2012 consultation, we consider that the relevant onshore TO(s) and the NETSO could identify the need for non developer-led WNBI. Across all three models, we expect that they would also undertake high level system analysis and identify potential options to address the need or opportunity.

2.20. *Ongoing role and supporting the needs case:* In each of the models, we expect the TOs, NETSO and other relevant parties (such as developers of offshore generation projects in the area) will have a role to engage on an ongoing basis with

the party undertaking the preliminary works, to share information and data that may be of relevance to that party as they identify the preferred solution and take forward the works. For example, this might include information about anticipated generation developments locally and across the GB network, which might affect the design of the transmission assets. TOs and the NETSO may also be required to support the needs case before a tender to appoint an OFTO to undertake construction works (Models 1 and 3) or before confirming the needs case for the construction of assets (Model 2). This needs case would be submitted to Ofgem for a decision on whether it was in the interests of consumers to construct the assets.

2.21. *Creating the tender specification:* We are considering whether the TOs together with the NETSO would be most appropriate to put together the specification that would form the basis for the tenders identified under the different models. Under the TO Initiated Late OFTO Build model, TOs might put forward a funding request for the preliminary works and part of those works would be to create a tender specification for a late OFTO build tender. In contrast, in Models 1 and 2 either the NETSO or the relevant TO(s) might produce the high-level specification which would form the basis for the tender for preliminary works. Under Model 1, the third party selected via the initial tender would develop a tender specification for a late OFTO build tender as part of carrying out the preliminary works.

2.22. We are currently reviewing the system planning arrangements for GB's transmission network through the ITPR project. In our June 2013 consultation on ITPR[12], our emerging thinking was that there could be benefit to an 'enhanced' NETSO or other coordinating body taking a more proactive role in planning the system by working with TOs and other transmission developers. This role could include identifying strategic system needs and coordinating the preferred solution across industry participants. We will work to ensure that developments within both the offshore coordination and ITPR projects are compatible.

Role of Ofgem in assessing WNBI

2.23. Ofgem would have a role under each of the models to determine whether the works were in the interests of consumers and therefore whether they should be funded.

- Prior to preliminary works: Under the Split OFTO Build or the Early OFTO build models, Ofgem would determine whether the preliminary works should proceed and therefore whether to launch an initial tender. Under the TO Initiated OFTO Build model, Ofgem would determine whether to allow funding for the preliminary works and any conditions of that funding.

[12] *Integrated Transmission Planning and Regulation Project: Emerging Thinking* (Ref 83/13), https://www.ofgem.gov.uk/ofgem-publications/52728/itpremergingthinkingconsultation.pdf.

- Prior to construction: Ofgem would determine whether to proceed with the construction works, and therefore whether to launch a late OFTO build tender (under the Split OFTO Build and TO Initiated OFTO Build models) or whether to extend the OFTO's revenue to cover construction of the transmission assets (under the Early OFTO Build model).

2.24. These decisions would be taken by Ofgem based on whether the investments were in the interests of consumers, and would be similar to decisions that Ofgem takes on whether Strategic Wider Works projects should proceed. In the December 2012 consultation, we set out criteria that Ofgem would look at in assessing proposals to take forward coordinated offshore assets under the TO Initiated Late OFTO Build model. These included: the (economic) needs case for the investment; the timing and scope of the project and its technical readiness; the outputs to be provided and funding associated with them; and evidence of engagement undertaken with impacted parties and plans for ongoing engagement as the works are developed. We envisage that similar criteria would be used for the Split OFTO Build and Early OFTO Build models, but that these could vary depending on the model and the point of the project's development (e.g. preliminary works or construction phases).

Risk sharing under the potential models

2.25. For each of the models, we will also need to consider how risk is apportioned between parties. Generally, we consider that risks should be allocated to those best placed to manage them. Often these are the parties undertaking the preliminary or construction works, or the parties that are operating the assets.

2.26. However, there are some risks that may be appropriate to share with consumers. One such risk is where the needs case for a project changes over the course of the works. For example, if there were already preliminary or construction works underway, and external factors (such as the projected generation background) change to reduce the need for the investment, we do not consider that it would be appropriate for the party undertaking the works to be at risk of not recovering costs that it had already economically and efficiently incurred or committed. This is consistent with our approach to developer-led WNBI.

