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Consultation on a proposed framework to enable coordination of offshore transmission

Consultation

Reference:	164/12	**Contact:**	Gareth Atkins
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Response deadline:	1 March 2013	**Tel:**	0207 901 1831
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Overview:

The offshore transmission regulatory regime was developed by the Department of Energy and Climate Change (DECC) and Ofgem for the construction and operation of offshore transmission assets. The key premise of the regime is that Offshore Transmission Owners (OFTOs) are selected and licensed though a competitive tender process run by Ofgem. To date, the offshore transmission regime has delivered significant investment, achieving savings for consumers and attracting new sources of finance in a difficult economic climate.

In future, offshore wind projects will become larger, more complex and be at a greater distance from the shore than those developed to date. As a result, there is likely to be the potential for efficiencies from greater coordination in the development of the transmission infrastructure.

This document sets out our proposed framework to enable the investment needed for efficient coordination in offshore transmission development for further consultation.

We welcome responses by 1 March 2013.

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. The government's Renewable Energy Roadmap (2011) central range suggests that there could be 11 to 18 gigawatts (GW) of offshore wind capacity by 2020. There is also substantial scope for further growth beyond this, with the Crown Estate Round 3 zones representing up to 32GW of additional offshore generation. Achieving such levels will require a timely, cost-effective and secure offshore electricity transmission network to transfer electricity generated offshore to the onshore network.

The Office of Gas and Electricity Markets (Ofgem) and the Department of Energy and Climate Change (DECC) have collaborated since 2005 to design and implement the regulatory regime for offshore electricity transmission. Under these arrangements, Ofgem is responsible for granting offshore transmission licences on the basis of a regulated competitive tender process. In July 2009 Ofgem commenced the first transitional tender round for offshore transmission assets, attracting almost £4 billion of investment appetite and generating substantial savings for generators and consumers. Ofgem is now in the process of running the second and last transitional tender round and has recently consulted on the design of tender exercises going forward.

Up until now offshore transmission assets have been developed as single, standalone connections to shore ("radial" connections). However, the Round 3 offshore wind projects are larger, more complex and at a greater distance from the shore than those that have been developed to date, and as a result there is likely to be the potential for efficiencies from greater coordination. This could include coordination between connections, and coordination between the strategic development of the onshore and offshore networks through offshore reinforcement projects.

Associated documents

- Offshore Electricity Transmission: Consultation on licence policy for future tenders, November 2012, Ref 159/12
- Open letter- Integrated Transmission Planning and Regulation Project, November 2012, Ref 146/12
- Open letter: Offshore Transmission - update on Coordination policy developments, July 2012, Ref 102/12
- Joint Ofgem/DECC OTCP conclusions report, March 2012
- Offshore Transmission – Consultation on potential measures to support efficient network coordination, March 2012, Ref 26/12

Contents

Executive Summary

The offshore transmission regulatory regime was developed by the Department of Energy and Climate Change (DECC) and Ofgem for the construction and operation of offshore transmission assets. The key premise of the regime is that Offshore Transmission Owners (OFTOs) are selected and licensed through a competitive tender process run by Ofgem. To date, the offshore transmission regime has delivered significant investment, achieving savings for consumers and attracting new sources of finance in a difficult economic climate.

We have been continuing to develop our tender process and the OFTO licence to address the greater complexity of future projects and ensure that they continue to provide best value for consumers. Alongside this, we have been considering whether changes are needed to the wider regulatory framework to reflect the potential for savings from increased coordination in the development of offshore transmission.

The Offshore Transmission Coordination Project

DECC and Ofgem jointly undertook the Offshore Transmission Coordination Project (OTCP) over 2011/12 to assess the potential benefits from coordination and, where there could be benefits, to consider whether changes were needed to the regulatory regime to enable it.

Analysis undertaken for the project found that increased coordination of investment could potentially result in an 8-15% overall cost reduction when compared to a standard radial approach. However, the analysis highlighted the potential for savings is uncertain and that there are risks of a coordinated investment approach leading to potential asset stranding. This means there is a need to create a framework that allows a case-by-case assessment of coordination opportunities that manages stranding risk effectively and enables coordination to proceed where it is deemed to be feasible and beneficial.

Proposed framework for coordinated network investment

We published a consultation alongside the OTCP conclusions report in March 2012 which focused on two of the key potential barriers identified by the OTCP – system planning and enabling anticipatory investment to support the development of a coordinated network. We then published an open letter in July 2012 providing an update on our work and seeking further views in certain areas. This document builds on previous work and sets out our proposed framework to enable the investment needed for efficient and coordinated offshore transmission development, for further consultation.

We consider that the framework for coordinated investment needs to be flexible according to the type of investment being undertaken, particularly when the

investment is anticipatory investment to support the later connection of specific offshore generation or investment for wider network benefit.

For Generator-Focused Anticipatory Investment (GFAI), we consider that the owner of the generation project for which such investment is undertaken is best placed to manage the stranding risk, and that this should be achieved through the industry user commitment arrangements (or equivalent). We are inviting views on the extent to which the current arrangements achieve this or if any changes are required. Subject to the appropriate allocation of stranding risk through user commitment arrangements, we propose that we would not need to consider whether it was economic and efficient to include GFAI elements in the scope of a transmission project when later undertaking our cost assessment in that tender exercise.

For Wider Network Benefit Investment (WNBI), we consider that there is a case for sharing some stranding risk across transmission system users and propose that we would have a role in ensuring that the likely benefits of the investment are sufficient to justify that risk. Our proposed framework for this differs according to whether an offshore developer is taking forward the investment or not.

For developer-led WNBI, we propose to include two Ofgem assessment gateways to provide the developer with greater confidence on its route to cost recovery for the works. During a gateway we would assess whether we agreed it would be economic and efficient to include WNBI in the scope of the developer's works.

We consider that onshore TOs are well placed to undertake certain preliminary works for non developer-led WNBI and that funding could be provided through onshore price control mechanisms, subject to the outcome of this consultation and a detailed review of the legislative and licensing frameworks to support this route. Therefore our lead option for non developer-led WNBI, subject to the further work, is for onshore Transmission Owners (TOs) to be able to submit proposals for funding to undertake the preliminary works, followed by an OFTO build tender to identify who will then construct and own the assets. We are also considering assessment gateways for this route.

We expect that the connection application and agreement process will be key in identifying coordination opportunities and determining where investment to support coordination is needed and whether the works will be developer-led or not. This builds on the existing system planning framework, and we consider it important that both the National Electricity Transmission System Operator (NETSO) and TOs fulfil their duties under their current roles. We are undertaking a broader review of the roles and responsibilities in system planning across onshore, offshore, and interconnection, through the Integrated Transmission Planning and Regulation (ITPR) project.

We intend to hold a stakeholder workshop on 23 January 2013 to discuss some of the proposals in this consultation and other policy developments in the offshore regime. We will provide an update on our proposals, taking into account feedback from the workshop and responses to this consultation, in a further publication in spring 2013.

1. Introduction

Chapter Summary

Outlines the purpose of, and background to, the consultation document including recent publications and interactions between our work on offshore coordination and other relevant work areas.

Purpose of this document

1.1. The aim of our work on offshore coordination is to ensure the most economic and efficient outcome for consumers. This document sets out our proposed regulatory framework to support the delivery of coordinated offshore transmission assets[1]. The framework builds on the initial proposals set out in the March consultation and the July open letter, taking into account stakeholder feedback.

Background information

1.2. Developers' costs of developing offshore transmission assets are recovered via a competitive tender exercise run by Ofgem. This exercise includes a cost assessment undertaken by Ofgem to establish the economic and efficient costs that ought to be or ought to have been incurred. Following the tender exercise Ofgem grants licences to construct, own and maintain (OFTO build), or to own and maintain (Generator build) the offshore transmission assets.

1.3. To date, offshore transmission assets have been developed as single, standalone connections to shore ('radial' connections). However, as technologies develop and offshore generation projects get larger and more complex, there is likely to be the potential for efficiencies from the development of onshore and offshore transmission networks in a strategic and coordinated manner. Transmission assets may be designed to serve multiple developers (intra and inter-zonal) and/or reinforce the onshore network.

1.4. In early 2011, Ofgem and Department of Energy and Climate Change (DECC) jointly launched the Offshore Transmission Coordination Project (OTCP). The OTCP's purpose was to assess the potential costs, risks and benefits that may arise from the development of a coordinated offshore and onshore electricity transmission network. It also considered whether further measures were

[1] 'Offshore transmission assets' means the transmission system in respect of which the offshore transmission licence is (or is to be) granted or anything which forms part of that system - Paragraph 1(3)(a) of Schedule 2A to the Electricity Act 1989. The offshore transmission system is expected to include subsea export cables, onshore export cables, onshore and offshore substations, and any other assets, consents, property arrangements or permits required by an incoming OFTO in order for it to fulfil its obligations as a transmission operator.

necessary to help ensure that onshore and offshore transmission networks develop in a strategic and coordinated manner.

1.5. The OTCP identified that, in some areas, a coordinated approach to the future development of offshore transmission assets may be economically beneficial. Analysis carried out by Redpoint Energy[2], taken across four different offshore generation deployment scenarios, suggests coordination has the potential to deliver savings of around 8-15% (£0.5-3.5 billion) when compared to a radial configuration. However, the analysis highlighted the risks of a coordinated approach leading to potential asset stranding. It also found that savings from coordination are highly reliant on the scale of offshore generation deployment and the emergence of new higher-capacity High Voltage Direct Current (HVDC) technologies, both of which are uncertain.

1.6. The OTCP conclusions report[3] identified six barriers to coordination, including issues with anticipatory investment, consenting, regulatory boundaries and the risk-reward profile of coordinated investments, system planning and technology development. Ourselves and DECC have been working to address key aspects of these issues.

1.7. In March this year, we published a consultation[4] (the March consultation) on potential measures to support efficient coordination of offshore transmission assets. It invited views from stakeholders on the need for improvements to the network planning process and the potential process for supporting anticipatory investment in the offshore regime. Among other things, we consulted on whether there was need for greater clarity as to how Ofgem would treat coordinated assets during a tender exercise and whether there is a role for TOs in taking forward some preliminary works where developers are not taking these forwards. Responses to the consultation were positive and there was broad agreement with much of our analysis, with some areas identified for further work.

1.8. In July we published an open letter[5] (the July open letter) to give an update on our policy developments in these areas, and to consult further on specific areas. Responses to the open letter outlined suggestions for improvements to the network planning process and the framework for anticipatory investment. A summary of responses to the open letter is included in Appendix 4 of this document. Full responses can be found on our website.[6]

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[2] Redpoint Energy: Offshore Transmission - assessment of regulatory, commercial and economic issues and options, December 2011

[3] DECC/Ofgem Offshore Transmission Coordination Project Conclusions Report, March 2012

[4] Offshore Transmission - Consultation on potential measures to support efficient network coordination, March 2012, Ref 26/12

[5] Offshore Transmission: update on coordination policy developments, July 2012, Ref 102/12

[6] See n.5 above

Structure of this document

1.9. This document outlines our proposed framework for enabling greater coordination in the development of offshore transmission infrastructure based on the three investment categories identified in the July open letter. We have adjusted the names of the categories following feedback from stakeholders:

- **Category 1: Generator-Focused Anticipatory Investment**
- **Category 2: Developer-led Wider Network Benefit Investment**
- **Category 3: Non developer-led Wider Network Benefit Investment**

1.10. In **Chapter 2** we set out an overview of the framework, introducing the three investment categories and key concepts. In **Chapters 3, 4 and 5** we outline our proposals for each of the three categories of investment in turn. Finally, **Chapter 6** sets out next steps, outlining further policy development needed and implementation actions to introduce the framework. An updated impact assessment of the options considered is included at Appendix 2.

Interactions and interdependencies

Other offshore regime developments

1.11. Our May 2012 consultation[7] on 'Updated proposals for the enduring regime' set out minded-to positions for future tender exercises following the transitional tender rounds. It also outlined policy proposals on potential improvements to the OFTO licence for these tender exercises and related aspects of the commercial framework. Finally, it proposed some high level principles around treatment of phased and staged projects.

1.12. We also consulted on revised tender regulations to support the first enduring tender exercises in our September 2012 open letter[8]. The regulations were developed to reflect previous policy consultations on the future offshore regime in December 2011 and May 2012. We anticipate that these regulations will come into force in early 2013. We expect to provide further details in relation to the tender process for future offshore tender exercises.

[7] Offshore Electricity Transmission: Updated proposals under the enduring regime, May 2012, Ref 72/12
[8] Open Letter: Draft Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2012 for consultation, September 2012

1.13. We are currently consulting on more detailed proposals relating to the OFTO licence to be granted following the first enduring tender exercises[9]. We anticipate that we will publish a draft of the licence for consultation next year.

1.14. Ofgem's approach to the assessment of developers' costs is an important element of a tender exercise. We have set out the general principles we have applied for each completed cost assessment in reports that can be found on our website. We are working towards publishing general guidance on the offshore transmission cost assessment process.

1.15. The Energy Bill was laid in Parliament on 29 November 2012[10]. The Bill includes a clause on generator commissioning that will enable generators to continue commissioning the transmission assets for their projects. The Bill gives the Gas and Electricity Markets Authority (the Authority) powers to make modifications to industry codes to implement the generator commissioning provisions. We will provide updates in the coming months on how the implementation of this Bill will be taken forward, including industry input and consultation.

National Grid's East Coast proposal

1.16. RIIO (Revenue = Incentives + Innovation + Outputs) will be Ofgem's new model for setting prices for the onshore transmission network. RIIO-T1 will be the first onshore transmission price control review to reflect this new regulatory framework and is due to be implemented in April 2013. As stated in the July open letter, National Grid submitted a request to us for funding through RIIO-T1 to undertake preliminary works related to potential integrated network investment off the East Coast of England[11].

1.17. In the interest of preventing any unnecessary delay to the development of the project, we are working with National Grid to identify any early system and technical study work that could begin in the short term. Such work could assist future development regardless of the results of this consultation. We intend to issue further information regarding this early work in the RIIO-T1 Final Proposals for National Grid Electricity Transmission this December.

Integrated Transmission Planning and Regulation (ITPR) project

1.18. Ofgem's coordination policy work focuses on enhancing the existing offshore regulatory framework to enable greater coordination in offshore transmission. In parallel to this, we launched the ITPR project in March this year. This will

[9] Offshore Electricity Transmission: Consultation on licence policy for future tenders, November 2012, Ref 159/12
[10] The Energy Bill is available on the Parliament website
[11] National Grid integrated East Coast offshore network funding request

consider developing network planning and delivery arrangements to facilitate a future integrated system for onshore and offshore transmission and interconnection. In particular, ITPR is taking a holistic view across the regimes to remove barriers to integration.

1.19. The ITPR project recently published an open letter[12] to seek views on the materiality and relevance of potential issues. We intend to consult on the possible options to address these issues in spring next year.

Transmission charging and user commitment developments undertaken by industry

1.20. Transmission Network Use of System (TNUoS) charging arrangements that reflect the cost of installing, operating and maintaining the transmission system. Charging arrangements that reflect how assets are used by both individual generators and wider network users will play an important role in facilitating the development of an integrated onshore-offshore network. NGET has convened an informal[13] working group to consider possible developments to the transmission charging methodology to support an integrated onshore-offshore network. We expect the working group to publish a report in the new year, which will inform a potential future Connection and Use of System Code (CUSC) modification proposal.

1.21. In the area of user commitment, CUSC Modification Proposal 192 (CMP192)– Arrangements for Enduring User Commitment[14] was approved in March 2012 to replace the previous arrangements for identifying generators' liabilities. The arrangements cover the level of security required from generators before and after their commissioning. The implementation of CMP192 does not preclude further developments in future to support coordinated offshore solutions.

Responding to this document

1.22. We welcome comments from respondents on all issues in this document. We have also highlighted specific issues in the relevant chapters for which we would like views.

1.23. While we are open to discussions with stakeholders, we would encourage formal feedback via a response to this consultation. All responses should be received no later than 1 March 2013 and sent to: offshore.coordination@ofgem.gov.uk

[12] Open Letter: Update on the Integrated Transmission Planning and Regulation Project – request for further views and evidence, November 2012, Ref 146/12

[13] The group has been convened at the request of NGET and has no formal recognition under the Connection and Use of System Code (CUSC).

[14] CUSC Modification Proposal 192 (CMP192)– Arrangements for Enduring User Commitment

2. Overview of our proposed framework for the delivery of coordinated offshore transmission assets

Chapter Summary

Presents a high-level overview of our proposed framework for the delivery of coordinated offshore transmission assets in order to provide a broad view of the main concepts. Also sets out our proposals for roles and responsibilities in system planning to support our proposed framework. Detail and supporting analysis for each of the investment categories is contained within Chapters 3-5.

Question box

Q2.1 Do you agree with our high-level framework for the development of coordinated offshore transmission assets?

Q2.2 Do you agree with our expectations of how coordination opportunities will be identified for parties to progress? Are they consistent with existing roles and responsibilities of parties with regards to the development of the network?

Q2.3 Do respondents consider that changes to the CION process are needed, for example, should the CION be developed further to support coordination? If so, what changes are needed to the process or document? Would an improved CION assist in building developers' confidence in accepting coordinated connection offers?

Q2.4 Are there any barriers to improving the CION, if so, what barriers exist and how could they be addressed?

Q2.5 Do respondents anticipate issues with the design or delivery of transmission assets where generation projects are reliant on works to be undertaken by another developer? If so, what would be the appropriate mechanism to address such issues?

Q2.6 To what extent could NETSO intermediation mitigate data confidentiality issues between developers? Are any further measures required?

Types of investment

2.1. The July open letter set out the three proposed investment categories for the development of offshore coordination assets. In developing our policy thinking we have adjusted our descriptive phrases to more accurately reflect the purpose of each of the categories. These proposed categories of investment are set out in more detail below.

2.2. **Category 1: Generator-Focused Anticipatory Investment (GFAI)** – This category relates to investment in offshore transmission led by a developer[15] which would enable the later connection of specific offshore generation. For example, this could involve increasing the capacity of earlier offshore transmission assets to accommodate multiple stages of generation build-out. The GFAI might be for later stages owned by a single developer or to meet the needs of another developer whose generation project is located nearby and is due to connect soon after the earlier development. While led by a developer, this category would not preclude construction of the GFAI through OFTO build.

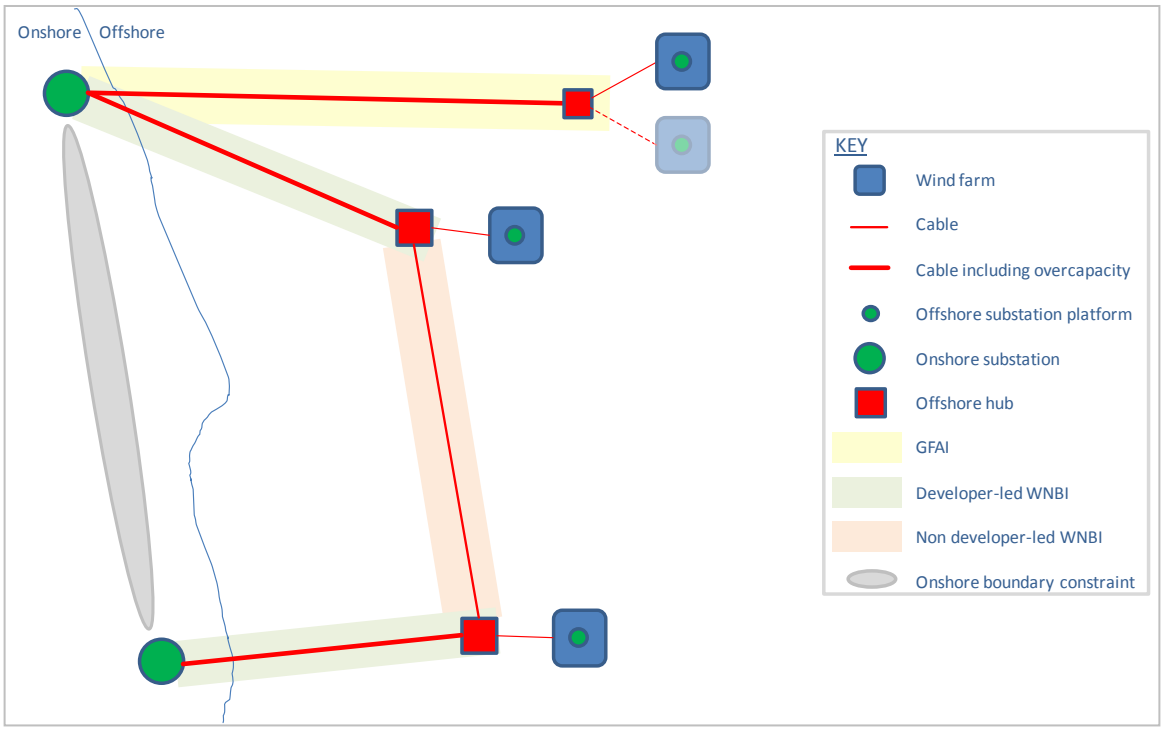
2.3. **Category 2: Developer-led Wider Network Benefit Investment (developer-led WNBI)** – This category captures investment in offshore transmission capacity to provide wider network benefit, led by developers (whether Generator build or OFTO build). This would include investment in offshore transmission assets or capacity that goes beyond that needed by a single developer and is for the purpose of supporting the reinforcement of the wider network. This could include investment providing for, or creating the potential for, increased boundary transfers between different zones of the overall network via offshore links and could avoid the need for reinforcement of the onshore network.