Transition from preliminary works to construction

2.27. Models 1 and 3 would both involve the management of the project changing prior to construction beginning. This is consistent with the approach of our developer-led late OFTO build model (as set out in our May 2012 consultation), whereby the generator undertakes the preliminary works for the transmission assets ahead of an OFTO constructing and owning them. Under that late OFTO build model (where the project is driven by the developer's connection need) the developer would be responsible for applying for planning consents and taking forward the consent application, and the OFTO would be appointed once the consents had been granted. There are significant efficiencies to doing so under that model; for example, it is

often possible for a developer to seek consents and planning permissions for both the generation and transmission assets at the same time, and the generator can therefore manage interdependencies between the two during the consenting process. In terms of the timing of the tender process, we identified previously that there are benefits to seeking final ITT stage bids shortly following grant of consents, as this provides greater certainty and information about the project. This in turn can bring greater certainty on pricing, which can be of benefit to consumers by allowing fixed price bids and supporting a wider range of sources of OFTO financing.

2.28. One stakeholder responded to the December 2012 consultation with concerns regarding splitting responsibility for consents and construction under non developer-led WNBI. This splitting of responsibility would be relevant for Models 1 and 3 above, where a party other than the OFTO would have responsibility for progressing the consent submission (the third party under Model 1 and the TO under Model 3). A key concern expressed by the stakeholder is that the OFTO could be responsible for carrying out works associated with meeting certain consent conditions that had been agreed by another party.

2.29. We expect that it will be necessary and appropriate for the OFTO to take on responsibility for meeting certain consent conditions, as certain conditions are only likely to be capable of being met by the party undertaking the construction. However, under Models 1 and 3 we envisage that appropriate incentives and obligations would need to be placed on the party leading the preliminary works such that the works, including consents, are completed in the best interests of consumers and can be transferred to the OFTO so that the transmission assets can be delivered economically and efficiently. Ongoing stakeholder engagement would also assist all parties and bidders to be aware of project progress and risks. It is important that bidders are provided with transparent information and are kept up to date on progress of consenting and other preliminary works activities. We seek any further stakeholder views in this area.

Preliminary analysis of the alternative models

2.30. Our latest impact assessments on the coordination framework can be found in our December 2012 consultation[13] and July 2013 publication[14]. The December 2012 impact assessment in particular includes consideration of the TO-Initiated Late OFTO Build model.

[13] *Consultation on a proposed framework to enable coordination of offshore transmission* (Ref 164/12), December 2012, https://www.ofgem.gov.uk/ofgem-publications/51533/consultationonaproposedframeworktoenablecoordinationofoffshoretransmission.pdf, page 45.

[14] *Statement on the proposed framework to enable coordination: An update to our December consultation* (Ref123/13), July 2013, https://www.ofgem.gov.uk/ofgem-publications/75429/statement-proposed-framework-enable-coordination-update-our-december-consultation.pdf, page 36.

2.31. Our previous analysis shows that our overall proposals on the coordination framework could deliver benefits to consumers, while supporting competition and sustainable development. In our July 2013 publication, we concluded that some of the benefits of coordination would be:

- potential cost savings from coordination (though this will vary on a case by case basis)
- maintaining the current benefits of the competitive offshore regime
- positive impacts on sustainable development, particularly in managing the transition to a low carbon economy and developing improved environmental performance.

2.32. Through the models we have proposed for non developer-led WNBI, we aim to further enable the benefits of coordination to be realised. Below, we have undertaken preliminary analysis of the alternative models. In accordance with key principles of the offshore regime and offshore coordination, the models seek to:

- deliver fit for purpose electricity transmission infrastructure to facilitate the connection of offshore generation and realisation of significant carbon savings
- provide value to consumers by building on the existing offshore regulatory regime, retaining the benefits of competition and helping to capture the benefits of coordination
- attract new entrants and sources of finance to the sector
- ensure that consumers are protected from undue stranding risk, and where they do take on some stranding risk, that they should also receive clear benefit for doing so.

2.33. The Split OFTO Build model has the potential advantage of bringing benefits from early competition in high level asset and network design. It could also include the opportunity to bring new and expert parties into the early project development work, potentially leading to further innovation in the sector.

2.34. A key challenge associated with this model is one identified above in terms of the remuneration for the third party. Therefore, subject to further work and legal analysis of potential remuneration options, there is a risk that this model would have lengthy implementation timelines. Whether such lengthy timelines would have a significant impact would depend on the pipeline of projects coming forward, which remains uncertain. The Split OFTO Build model could also have greater transaction costs associated with running two tenders instead of one, and added complexity associated with having two transfers.

2.35. The Early OFTO Build could bring benefits through early competition in high level asset and network design, whilst also selecting a party with the capability and skills to successfully construct, operate, own and maintain the transmission assets. Early OFTO build would provide continuity in project development, with the same party responsible for the project throughout its development. It would likely be a simpler model to implement and administer than the Split OFTO Build model since there are fewer parties involved overall and only one tender.