2.4. **Category 3: Non developer-led Wider Network Benefit Investment (non developer-led WNBI)** – This category captures investment in wider network benefit offshore transmission assets which are not related to a specific connection offer, or where the relevant developer(s) do not have the appetite to develop the project.

2.5. Figure 2.1 below illustrates some examples of coordinated transmission projects that would fall under the three different investment categories. The potential GFAI is highlighted in yellow, developer-led WNBI in green, and non developer-led WNBI in red.

[15] Developer has the meaning set out in the Glossary in Appendix 5

Figure 2.1: Example of coordinated transmission projects



Our proposed framework to enable coordination of offshore transmission assets

2.6. The Offshore Transmission Coordination Project (OTCP) and our subsequent consultation have identified that the key regulatory issues for offshore transmission coordination are confidence for the developer to recover efficient costs and appropriate allocation of stranding risks. The measures outlined below are intended to appropriately allocate risks and responsibilities between parties for each investment category. For GFAI where the need is driven by a small number of specific generators, we consider that the owner of the generation projects for which the anticipatory investment is undertaken is best placed to manage the stranding risk before their connection materialises. For WNBI which is driven by a much wider base of network users, we consider that there is a case for extending the existing practice of sharing some stranding risk across transmission system users and propose that we would have a role in ensuring that the likely benefits of the investment are sufficient to justify that risk. Furthermore, our proposed framework for WNBI differs according to whether an offshore developer is taking forward the investment, or not.

2.7. We outline in this section our proposed framework relating to each of the three investment categories, including a summary of key terms in Figure 2.2 and an illustrative diagram in Figure 2.3. Specific aspects of our proposals for each category are discussed in more detail in the following chapters.

Generator-Focused Anticipatory Investment

2.8. Developers taking forward GFAI on behalf of a later generator require clarity on their route to cost recovery for the GFAI they undertake. At the same time, consumers must be protected from the risk of stranding offshore transmission assets.

2.9. The potential measures outlined in this consultation focus on enabling the lead developer to recover, at the point of asset transfer to an OFTO, the economic and efficient costs incurred in developing the GFAI while ensuring that the stranding risk does not fall unduly on consumers. In particular, we consider options which could support the transfer of GFAI to an OFTO while protecting consumers. For example, if user commitment arrangements were to be extended to cover assets constructed for the use of a later generator under the Generator build option.

Developer-led Wider Network Benefit Investment

2.10. Developers undertaking WNBI require clarity on their route to cost recovery for the WNBI they undertake. As for GFAI, this could relate to preliminary works[16] and construction works under the Generator build option, and preliminary works only under the OFTO build option. For WNBI, we consider that there is a case for sharing some stranding risk across transmission system users and propose that we would have a role in ensuring that any stranding risks borne by wider network users, including consumers, are allocated and managed appropriately and that the likely benefits outweigh potential risks.

2.11. For developers progressing WNBI projects we propose to introduce two gateway assessments, broadly ahead of commencement of preliminary works and ahead of construction works, where Ofgem would assess the rationale for the WNBI. Under Generator build, where we are convinced by the developer's rationale for undertaking the WNBI, we would commit to not reassessing this rationale during the cost assessment stage of a tender exercise. These gateways will be voluntary. Where a developer is comfortable that they can support their decision to develop the WNBI as part of a cost assessment process, the developer can choose not to go through one, or both, of the gateways. Under OFTO build, the first gateway will be consistent with our approach to Generator build, with the second gateway helping to inform the scope of the OFTO build tender exercise.

[16] In the forthcoming Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations, 'pre-construction works' will be referred to as 'preliminary works' – see the Open Letter: Draft Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2012 for consultation http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=73&refer=Networks/offtrans/pdc/cdr/2012.

Relationship to the cost assessment process

2.12. The purpose of our GFAI and developer-led WNBI proposals is to allocate risk appropriately between parties and provide developers that are being asked to undertake investment on others' behalf with greater clarity on how they will recover their costs for that work. Our proposed measures would allow for developers to have greater upfront confidence that we would not dispute the decision to include GFAI or WNBI elements in the scope of works during our cost estimate and assessment processes. We would still determine through these processes the economic and efficient costs associated with developing the transmission assets, including the coordinated elements of those assets.

Non developer-led Wider Network Benefit Investment

2.13. There is currently no clear framework for developing and progressing WNBI that is not developer-led. To address this we are considering a route for preliminary works for WNBI to be taken forward by a party other than a developer in some cases. Our lead option, subject to further work, is for onshore Transmission Owners (TOs) to be able to submit proposals for funding to undertake the preliminary works for WNBI, followed by an OFTO build tender exercise to identify who will then construct and own the assets. We would introduce a two-gateway process to facilitate this.

Q2.1 Do you agree with our high-level framework for the development of coordinated offshore transmission assets?

Figure 2.2: Summary of key terms

Anticipatory Investment
Investment in offshore transmission that goes beyond the needs of immediate generation, reflecting the needs created by a likely future generation project or projects. We used this term in the March consultation and building on this we have further categorised investment types.

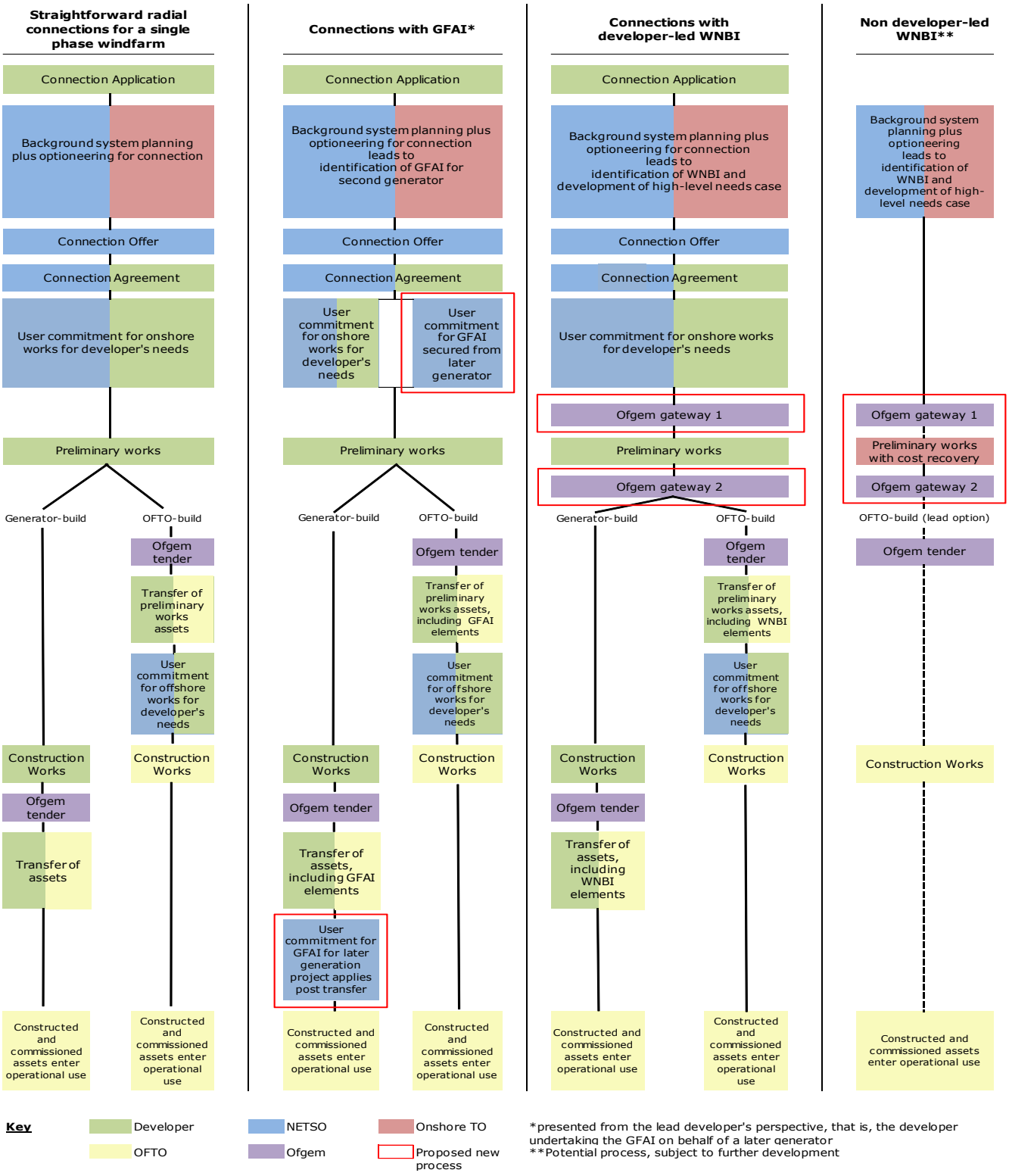
Generator-Focused Anticipatory Investment (GFAI)
Anticipatory investment that provides offshore transmission capacity for specific future offshore generation projects.

Wider Network Benefit Investment (WNBI)
Investment in offshore transmission that is driven by the need to reinforce the wider network.

Developer-led
Works led by a developer as part of the development of their connection. The developer could opt to develop the assets under Generator-build or OFTO-build.

Non developer-led
Works which are not identified for a developer to take forwards as part of their connection.

Figure 2.3: Summary of proposed framework



Boundaries between investment categories

2.14. The March consultation sought views on whether we should seek to create firm boundaries between investment types and whether there should be some transmission projects which should not be within scope for developers to take forwards. This would be because where assets are driven mainly by wider network benefit, developers may not have the same incentives to ensure such assets are built in a timely and cost-effective manner compared to where they are building connection assets for their own generation project.

2.15. We continue to envisage that assets that are being driven primarily by wider network benefit may be less suitable for developer-led options, particularly the Generator build option. However, our analysis and stakeholder feedback suggests that defining a class of assets that could not be taken forward by developers would be problematic and there may be benefits to be had in allowing flexibility as to how projects are progressed. We recognise these points and therefore at this time are not proposing to introduce any restrictions on which assets developers can take forward.