2.36. The key challenges with the Early OFTO Build model are that there would be less price certainty at the point of competition, due to the higher levels of project risk (eg consenting), and lower certainty on the need, nature and scope of the transmission assets to be constructed. This could reduce some of the competitive pressure on OFTO pricing and revenue. Setting a TRS based on a mix of fixed and indicative costs, where we would seek to fix the indicative cost terms post-consents being granted, could mitigate this risk to some extent.

2.37. The key benefit of the TO Initiated Late OFTO Build model is that TOs have existing skills and experience to undertake preliminary works. Through consultation we have, together with stakeholders, identified that because of this TOs could be an appropriate party to undertake these works.

2.38. A challenge with this model is that TOs may not come forward with proposals to take forward preliminary works. From responses to our December consultation, we are aware that TOs may be hesitant due to resourcing impacts, as well as concern over whether there may be potential limits where TOs take forward consent submissions without responsibility for the ultimate delivery of the transmission assets. We note that previous analysis for the developer-led late OFTO build model indicates that such a transfer is manageable. An additional drawback is that allocating the work to onshore TOs does not enhance competition in this aspect of the development of the offshore regime.

3. Links, Dependencies and Next Steps

Links and dependencies

Integrated Offshore Transmission Project East

3.1. National Grid is currently progressing the Integrated Offshore Transmission Project East (IOTPE). IOTPE involves potential non developer-led WNBI off the east coast of England, and is examining options to connect the Dogger Bank, Hornsea and East Anglia zones in an integrated manner to alleviate transmission capacity constraints. National Grid is using £1.47m, provided as part of the RIIO-T1 final proposals, to examine the system requirements, technology needs, and commercial and regulatory aspects of different connection options.

Developer-led late OFTO build

3.2. To date we have consulted on the developer-led late OFTO build model, most recently in our May 2012 consultation. Policy development in relation to this model is currently focussed on understanding industry needs and potential barriers to the uptake of developer-led late OFTO build. We currently plan to publish an open letter on developer-led late OFTO build in the coming months, outlining certain key concerns and potential new approaches as proposed in particular by developers. Following publication of this letter, we would seek industry views to understand how we might further develop the developer-led late OFTO build model without compromising the benefits we consider it can deliver.

3.3. The non-developer led WNBI models discussed in this consultation all involve some form of OFTO build tender. While there are a number of similarities and synergies between these two policy areas, there are also key differences, which may lead to divergence in approach between some aspects of the non developer-led WNBI models and the developer-led late OFTO build model.

Integrated Transmission Planning and Regulation Project

3.4. Ofgem's coordination policy work focuses on enhancing the existing offshore regulatory framework to enable greater coordination in offshore transmission. The ITPR project is considering developing network planning and delivery arrangements to facilitate a future integrated system for onshore and offshore transmission and interconnection. The models presented in this consultation could feed into ITPR policy

development. We published an open letter in November providing an update on our work on the ITPR project[15].

Regulatory frameworks

3.5. Each of the potential non developer-led WNBI tender models presented in this consultation differs from the types of tenders which are governed by the Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2013. Further work is required to determine the changes that would be required to the current regulatory framework to enable these models.

3.6. We expect that changes will also be needed to Ofgem's internal processes and supporting public guidance (the offshore tender documentation and processes). As well we expect changes will be needed to transmission licences and industry codes and standards.

Next steps

3.7. We are interested in stakeholder views on whether there is market interest in the models outlined in this consultation as well as stakeholder views on the models themselves. We also invite stakeholders to contact us with any queries about the consultation or to discuss any of the issues it contains. Contact details can be found in Appendix 1. Following the close of the response period, responses will be reviewed and we will undertake further policy development. This policy development will include an assessment of impacts and regulatory frameworks, and will take into account the potential project pipeline and interactions with related policy development work.

[15] *Open Letter: Update on the Integrated Transmission Planning and Regulation project*, November 2013. https://www.ofgem.gov.uk/ofgem-publications/84495/itpr3rdopenletter3.pdf

Appendices

Index

Appendix 1 - Consultation response and questions

1.1. Ofgem would like to hear your views in relation to any of the issues set out in this document. In particular, we would like to hear from market participants that might be interested in bidding for the tenders outlined above.

1.2. We would especially welcome responses to the specific questions which we have set out at the beginning of Chapter 2 heading and which are replicated below.