2.16. Instead, we expect the chosen investment route will be a product of discussions between the parties involved (National Electricity Transmission System Operator (NETSO), developer(s) and TO(s)). We note in this respect that some developers have suggested that they would be reluctant to take on the development of significant assets which primarily provide wider network benefit where these do not also provide their primary export route. Where this is the case this consultation considers how the preliminary works for such assets might be undertaken through the non developer-led WNBI route that we are consulting on.

2.17. We will continue to consider whether there may need to be restrictions around who can develop some classes of assets in future, both under the Coordination and Integrated Transmission Planning and Regulation (ITPR) projects.

Cross-category projects

2.18. We consider that it may be possible that some developer-led projects could include elements of both GFAI and WNBI. In such scenarios we propose that the elements within each investment category would follow the investment route relevant to that category.

2.19. It is also possible that there could be interactions between different projects, for example where the case for including WNBI in one project depends on WNBI also being taken forward in a separate project. In such scenarios we would envisage that the NETSO would have a key role in coordinating between the projects. We would seek to understand any such interdependencies and plans to manage them as part of the proposed Ofgem gateways.

System planning and design issues

Identifying a coordination opportunity and the party responsible for development

2.20. In the March consultation we set out that we see the connection offer as being a key process for the identification of coordination opportunities. We consulted on the role the NETSO should play in system planning including whether the NETSO needed further powers to develop an efficient network. We also sought views on whether there are any barriers to the NETSO taking on an enhanced role in network development.

2.21. Feedback highlighted the important role both the NETSO and the TOs play in system planning. Responses showed that most stakeholders consider that the NETSO should take a greater role in system planning, with recognition that the NETSO has already been identifying where coordination would be beneficial when making connection offers.

2.22. In developing the framework for offshore system planning and network development, we are seeking to build upon the existing framework and roles of parties that exist onshore and offshore. In particular, we consider it important that both the NETSO and TOs fulfil their duties under their current roles. Potential changes to the roles of parties in the system planning process will be considered under the ITPR project.

2.23. We expect that the connection application and agreement process will be the key determinant of where investment to support coordination is needed and whether the works will be developer-led (either Generator build or OFTO build) or not, as they will set out the works for developers to undertake. Further details on this are discussed in Chapters 3 and 4. This includes, for example, the role of the NETSO in supporting the gateway process.

2.24. In planning and developing transmission assets under the Generator build option, developers are required under the Grid Code[17] to take into account reasonable requests from National Grid Electricity Transmission (NGET) regarding coordination, where it is reasonable and practicable to do so. We note concerns held by developers regarding the need for a clearer route for cost recovery and risk sharing in undertaking investments with coordination elements. The measures outlined in this consultation are intended to address these concerns.

2.25. In the context of each party's obligations, we would expect developers, the NETSO and onshore TOs to engage to determine where W would be progressed by the developer.

[17] Grid Code Planning Code PC.6.5

2.26. If TOs, supported by the NETSO on the needs case, consider that development works are needed that are not specified for a developer to undertake in a Bilateral Connection Agreement (BCA), they may submit a proposal to Ofgem to undertake the preliminary works. Demonstration of engagement with developers will be a key aspect of our consideration of the request for funding.

2.27. We expect the network development scenarios outlined in NGET's proposed new planning document, the Electricity Ten Year Statement (ETYS), which was published in November 2012, will play a supporting role in the identification of coordination opportunities for all parties.

Q2.2 Do you agree with our expectations of how coordination opportunities will be identified for parties to progress? Are they consistent with existing roles and responsibilities of parties with regards to the development of the network?

Connections optioneering and connection offers

2.28. NGET is required to provide details of the preliminary identification and consideration of the connection options available, as part of the connection offer to the developer[18]. This includes the preliminary costs used in assessing such options and the offshore works assumptions, including the assumed interface point identified. NGET fulfils these requirements by the production of the offshore Connections Infrastructure Options Note (CION). The CION sets out the offshore works assumptions and consideration of options available and is provided to the developer during the connection offer process.

2.29. Previous stakeholder feedback has highlighted that NGET's process for producing the CION could potentially be developed further or made more transparent and that this could be particularly important for coordination. NGET's optioneering process is key to the identification of many coordination opportunities and determining the optimal design for connections with coordinated elements. Going forwards, the CION could play a key role in building developers' confidence in the rationale for why GFAI or WNBI have been included in connection offers.

2.30. We therefore seek views from stakeholders on whether specific improvements to the CION process could be made. For example, while the current framework does not prevent developers sharing information with NGET to inform the optioneering, should there be more formalised opportunities for developers to engage in the process given their experience in offshore delivery? How could this impact on timescales for agreeing connection offers?

[18] Grid Code, Planning Code PC F.2.1

2.31. We expect NGET to take on board stakeholder feedback on the CION process, including feedback made in non confidential responses to this consultation, in order to build developers' confidence in the connection offers they receive, and better facilitate coordination.

2.32. The identification and optioneering process may result in the NETSO issuing connection offers which assume a degree of overcapacity to meet the need of another connecting party or benefit the wider network, where they consider this to be an economic and efficient approach. If that is the case, we would be interested to understand from respondents whether they would expect issues to arise with the design or delivery of the resulting connections. For example, whether there might be disputes on design or delays. If so, what would be the appropriate route to address such issues?

Q2.3 Do respondents consider that changes to the CION process are needed, for example, should the CION be developed further to support coordination? If so, what changes are needed to the process or document? Would an improved CION assist in building developers' confidence in accepting coordinated connection offers?

Q2.4 Are there any barriers to improving the CION, if so, what barriers exist and how could they be addressed?

Q2.5 Do respondents anticipate issues with the design or delivery of transmission assets where generation projects are reliant on works to be undertaken by another developer? If so, what would be the appropriate mechanism to address such issues?

Data confidentiality issues

2.33. In the July open letter, we asked for views on the availability of information around connection offers particularly in relation to facilitating coordination and assessing connection offers that include works that go beyond the generator's own needs.

2.34. Stakeholders highlighted that data sharing between developers in GFAI scenarios is problematic because it would require competitors to share detailed information on their generating stations, networks and technology. Respondents made some suggestions, including, a potential NETSO role in inviting parties to work together and facilitating the signing of data confidentiality agreements. We would be interested in views on the extent to which NETSO intermediation could mitigate these issues.

Q2.6 To what extent could NETSO intermediation mitigate data confidentiality issues between developers? Are any further measures required?

Timescales for agreeing connection offers

2.35. In the July open letter we asked for views on whether 90 days was sufficient for both making and accepting connection offers, noting that the process includes some flexibility to make extensions where appropriate. Previous feedback had highlighted that this may not allow sufficient time for some more complex offers.

2.36. Responses to the July open letter generally indicated that a blanket extension to all connection offers may create unnecessary delays, and that in general sufficient flexibility existed within the current process. On this basis we do not believe a change to the existing timescales framework is needed at this time.

3. Category 1: Generator-Focused Anticipatory Investment

Chapter Summary

Sets out our current thinking in respect of cost recovery and stranding risk issues associated with Generator-Focused Anticipatory Investment (GFAI). A number of options to address stranding risk are highlighted for consideration and views sought.

Question box

Q3.1 Do respondents agree with our preferred option, to support the transfer of GFAI assets to the OFTO if security is provided to protect consumers against stranding risk?

Q3.2 To what extent do the current user commitment arrangements address the scenarios set out in table 3.1 and paragraph 3.13?

Q3.3 Are there any barriers to extending user commitment arrangements to address any gaps identified in question 3.2?

Overview

3.1. Generator-Focused Anticipatory Investment (GFAI) is investment in offshore transmission led by a developer to support the later connection of specific offshore developments. Under this category the developer could select either the Generator build or OFTO build option, i.e. the leading developers may or may not undertake construction of the transmission assets. Developers may request GFAI to support later project stages or the National Electricity Transmission System Operator (NETSO) might request efficient overcapacity to be constructed for a future nearby development.

3.2. GFAI has the potential benefit of more efficient combined connection costs for all the relevant generation projects. However, it also introduces potential risk of stranding of the coordination elements if the future generation projects do not all materialise. We consider that such stranding risk should be allocated to the owners of the generation projects, since they are best placed to manage the certainty of their own projects connecting and also stand to benefit directly from the GFAI. Provided appropriate arrangements are in place to allocate the stranding risks, our proposed measures will provide certainty for the developer to recover their economic and efficient costs through an OFTO tender exercise.

Issues to be addressed

3.3. In responses received to the March consultation and the July open letter, respondents generally welcomed our proposed approach to enable anticipatory investment, while noting challenges in identification and risk management. The responses together with further analysis identified several issues specifically relating to GFAI:

- The need for clear and appropriate allocation of stranding risk to protect consumers from undue risk.
- The requirement for greater certainty on the route to cost recovery for developers undertaking GFAI.
- Cost assessment guidance for developers undertaking GFAI.

3.4. A key issue that would need to be addressed for GFAI to provide greater certainty on the route to cost recovery is the allocation of stranding risk until the connection of the later generator(s)[19]. This is because the underutilised portion of the transmission assets will be for the use of individual generators in specific locations, so there may be limited alternative users if the identified later generator does not connect. We therefore consider that, if the later generator does not connect, the risk of long term underutilisation is high.

3.5. It is important that stranding risk up until the later generator(s) connects is allocated appropriately and consumers are not exposed to undue risk. The allocation of stranding risk for GFAI will depend on the following parameters:

- Whether the assets are developed under Generator build or OFTO build.
- Whether the assets are pre or post transfer to an OFTO.
- Whether the transmission assets, including the GFAI elements, are being developed for a single party (for a later stage of their own project) or for multiple parties (the GFAI is on behalf of an unrelated generator).
- User commitment arrangements to the point of commissioning of generation.

3.6. Table 3.1 below describes the relevant issues in considering the allocation of stranding risk for GFAI with various combinations of the above parameters under the **Generator build option**. We highlight key elements we consider would be needed from user commitment arrangements (or equivalent) to ensure that consumers do not take on undue stranding risk at any stage. Figure 3.1 describes current user commitment arrangements in more detail.

[19] In this document we are considering stranding risk related to the specific issues identified with GFAI. We do not address the residual stranding risk once all generation is connected, such risk also exists onshore and under OFTO build.

3.7. In the table, we refer to developer and later generator. For clarity, the developer is the party constructing the assets (and the first generation project) under Generator build, while the later generator is the party (or parties) for whom the GFAI has been constructed.

Table 3.1 Key issues for allocating stranding risk for GFAI under the Generator build option

	Pre transfer to an OFTO	Post transfer to an OFTO
Single Party	The developer will bear stranding risk and will be able to take a commercial view on whether the potential benefits outweigh the risks.	The developer would require certainty of cost recovery, i.e. for the transfer value to reflect the economic and efficient costs of constructing the GFAI scope. If this is the case, the developer would pay Transmission Network Use of System (TNUoS) charges based on the transmission entry capacity associated with the first generation project's use of the transmission assets it has triggered; TNUoS charges associated with the remaining transmission assets would be payable from the connection date of the later generator. At the same time, there is a need to avoid consumers bearing undue stranding risk before the connection of the later generator where the GFAI is transferred to the OFTO for the economic and efficient costs of construction. In the interim, there would need to be user commitment (or equivalent) provided from the developer for its later generation project's share of costs taken on by the OFTO until its connection.
Multiple Parties	The developer will bear the costs of developing additional capacity for the later generator and would require certainty of recovering the economic and efficient costs for the additional capacity at transfer. At the same time, there is a need to avoid consumers bearing undue stranding risk if comfort is given to the developer, so the later generator would need to provide user commitment for the share of costs the developer is incurring on its behalf.	The developer would require certainty of cost recovery, i.e. for the transfer value to reflect the economic and efficient costs of constructing the GFAI scope. If this is the case, the developer would pay TNUoS charges based on the transmission entry capacity associated with the first generation project's use of the transmission assets it has triggered; the later generator would pay cost reflective TNUoS charges for its use of the transmission entry capacity it has triggered when it connected. At the same time, there is a need to avoid consumers bearing undue stranding risk before the connection of the later generator where the GFAI is transferred to the OFTO for the economic and efficient costs of construction. In the interim, there would need to be user commitment (or equivalent) from the later generator for its share of costs taken on by the OFTO until its connection.

3.8. Under an **OFTO build option** the following key issues need to be addressed:

- Pre transfer of preliminary works to an OFTO, if the developer is undertaking preliminary works on behalf of a later generator as well as itself, then it would require certainty to recover the associated costs on transfer of the preliminary works to the selected OFTO. At the same time, there is a need to avoid consumers bearing undue stranding risk, so the later generator might need to provide user commitment on the share of costs the developer is incurring on its behalf. However, these costs would be significantly lower than those the developer would incur on behalf of the later generator under the Generator build option.

- Once an OFTO commences construction, then user commitment arrangements would apply and both generators would provide user commitment based on the OFTO capex spend.

- Once the OFTO has commissioned the assets, initially only the developer would be paying TNUoS charges based on its use of the assets. The later generator(s) would only start paying TNUoS charges for the use of their capacity from the connection date. There would be a need to avoid consumers bearing the stranding risk before the connection of the later generators. In the interim, there would need to be user commitment (or equivalent), from the later generator for its share of the costs taken on by the OFTO until its connection.

Figure 3.1 Current user commitment arrangements

The user commitment arrangements implemented under the Connection and Use of System Code (CUSC) Modification Proposal 192 (CMP192) are based on incentivising generation projects to provide notice of cancellation, closure and capacity reduction in a timely manner. This aims to minimise inefficient investment by transmission owners while reducing barriers to new entrants.

The arrangements are set out in the CUSC, coming into effect from April 2013. They comprise a generic liability to cover wider system investment, and a specific liability to cover investment that is directly attributable to the connection of each generator. All generation projects are liable for a proportion of the wider amount, while only pre commissioning generation projects are liable for their particular attributable amount. The methodology used in calculating the requirements includes factors to reflect the risk of stranding or inefficient investment.

Pre commissioning, the liability under user commitment arrangements includes amounts for both attributable works and wider investment. Security for this liability reduces as the project progresses towards completion. Post commissioning, the liability only reflects the wider investment and no security is required from post commissioning users. These arrangements apply to transmission assets being built or owned by transmission licensees but currently would not address Generator build

incurred costs because the potential user is deemed to 'self-securitise' by funding the capital expenditure.[20]

Proposed approach

3.9. Our preferred approach, as summarised in figure 2.3 in chapter 2, would be to enable GFAI to proceed within the parameters of normal industry arrangements, subject to the effective management of stranding risk.

3.10. This could involve user commitment based arrangements to allocate stranding risk for the GFAI to the relevant generator, and so protect consumers from bearing undue stranding risk. Subject to the appropriate allocation of stranding risk through user commitment arrangements, we propose that we would not need to consider whether it was economic and efficient to include GFAI elements in the scope of a transmission project when later undertaking our cost assessment in the tender exercise for that project. We would still determine through the cost assessment process in the tender exercise the economic and efficient costs associated with developing the GFAI.

3.11. **This option is our preferred approach as it mitigates the issues faced under other options**:

- It would be consistent with onshore and OFTO build arrangements.
- It would allocate stranding risk of GFAI to the party best placed to manage and benefit from it.
- It would not require Ofgem to take a view on the likelihood of a specific generation project proceeding.

3.12. A key element of this option is understanding to what extent existing user commitment arrangements provide adequate consumer protection. CMP192 introduced new user commitment arrangements into the CUSC as referenced in figure 3.1. The arrangements are due to come into effect in April 2013, but will not cover all the situations described in Table 3.1 above. For example, developers have raised the issue that user commitment currently only applies where Transmission Owners (TOs) are building assets (including under OFTO build once the OFTO has been appointed).

3.13. Developers have suggested that the user commitment arrangements might be extended to address GFAI assets being constructed by a developer. We consider that three key areas need to be covered:

[20] Further detail on current user commitment arrangements and applicable transmission charging is found in the Guidance document: CUSC Section 15 (CMP192) User Commitment Methodology, Guidance and Implementation Document, May 2012 and the Statement of Use of System Charges both published by National Grid.

- Security from the later generator **during preliminary works and construction** by the developer of GFAI assets for the use of multiple parties.
- Continuing security from the later generator **post transfer** to an OFTO of GFAI assets for the use of multiple parties, pending the later generator connecting.
- Security from the developer for the underutilised portion of the assets **post transfer** of single party GFAI assets, pending later project connection.

3.14. Security would not be required from the developer for the GFAI assets being constructed for its own use while the assets are under construction. As identified in table 3.1, the developer is able to take a commercial view on whether the potential benefits outweigh the risks, and bears the stranding risk pre transfer. Once the GFAI assets are transferred, in the absence of security, the risk of the developer connecting its later project would transfer to the consumer.

3.15. **If respondents agree with our preferred option, we would look to the industry and National Grid Electricity Transmission (NGET) as the CUSC administrator to bring forward suitable CUSC modification proposals for consideration.**

3.16. In addition to the extension of user commitment based arrangements, we considered two other options that would not be focused on user commitment to manage stranding risk:

- Up front Ofgem assessment – stakeholders suggested that one approach would be for Ofgem to conduct an up front cost benefit assessment, then to permit socialisation of the resulting GFAI stranding risk. While this might provide greater clarity to the developer on cost recovery, it would not protect consumers and would not allocate stranding risk to the party best placed to manage it.

- Application of additional cost assessment criteria in the tender exercise – an alternative would be to permit the transfer of the assets for the economic and efficient value, subject to the later generator meeting additional cost assessment criteria. While this could protect consumers from bearing undue stranding risk, the developer would continue to inappropriately bear stranding risk on behalf of the later generator

3.17. We are not proposing to take either of these options forward, on the basis that neither of them both protected consumers and properly allocated the GFAI stranding risk. More detail is provided in the updated impact assessment in Appendix 2.

Q3.1 Do respondents agree with our preferred option, to support the transfer of GFAI assets to the OFTO if security is provided to protect consumers against stranding risk?

Q3.2 To what extent do the current user commitment arrangements address the scenarios set out in table 3.1 and paragraph 3.13?

Q3.3 Are there any barriers to extending user commitment arrangements to address any gaps identified in question 3.2?

4. Category 2: Developer-Led Wider Network Benefit Investment

Chapter Summary

Sets out further details on our proposal to introduce two Ofgem gateway assessments, broadly ahead of the commencement of preliminary works and ahead of construction works, to support developers in undertaking Wider Network Benefit Investment (WNBI). We also consider whether there is the potential for further options to support the development of specific types of low cost WNBI outside of a gateway assessment route.

Question box

Q4.1 Do you agree that the NETSO should support the needs case for developer-led WNBI, drawing on relevant TO(s) as necessary? Do you consider changes to the NETSO licence or industry codes are needed to support this?

Q4.2 Are there any specific barriers to the NETSO sharing information required to support the needs case for developer-led WNBI with the appropriate developer?

Q4.3 What are your views on the criteria that Ofgem could use when assessing proposals for developer-led WNBI?

Q4.4 Do you agree with our proposal for the timing of the Ofgem assessment gateways to support developer-led WNBI?

Q4.5 Are there some specific types of low regret WNBI that developers may be willing to take forward without a gateway assessment?

Q4.6 Do you consider that there should be a de minimis threshold for low regret developer-led WNBI? What are your views on how this should work, while ensuring consumers are not exposed to significant stranding risk? Where possible, please provide evidence of the types and costs of WNBI that you consider should be captured by the threshold.

Overview

4.1. Developer-led WNBI is investment in transmission capacity to provide wider network benefit, led by developers (whether Generator build or OFTO build). This would include investment in offshore transmission assets or capacity that goes beyond that needed by a single developer and is for the purpose of supporting the reinforcement of the wider network. This could include investment providing for, or creating the potential for, increased boundary transfers between different zones of the overall network via offshore links and could avoid the need for reinforcement of the onshore network.

4.2. WNBI has the potential benefit of achieving a more efficient transmission system overall, but also introduces potential stranding risks if the wider network need does not materialise. Unlike Generator-Focused Anticipatory Investment (GFAI) which is driven by the need of a limited number of specific generation projects, WNBI has a much wider group of potential users. Therefore, we consider that there is a case for sharing some stranding risk across a wider base of transmission system users (including consumers). At the same time, given the lack of risk attribution to specific users, we consider that there is stronger need for a role for Ofgem in ensuring that any stranding risks are allocated and managed appropriately and that the likely benefits outweigh potential risks.

Issues to be addressed

4.3. Our analysis and previous stakeholder feedback has suggested that the key barriers to developers undertaking WNBI include a lack of clarity on how transmission assets that go beyond the immediate needs of the developer will be treated during a tender exercise. This chapter sets out our proposed approach to address this barrier.