1.3. Responses should be received by 7 March 2014 and should be sent to:

Pete Wightman
Ofgem
107 West Regent Street
Glasgow
G2 2BA
offshore.coordination@ofgem.gov.uk

1.4. Unless marked confidential, all responses will be published by placing them in Ofgem's library and on its website www.ofgem.gov.uk. Respondents may request that their response, or part of their response, is kept confidential. Ofgem shall respect this request, subject to any obligations to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004.

1.5. Respondents who wish to have their responses remain confidential should clearly mark the document(s) to that effect and include the reasons for confidentiality. It would be helpful if responses could be submitted both electronically and in writing. Respondents are asked to put any confidential material in the appendices to their responses.

1.6. Any questions on this document should, in the first instance, be directed to Pete Wightman, Senior Manager, Offshore Transmission Policy (details above).

Question box

Question 2.1: Do you consider there would be market interest in tenders under these non developer-led WNBI models? Please state why or why not, including whether you would be an interested party.

Question 2.2: What are your views on the role that onshore TOs and the NETSO would need to undertake to ensure success of non developer-led WNBI projects under the different models?

Question 2.3: What are your views on the appropriate risk allocation between consumers and parties undertaking preliminary or construction works, and why?

Question 2.4: What are your views on the incentives and obligations that would be needed to ensure that the preliminary works, including consents, are completed in the interests of consumers and the economic and efficient development of the future transmission system?

Question 2.5: To what extent do you think the alternative models would help deliver the objectives set out in paragraph 2.32 of Chapter 2?

Appendix 2 - Glossary

A

Anticipatory Investment

Investment that goes beyond the needs of immediate generation, reflecting the needs created by a likely future generation project or projects.

B

BCA

Bilateral connection agreement.

C

CfD

Contract for difference.

Coordination

The work we are undertaking to support the development of onshore and offshore transmission networks in a strategic and coordinated manner.

D

DECC

Department of Energy and Climate Change.

Developer

The Tender Regulations define a 'developer' as 'any person within section 6D(2)(a) of the Electricity 1989 Act or within a developer group'. Section 6D(2)(a) of the Act defines such person as 'the person who made the connection request for the purposes of which the tender exercise has been, is being or is to be, held'. In practice, such person is also the entity responsible for the construction of the generation assets and, under generator build, the transmission assets.

Developer-led Wider Network Benefit Investment (WBNI)

Investment in transmission capacity to provide wider network benefit, led by developers as part of the development of their connection (whether generator or OFTO build).

E

Electricity Act

The Electricity Act 1989 (as amended from time to time).

G

GB

Great Britain.

Generator build

A model for the construction of offshore transmission assets. Under the generator build option, the developer carries out the preliminary works, procurement and construction of the transmission assets. The OFTO operates, maintains and decommissions the transmission assets.

Generator Focused Anticipatory Investment (GFAI)

Anticipatory investment that provides offshore transmission capacity for specific future offshore generation projects.

I

Industry codes

The industry codes underpin the electricity wholesale and retail markets and define the terms under which industry participants can access the electricity networks including the Connection and Use of System Code (CUSC), the Balancing and Settlement Code (BSC), the Grid Code, the System Operator – Transmission Owner Code (STC), the Distribution Connection and Use of System Agreement (DCUSA) and the Distribution Code.

Integrated Transmission Planning and Regulation (ITPR) Project

A project launched by Ofgem in March 2012 to consider how Great Britain's network planning and delivery arrangements can provide for a future integrated system for onshore and offshore transmission and interconnection.

Invitation to Tender (ITT) Stage

The stage of a Tender Exercise during which the Authority may determine which Qualifying Bidder becomes the Preferred Bidder or whether to hold a BAFO stage. This stage starts from the distribution of the ITT Document to Qualifying Bidders by Ofgem, and includes the preparation, submission and evaluation of ITT Submissions.

N

National Electricity Transmission System (NETS)

The system consisting (wholly or mainly) of high voltage electric lines owned or operated by transmission licensees within Great Britain, in the territorial sea adjacent to Great Britain and in any Renewable Energy Zone and used for the transmission of electricity from one generating station to a sub-station or to another generating station or between sub-stations or to or from any interconnector and includes any electrical plant or meters owned or operated by any transmission licensee within Great Britain, in the territorial sea adjacent to Great Britain and in any Renewable Energy Zone in connection with the transmission of electricity.

National Electricity Transmission System Operator (NETSO)

The National Electricity Transmission System Operator is the entity responsible for coordinating and directing the flow of electricity over the NETS.