4.4. Uncertainty around how security and charging arrangements would work for WNBI was also identified as a barrier for developers taking forward coordinated assets. In the March consultation we set out that we expect security and charging arrangements for coordinated offshore assets should be cost reflective[21]. We recognise that National Grid Electricity Transmission (NGET) are currently taking forward work on charging arrangements through an informal working group as set out in paragraph 1.20.

4.5. NGET user commitment guidance published this year[22] makes provisions for how wider system investments could be treated whilst being constructed by an OFTO. The guidance suggests user commitment for wider system investments would be shared 50/50 between generation and consumers. We consider that there needs to be further work to understand whether these principles should be extended to include wider system investments undertaken by a developer. Going forward, we expect industry and NGET to consider whether changes to current arrangements may be required.

Proposed approach

4.6. In March, we consulted on the potential introduction of two Ofgem assessment gateways to support developers in taking forward WNBI.

[21] See page 25, the March consultation.
[22] CUSC Section 15 (CMP192) User Commitment Methodology, Guidance and Implementation Document, May 2012

Responses broadly agreed with the principle of Ofgem providing greater clarity ahead of significant preliminary and construction works.

4.7. **This section sets out further details on our proposal to introduce two Ofgem gateway assessments, broadly ahead of the commencement of preliminary works and ahead of construction works.**

4.8. The principle aim of our gateway assessments will be to support developers in undertaking offshore WNBI where this represents an economic and efficient response to wider transmission network requirements. Gateways that provide early clarity on our approach to a cost assessment will be voluntary. Where a developer is comfortable that they can support their decision to develop the WNBI as part of a cost assessment during a tender exercise, the developer can choose not to go through one, or both, of the gateways.

4.9. At the first gateway, Ofgem will review the rationale for including the WNBI in a developer's design solution at the preliminary works stage. Our assessment at the first gateway will inform our cost assessment process when a tender exercise is triggered by the developer. This is the case for developers following both the Generator build and OFTO build option. Where we are convinced by the developer's rationale for undertaking certain preliminary works associated with the WNBI, we would commit to not reassessing this rationale during the tender exercise.

4.10. Any commitments at the first gateway would be conditional on the National Electricity Transmission System Operator (NETSO) and the developer continuing to engage and monitor the needs case for the WNBI. In some instances, where the needs case changes, we would expect these parties to review the design of the offshore assets and make any necessary changes where this would be economic and efficient.

4.11. At the second gateway Ofgem will review the rationale for constructing the WNBI. Where the developer opts for Generator build, our assessment at the second gateway will inform our cost assessment process when a tender exercise is triggered by the developer. Where we are convinced by the developer's rationale for including specific additional, or oversized, transmission assets associated with the WNBI, we would commit to not reassessing this rationale during the tender exercise. Where a developer is following the OFTO build option, our assessment will help to inform the scope of the OFTO build tender exercise.

4.12. As with all projects that enter a tender exercise, projects which pass through the gateways will be subject to the cost assessment process as part of a tender exercise in the usual way. However, this cost assessment process will be informed by our decisions at the gateways.

4.13. In cases where the NETSO and developer have not presented sufficient information to support the rationale for developing the WNBI at a gateway,

there will be an opportunity for the parties to provide further information. Where we remain unconvinced of the rationale, we will set out our reasoning. At this point we expect the NETSO and developer may choose to renegotiate the scope of works being taken forward by the developer.

4.14. Responses to the March consultation requested clarity as to what might cause Ofgem to be convinced of the rationale for the WNBI at the first gateway but then not at the second gateway. We consider that the factors which could influence whether developing the WNBI remains economic and efficient at the construction stage will be project specific. We are keen to work with developers and the NETSO at the first gateway to ensure that the likelihood and impact of potential standing risks are appropriately considered in their proposed design solution submitted to us at the first gateway.

Roles and responsibilities

4.15. We propose that the developer will lead in triggering and making a submission to a gateway assessment. Where the NETSO includes WNBI in a developer's connection offer we propose that the NETSO (drawing on relevant onshore Transmission Owners(s) (TO(s)) as necessary) would:

- support the needs case for developing the WNBI at the gateway assessment, or during the cost assessment process as part of a tender exercise where the developer does not go through the gateway assessments

- assist in monitoring the needs case for WNBI after the Bilateral Connection Agreement (BCA) is signed and in reviewing the design for developer-led WNBI where this is an appropriate response to a change in the needs case.

Q4.1 Do you agree that the NETSO should support the needs case for developer led WNBI, drawing on relevant TO(s) as necessary? Do you consider changes to the NETSO licence or industry codes are needed to support this?

Q4.2 Are there any specific barriers to the NETSO sharing information required to support the needs case for developer led WNBI with the appropriate developer?

Assessment criteria

4.16. In the March consultation we outlined three criteria that Ofgem could look at in assessing proposals to take forward coordinated offshore assets[23]. Since then we have further developed these criteria[24] and for developer-led WNBI they now include:

- the (economic) needs case for investment
- the timing and scope of the project and its technical readiness
- proposals for ongoing NETSO-developer engagement
- a developer's commitment to triggering a tender exercise.

4.17. Where a gateway is requested before a tender exercise is triggered, we consider that we will need evidence of a developer's commitment to triggering a tender before we undertake a gateway assessment.

Q4.3 What are your views on the criteria that Ofgem could use when assessing proposals for developer-led WNBI?

Timing of the gateways

4.18. In our March consultation, our potential model for a gateway process suggested that the first gateway could take place around the time the developer signs a BCA, with the second gateway taking place after a consent application has been made. In general, responses broadly agreed with these timings. This section sets out our further thinking on the potential timing of the gateway assessments. Our proposals seek to ensure that the gateways maintain flexibility to respond to the needs of individual projects – a key factor highlighted in stakeholder responses - whilst ensuring that developers are able to provide sufficient information to inform our assessment.

Timing of first gateway

4.19. Developers will be able to trigger the first gateway when they have sufficient information to enable us to conduct an informed assessment, and we expect early engagement between developers and Ofgem will help inform when the gateway should be triggered. We consider that projects will generally only be able to satisfy the assessment criteria for the first gateway after a developer has signed a BCA. Signing a BCA will be an important signal of commitment

[23] Offshore Transmission - Consultation on potential measures to support efficient network coordination, March 2012, Ref 26/12, page 28 paragraphs 3.36-3.40

[24] See Appendix 3, Proposed Assessment Criteria at WNBI Gateways for further details

from the developer. We also expect that further high level design work that occurs once a BCA is signed will be important in providing sufficient analysis to evidence the needs case for taking forward the WNBI at the preliminary works stage. However, should developers be able to provide sufficient evidence to meet the assessment criteria before signing a BCA then we would be open to discussing this on a case-by-case basis.

Timing of second gateway

4.20. Again, developers will be able to trigger the gateway when they have sufficient information to enable us to conduct an informed assessment. We propose to maintain flexibility as to when a developer can make a submission to the second gateway. Under the Generator build option, we expect the timing of this gateway to be as late as possible, to help ensure that the evidence provided in a developer's submission remains up to date at the point at which significant final procurement decisions for the WNBI are made. Under the OFTO build option, we expect the second gateway will take place in order to inform the OFTO build tender exercise.

Q4.4 Do you agree with our proposal for the timing of the Ofgem assessment gateways to support developer-led WNBI?

Areas for further work

4.21. As set out in the July open letter, we are considering whether there is the potential to support some specific types of low cost WNBI outside of the gateway assessments

4.22. Gateways that provide early clarity on our approach to a cost assessment will be voluntary. In deciding whether to go through a gateway a developer would be informed by cost assessment guidance and their engagement with the NETSO. In particular, the type of WNBI that may not need to pass through the gateways could include low cost, low regret WNBI, where low regret refers to:

- low risk of stranding of the WNBI and/or
- strong benefits of the WNBI in terms of enabling potential future savings or maintaining future network flexibility. This could include low cost preliminary works which allow the option for taking forward WNBI to be kept open during the preliminary works stage.

4.23. Going forward we will be considering whether there is further potential for supporting specific low regret WNBI below a set threshold ('de minimis threshold') without the need for a gateway assessment. Options we have currently identified include Ofgem committing to not assessing the rationale for pursuing these works during the cost assessment process as part of a tender exercise where:

- these activities are set out in Ofgem guidance and the developer can demonstrate that such guidance has been adhered to

- the NETSO has driven and endorsed the inclusion of the low regret WNBI in the BCA.

4.24. Further analysis to support these options will be undertaken next year. We are seeking stakeholder input at this early stage to help inform our work on a potential de minimis policy option and we intend to come back to stakeholders with further information at a later date.

Q4.5 Are there some specific types of low regret WNBI that developers may be willing to take forward without a gateway assessment?

Q4.6 Do you consider that there should be a de minimis threshold for low regret developer-led WNBI? What are your views on how this should work, while ensuring consumers are not exposed to significant stranding risk? Where possible, please provide evidence of the types and costs of WNBI that you consider should be captured by the threshold.

5. Category 3: Non Developer-led Wider Network Benefit Investment

Chapter Summary

Sets out how non developer-led Wider Network Benefit Investment (WNBI) could be brought forward, where our lead option, subject to further work, is to introduce a route for onshore Transmission Owners (TOs) to take forward certain preliminary works for some WNBI ahead of an Offshore Transmission Owner (OFTO) build tender to identify the party to own and construct the assets. In setting out this option we consider how preliminary works would be funded and what requirements would need to be put upon those whom are funded to do the preliminary works.

Question box

Q5.1 To what extent do you think it would be appropriate for onshore TOs to take forward preliminary works for non developer-led WNBI?

Q5.2 What are your views on the criteria that Ofgem could use if assessing proposals at the first gateway for non developer-led WNBI?

Q5.3 What are your views on using two gateways for non developer-led wider network benefit investment?

Q5.4 What additional incentives and requirements should be placed on preliminary works funding for non-developer led wider network benefit investments?

Q5.5 What parties should onshore TOs be expected to engage, and what engagement processes should they follow before and during preliminary works?

Overview

5.1. Non developer-led Wider Network Benefit Investment (WNBI) is 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).

5.2. Under the current offshore transmission regime, both the Generator build and the OFTO build options rely on offshore developers undertaking the preliminary works. However, developers may not be interested in taking forward projects such as system reinforcements that are not related to their own primary export route, or large scale WNBI that would link many different offshore generators. For such non developer-led WNBI projects, there may be a need for other parties to take forward preliminary works in order to avoid delay to the investment that could be of benefit to the overall system.

Issues to be addressed

5.3. The existing offshore regime offers no clear route for WNBI to be taken forward in offshore transmission assets where they are not being undertaken by a developer. Particularly, it is not clear how such investments should be identified, and how preliminary works, construction and then operation should be undertaken and funded.

5.4. We focus below on developing an approach to provide a route for these offshore transmission works to come forward where they are in the interests of consumers. We primarily consult on the preliminary works aspect of non developer-led WNBI. Subsequent work will focus on transitioning to the construction and operation stages.

Proposed approach

5.5. Based on responses to the July open letter, we consider that onshore TOs are well placed to undertake certain preliminary works for non-developer led WNBI and that funding could be provided through onshore price control mechanisms, subject to the outcome of this consultation and a detailed review of the legislative and licensing frameworks. Our lead option for this category, subject to the further work, is for onshore Transmission Owners (TOs) to be able to submit proposals for funding to undertake the preliminary works for non developer-led WNBI, followed by an OFTO build tender to identify an OFTO to construct and own the assets. If we are to progress this route in this way then there would be two Ofgem gateways to assess whether the project should proceed in the best interests of consumers: first to enable the preliminary works to go ahead, and second to again review the project before launching an OFTO build tender for the construction and operation of the assets.

Identification

5.6. In the July open letter we asked which parties could have a role in identifying these projects. Responses demonstrated a range of views on the potential roles and in general it was highlighted that the National Electricity Transmission System Operator (NETSO) and onshore TOs both play an important role. As discussed in Chapter 2, we are considering the possibility that works in this category would be identified by the NETSO and TOs, drawing on engagement with relevant parties, especially offshore generators undertaking works in the area. Assets not specified as for a developer to lead in a BCA could then potentially be brought forward under this category.

Parties able to take forward preliminary works

5.7. We also asked in the July open letter which parties could undertake the preliminary works for these projects. Many respondents indicated that TOs

have the information, skills and expertise necessary to propose and undertake preliminary works for assets in this investment category.

5.8. We envisage that the TO would work with the NETSO to identify the opportunity and develop a needs case. Such a route could use a mechanism in the onshore TO licences (which would be introduced in conjunction with onshore price control processes) to allow the TO to recover its preliminary works costs should Ofgem deem the works to be in the best interests of an economic and efficient network. In the coming months we will undertake analysis to determine how and to what extent the existing licensing framework could best enable this option.

5.9. There do not appear to be other suitable remuneration models for OFTOs or third parties. For example, it is not clear that appropriate revenue mechanisms could be introduced to OFTO licences at present, and there are questions as to whether OFTOs would be interested in undertaking preliminary works if it meant that strong business separation would be required (see paragraphs 5.24 to 5.26).

5.10. One option for third parties to recover their preliminary works costs is when the preliminary works transfer to a successful bidder (as per the OFTO build option where generators recover their costs this way). However, as discussed in paragraph 5.16, we propose to reassess the needs case at a second gateway, so whether a tender occurs and whether the assets transfer would be largely outside the control of the third party[25]. Should the Ofgem decide at the second gateway that the project should not proceed, a third party that had financed the preliminary works itself would not have a method for recovering these costs. Therefore, we do not think that this is a viable option given the risks it would entail for the third party.

5.11. We consider that progressing a model in the short to medium term whereby onshore TOs propose and develop preliminary works will enable assets to proceed in an economic and efficient manner. Over the longer term, we may explore, as part of the Integrated Transmission Planning and Regulation (ITPR) project, options that could bring other parties into the process.

Q5.1 To what extent do you think it would be appropriate for onshore TOs to take forward preliminary works for non developer-led WNBI?

[25] For example, if following the preliminary works the construction cost estimate increases significantly, or if planned generation development becomes less certain, Ofgem may determine that proceeding with a tender is not in the best interests of consumers.

Gateway assessments

5.12. In considering the approach described above, we envisage using two gateways to asses proposals for non developer-led WNBI. These gateways are analogous to the gateways discussed in Chapter 4 but have some important differences.

5.13. At the first gateway, TOs would submit preliminary works proposals to Ofgem, outlining a proposed project, any associated funding required and all other information necessary for Ofgem to decide whether to allow the TO to recover the costs associated with taking forward the preliminary works.

5.14. In the March consultation we outlined three criteria Ofgem could look at in assessing proposals to take forward coordinated offshore assets. Since then we have developed the set of criteria further (as discussed in Appendix 3), and they now include:

- the (economic) needs case for investment
- the timing and scope of the project and its technical readiness
- the outputs to be provided and funding associated with them
- evidence of engagement undertaken with impacted parties, and plans for ongoing engagement as the works are developed.

We would also look for the proposal to include rationale on why these works are being brought forward in this category and not as developer-led WNBI.

Q5.2 What are your views on the criteria that Ofgem could use if assessing proposals at the first gateway for non developer-led WNBI?

5.15. Ofgem would undertake an assessment of the proposed costs of the proposal and decide what level of funding to allow. We would issue a determination that triggered a specific level of funding and any associated conditions on that funding, through a licence condition that allowed this (an 'uncertainty mechanism'[26]). Assessments would then occur to ensure that the conditions of the funding had been met and that the outputs were delivered effectively.

5.16. The second gateway would occur when the preliminary works are completed or are nearing completion. Since the preliminary works would uncover further

[26] Uncertainty mechanisms allow changes to a licensee's base revenue during the price control period to reflect significant cost changes for specific activities.

information about the project such as updated costs, timings for construction, feasibility, and technical designs, the second gateway would allow Ofgem to once again assess the benefits of the proposed works. Based on our updated assessment, should the Ofgem believe that the project remained in the best interests of consumers, the project could proceed to the construction phase. We anticipate that the TO that undertakes the preliminary works would support the needs case at the second gateway.

Q5.3 What are your views on using two gateways for non developer-led WNBI?

Outputs and incentives for preliminary works

5.17. Ofgem has moved towards output and incentive based funding decisions for onshore TOs. Subject to our ongoing consideration of the viability of this option, we envisage that the funding of TOs to do preliminary works for this type of investment would be no different.

5.18. In the July open letter we asked for views on what outputs would be required from a third party's preliminary works activities for this type of asset. Most respondents indicated that the preliminary works outputs for this investment category should be no different from the outputs required from preliminary works under an OFTO build tender. We consider that these would be key required outputs.

5.19. We would also look to include incentives and conditions on any preliminary works funding provided. These would vary on a case-by-case basis and be fit for purpose for the proposed project. Timing will be one key area, as we would look to incentivise the timely delivery of outputs. Evidence of continued engagement with stakeholders, as noted above, could also be an important aspect of any funding decision made by the Ofgem.

5.20. We would also look to include incentives or conditions that ensure that the outputs could be fully transferable as part of an OFTO build tender. The preliminary works will need to be developed so that if a subsequent tender were run it would support a fair and open competition; for example, any agreements that are entered must not bias any particular potential bidder.

Q5.4 What additional incentives and requirements should be placed on preliminary works funding for non-developer led WNBI?

5.21. We foresee TOs undertaking ongoing engagement throughout the preliminary works to ensure that the project develops in a coordinated, economic and efficient way. TOs would be expected to engage with all of the affected developers, other TOs (including OFTOs), Ofgem, and other industry parties and stakeholders. This could mean directly including different parties within

the project oversight, or hosting update meetings or workshops to discuss the project's progress, as appropriate.

Q5.5 What parties should onshore TOs be expected to engage, and what engagement processes should they follow before and during preliminary works?

Areas for further work

Construction stage

5.22. Following the preliminary works, our lead option is to use an OFTO build tender exercise to identify an OFTO to construct, own and operate the assets. This would be consistent with the offshore regime and ensure we maintain competitive tendering for OFTO licences.

5.23. Further analysis will be required to determine whether or how the legislative framework might need to adjust to enable a competitive OFTO build when the preliminary works have been completed by a TO. Some example areas we intend to investigate further include the process to launch a tender exercise, as well as how costs for the tender exercise should be managed. We will consult on this further in due course.

Measures to ensure fair and competitive tenders

5.24. Our aim is to ensure that the competitiveness of any tender is maintained. The key issue with non developer-led WNBI is ensuring that a party that gains in-depth knowledge of a project and its associated characteristics (beyond that which will be made available to other bidders) is not able to pass that knowledge on to an associated organisation that is bidding in the subsequent tender.

5.25. We consider that some of the measures discussed around incentives and engagement will be important in ensuring fair and competitive tenders. In addition, we consider that effective business separation measures between a party undertaking the preliminary works and a related organisation intending to participate in a subsequent competitive tender will be needed. Respondents to the July open letter stated that business separation is important, but views were mixed as to whether the existing arrangements are adequate.

5.26. In light of the feedback we have received we will consider in conjunction with the ongoing ITPR project whether the competitiveness of potential tenders is at risk under this category. We will also consider whether other options to address these risks, such as increased transparency, could achieve effective outcomes.

6. Next steps

Chapter Summary

Sets out next steps that will need to be taken following the close of this consultation. These include areas for further policy development and potential implementation requirements.

6.1. While we intend to proceed with the proposals outlined above, we recognise that certain areas will require further policy development. We will also need to consider what changes will be required to the current industry codes, standards and associated documents, tender regulations, licences and supporting tender documentation. Where Ofgem has powers to implement changes we will continue to do this in a robust and transparent manner. Where industry owns a process, we will liaise closely to ensure changes are appropriate and timely.

Further policy development

6.2. We have identified several key areas which will require further development:

- Working with National Grid Electricity Transmission (NGET) and industry to consider possible improvements to the Connections Infrastructure Options Note (CION) process.
- Developing the process for the gateway assessments.
- Analysing stakeholder feedback and developing options for introducing a de minimis threshold.
- Reviewing what changes to the legislative framework and tender process may be necessary to enable our lead option for non developer-led WNBI of an onshore Transmission Owner (TO) completing preliminary works followed by an OFTO build tender.
- Further analysis of TO business separation and the need to ensure a level playing field where a TO is taking forward preliminary works.

Implementation

6.3. For our proposals to be implemented, we foresee that changes could need to be made to:

- Ofgem's internal processes and supporting public guidance
- tender regulations

- transmission licences
- industry codes and standards.

6.4. Where our proposals would require changes to industry codes and standards, it will be necessary for NGET and others to take the lead on implementation. We would continue to work closely with relevant parties with regard to these changes, some of which are already under way.

6.5. In taking this work forward we will continue to monitor and manage interdependencies with other related workstreams, such as the continuing development of the offshore tender regime and ITPR project, as highlighted in Chapter 1.

6.6. We invite views on any potential implementation implications which arise from our proposals, as highlighted in previous chapters. We will conduct a full scoping exercise for implementation after publication of this document.