Needs case

The economic case for investment, considering whether it would be economic and efficient in the context of the electricity transmission network as a whole.

Non developer-led Wider Network Benefit Investment (WNBI)

Investment to develop offshore transmission assets that would support reinforcement of the wider transmission network, onshore or offshore, but have not been identified as part of a developer's Bilateral Connection Agreement (BCA).

O

Offshore Transmission

As defined in section 6C of the Electricity Act 1989 means the transmission within an area of offshore waters of electricity generated by a generating station in such an area, where offshore waters means:
(a) waters in or adjacent to Great Britain which are between the mean low water mark and the seaward limits of the territorial sea;
(b) waters within an area designated under section 1(7) of the Continental Shelf Act 1964; and
(c) waters within an area under section 84(4) of the Energy Act 2004.

Offshore transmission licence (OFTO licence)

The licence awarded under section 6(1)(b) of the Electricity Act 1989 following a tender exercise authorising an OFTO to participate in the transmission of electricity in respect of the relevant offshore transmission system. The licence sets out an OFTO's rights and obligations as the offshore transmission asset owner and operator.

Offshore Transmission Owner (OFTO)

The holder of an offshore transmission licence.

Offshore transmission system

A transmission system made up of transmission assets that is used for purposes connected with offshore transmission.

OFTO Build

A model for the construction of offshore assets. Under the OFTO build option, the developer obtains the connection offer and undertakes high level design and preliminary works. The OFTO constructs, operates, maintains and decommissions the transmission assets.

P

Preliminary works

Are defined in the The Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2013 (the 2013 Tender Regulations) as 'all necessary works obtained or to be obtained by a developer in relation to the development of the proposed transmission assets, prior to the grant of an offshore transmission licence to a successful bidder in respect of an OFTO build qualifying project, for example, without limitation, works in relation to planning permissions, consents, wayleaves, easements, leases, topography and sea bed surveys, environment and archaeological surveys, impact assessments and professional fees related to obtaining the necessary works '. For the purposes of this consultation, the definition of preliminary works within the 2013 Tender Regulations may be used as a guide, recognising that the scope of preliminary works under different non developer-led WNBI models may ultimately vary from the current definition depending on the most appropriate scope of works for non developer-led WNBI projects.

R

Radial connection

A single, standalone connection from one wind farm to shore.

RIIO

Revenue = Incentives + Innovation + Outputs. The RIIO price control model is the price control framework applied to onshore transmission and distribution of gas and electricity.

RIIO-T1

The first onshore electricity transmission price control under the RIIO framework, which applies from 1 April 2013 to 31 March 2021.

S

Stranding risk

The risk that when investment in transmission or generation assets is made, expected build out is not reached, resulting in underutilised transmission assets or generation assets unable to transmit.

T

Tender Regulations

The Tender Regulations are made under section 6C of the Electricity Act 1989 and set out the legal framework and powers for the Authority to run a competitive tender process for the grant of an Offshore Transmission Licence in respect of an Offshore Transmission System. Currently the 2010 Tender Regulations (only for certain qualifying projects) and 2013 Tender Regulations are in force.

Tender Revenue Stream (TRS)

The revenue established through the tender process, which is the value set out in paragraph 4 of amended standard condition E12–J2 (Restriction of Transmission Revenue: Revenue from Transmission Owner Services) of the OFTO Licence.

The Crown Estate

The body that manages Crown property and that is responsible for awarding offshore wind leases for access to the seabed to wind farm operators. Each OFTO must enter into a lease or licence with The Crown Estate to be able to operate and maintain its Offshore Transmission System on the seabed.

Transmission Owner (TO)

An owner of a high-voltage transmission system.

W

Wider Network Benefit Investment (WNBI)

Investment which has wider network benefits by serving to mitigate the need for separate reinforcements of the onshore transmission network.

Appendix 3 - Feedback Questionnaire

1.1. Ofgem considers that consultation is at the heart of good policy development. We are keen to consider any comments or complaints about the manner in which this consultation has been conducted. In any case we would be keen to get your answers to the following questions:

1. Do you have any comments about the overall process, which was adopted for this consultation?
2. Do you have any comments about the overall tone and content of the report?
3. Was the report easy to read and understand, could it have been better written?
4. To what extent did the report's conclusions provide a balanced view?
5. To what extent did the report make reasoned recommendations for improvement?
6. Please add any further comments.

1.2. Please send your comments to:

Andrew MacFaul
Consultation Co-ordinator
Ofgem
9 Millbank
London
SW1P 3GE
andrew.macfaul@ofgem.gov.uk