6.7. We intend to hold a stakeholder workshop on 23 January 2013 to discuss some of the proposals in this consultation and other policy developments in the offshore regime. Parties interested in attending should contact us using the contact details in Appendix 1.

6.8. We will provide an update on our proposals, taking into account feedback from the workshop and responses to this consultation, in a further publication in spring 2013.

Appendices

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Appendix 1 - Consultation Response and Questions

A1.1 Ofgem would like to hear the views of interested parties in relation to any of the issues set out in this document.

A1.2 We would especially welcome responses to the specific questions which we have set out in chapters 2 to 5 of this document and which are replicated below.

A1.3 Responses should be received by 1 March 2013 and should be sent to:

Gareth Atkins
Offshore Coordination
9 Millbank,
London SW1P 3GE
offshore.coordination@ofgem.gov.uk

A1.4 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 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.

A1.5 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.

A1.6 Next steps: Having considered the responses to this consultation, Ofgem intends to provide an update on our proposals, taking into account feedback from the workshop and responses to this consultation, in a further publication in Spring 2013. Any questions on this document should, in the first instance, be directed to:

Gareth Atkins
Offshore Coordination
9 Millbank,
London SW1P 3GE
offshore.coordination@ofgem.gov.uk

CHAPTER 2: Overview of our proposed framework for the delivery of coordinated offshore transmission assets

Q2.1 Do you agree with our high-level framework for the development of coordinated offshore transmission assets?

Q2.2 Do you agree with our expectations of how coordination opportunities will be identified for parties to progress? Are they consistent with existing roles and responsibilities of parties with regards to the development of the network?

Q2.3 Do respondents consider that changes to the CION process are needed, for example, should the CION be developed further to support coordination? If so, what changes are needed to the process or document? Would an improved CION assist in building developers' confidence in accepting coordinated connection offers?

Q2.4 Are there any barriers to improving the CION, if so, what barriers exist and how could they be addressed?

Q2.5 Do respondents anticipate issues with the design or delivery of transmission assets where generation projects are reliant on works to be undertaken by another developer? If so, what would be the appropriate mechanism to address such issues?

Q2.6 To what extent could NETSO intermediation mitigate data confidentiality issues between developers? Are any further measures required?

CHAPTER 3: Category 1: Generator-Focused Anticipatory Investment

Q3.1 Do respondents agree with our preferred option, to support the transfer of GFAI assets to the OFTO if security is provided to protect consumers against stranding risk?

Q3.2 To what extent do the current user commitment arrangements address the scenarios set out in table 3.1 and paragraph 3.13?

Q3.3 Are there any barriers to extending user commitment arrangements to address any gaps identified in question 3.2?

CHAPTER 4: Category 2: Developer-Led Wider Network Benefit Investment

Q4.1 Do you agree that the NETSO should support the needs case for developer led WNBI, drawing on relevant TO(s) as necessary? Do you consider changes to the NETSO licence or industry codes are needed to support this?

Q4.2 Are there any specific barriers to the NETSO sharing information required to support the needs case for developer led WNBI with the appropriate developer?

Q4.3 What are your views on the criteria that Ofgem could use when assessing proposals for developer-led WNBI?

Q4.4 Do you agree with our proposal for the timing of the Ofgem assessment gateways to support developer-led WNBI?

Q4.5 Are there some specific types of low regret WNBI that developers may be willing to take forward without a gateway assessment?

Q4.6 Do you consider that there should be a de minimis threshold for low regret developer-led WNBI? What are your views on how this should work, while ensuring consumers are not exposed to significant stranding risk? Where possible, please provide evidence of the types and costs of WNBI that you consider should be captured by the threshold.

CHAPTER 5: Category 3: Non Developer-led Wider Network Benefit Investment

Q5.1 To what extent do you think it would be appropriate for onshore TOs to take forward preliminary works for non developer-led WNBI?

Q5.2 What are your views on the criteria that Ofgem could use if assessing proposals at the first gateway for non developer-led WNBI?

Q5.3 What are your views on using two gateways for non developer-led wider network benefit investment?

Q5.4 What additional incentives and requirements should be placed on preliminary works funding for non-developer led wider network benefit investments?

Q5.5 What parties should onshore TOs be expected to engage, and what engagement processes should they follow before and during preliminary works?

Appendix 2 – Updated impact assessment

Summary

A2.1 The March consultation set out potential measures to support the delivery of coordinated transmission assets. Given that we were at an early stage in policy development, the consultation included an initial impact assessment which set out the effects of a broad range of potential options.

A2.2 Since March we have conducted further analysis and refined our policy proposals into a framework to enable coordination. This updated impact assessment primarily focuses on:

- setting out how our policy has developed since the March consultation in light of stakeholder responses and further analysis. We also set out further information where we have considered new options since March, in particular for Generator-Focused Anticipatory Investment (GFAI)

- the impacts of our proposed framework. Where appropriate, we refer back to our initial impact assessment for analysis on the broad range of options considered. The initial impact assessment and the report conducted by Redpoint Energy[27] also contain more analysis on the benefits of pursuing a coordinated (rather than a solely radial) offshore transmission network.

A2.3 We invite views on the options and impacts discussed below, including whether there are further impacts which have not been considered. We acknowledge that there is a significant qualitative element to this assessment, and that it may not be possible to fully quantify many of the impacts to specific framework proposals at this stage. Where stakeholders are in a position to provide this, we welcome quantified analysis of impacts.

Key issues and objectives

Primary objective and principles

A2.4 Our principal objective is to protect the interests of both existing and future energy consumers. Our proposals to support the development of offshore coordinated assets facilitate the development of an economic and efficient transmission network. In this way our proposals serve the interests of consumers by helping to ensure that the costs of developing transmission assets, borne by consumers through their energy bills, are not higher than they need to be.

A2.5 In developing this framework, we have considered three key principles:

[27] Redpoint Energy: Offshore Transmission - assessment of regulatory, commercial and economic issues and options, December 2011

- Ensuring 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.

- Building on the existing offshore regulatory regime, so as to retain the benefits of competition, minimise disruption due to implementation and help to capture the benefits of coordination in the short term.

- Providing greater clarity for developers on their route to cost recovery where they are taking forward work on behalf of other generators or the wider network.

Current approach to developing offshore transmission assets (the base case)

A2.6 Under the current offshore regulatory regime, potential opportunities for coordination are identified through system planning documents and the connection offer process:

- Any generator wishing to connect to the National Electricity Transmission System must make an application in writing to the National Electricity System Transmission Operator (NETSO).
- In response to this request the NETSO will provide an economic and efficient connection offer. This offer could include coordinated assets.
- The developer and the NETSO will then negotiate and sign a Bilateral Connection Agreement (BCA) which may or may not include coordinated offshore transmission assets.
- Following the signing of the BCA, a developer will carry out the agreed works.
- The developer will expect to recover its economic and efficient costs through a competitive tender exercise run by Ofgem.
- Ofgem will then grant a licence to construct, own and maintain (Offshore Transmission Owner (OFTO) build), or to own and maintain (Generator build), the offshore transmission assets.

Key issues

A2.7 Under this current approach, it is still possible for coordination to be taken forward. Under the transitional regime some investment has already been made on an anticipatory basis and some connection offers have included coordinated elements. However, the Offshore Transmission Coordination Project (OTCP) found that developers are reluctant in some cases to take forward projects that involve coordination without sufficient clarity that they will be able to recover their investment during an OFTO tender exercise.

A2.8 Further analysis since the OTCP has highlighted several specific key issues with the current approach which do not support coordination. We set these

out below, referring to the three investment categories as set out in the main body of the consultation.

A2.9 **For Generator-Focused Anticipatory Investment (GFAI)**, where a developer has taken forward GFAI, whether for its own use or that of a later generator, stakeholders have suggested that it is not clear how Ofgem will treat the overcapacity at cost assessment. In addition, if transfer of the GFAI for the economic and efficient value is permitted, then consumers must be protected from undue stranding risk post transfer.

A2.10 **For developer-led Wider Network Benefit Investment (developer-led WNBI)** our analysis and previous stakeholder feedback has suggested that a key barrier to developers undertaking WNBI is a lack of clarity on how transmission assets that go beyond the immediate needs of the developer will be treated during a tender exercise.

A2.11 **For non developer-led Wider Network Benefit Investment (non developer-led WNBI),** the existing offshore regime offers no clear route for development to be taken forward where it is not being undertaken by a developer.

Options

A2.12 Our initial impact assessment set out a broad range of options on how investment in coordinated transmission assets would be taken forward under the offshore regime. This included a 'do nothing' approach, where there would be no changes to the existing regime. Options considered were organised under five headings:

- Identifying the need for, and type of, investment to support coordination
- Who undertakes preliminary works for investment to support coordination
- Who undertakes construction works for investment to support coordination
- Potential Ofgem assessment points
- Ofgem assessment criteria

A2.13 These options reflected the early stage of our policy development. We now set out further information on how we have refined these options - including through analysis of responses to our March consultation - in order to reach our proposed framework. For more detailed information on the impacts of some of the options set out below please see our initial impact assessment.

Identifying the need for, and type of, investment to support coordination

A2.14 The March initial impact assessment considered the following options:

- Building on the existing connection offer process, where generators, the NETSO and Transmission Owners (TOs) have a role. This option provides the benefits of the NETSO and local TO being able to take a holistic view

across network needs when considering the best connection offer to provide to the generator. This option also provides developers with some flexibility; they can choose how much of their project to request connection for, and engage with the NETSO through the connection offer process.

- Developer-led - offshore developers would have the key role in identifying where there are opportunities for investment which enables efficient coordination. We consider that while developers are in a strong position to identify opportunities for coordination within their own or associated projects, they may lack the NETSO's holistic view of all projects and existing onshore constraints.
- A blueprint and build approach - this option involved the central direction of the offshore network build-out whereby a central design authority (such as the NETSO) would set out a blueprint for what assets need to be built offshore to develop a coordinated network. Taking into account analysis carried out in the OTCP and stakeholder feedback, we do not consider that a blueprint and build model represents the most effective option at this stage.

A2.15 The majority of responses to the March consultation agreed that developers, the NETSO, and existing onshore TOs and OFTOs have an important role in identifying opportunities for coordinated investment. Responses also suggested that the connection offer process may be an appropriate platform for identifying investment to support coordination in certain instances. However, responses broadly indicated that the current connection offer process may not be appropriate as a platform for identifying all coordination opportunities, particularly those that are not linked to a single connection offer or where they involve works that do not form part of a generator's primary export route.

A2.16 Under our proposed framework to enable coordination of offshore transmission, we expect that the connection application and agreement process will be the key determinant of where investment to support coordination is needed and whether the works will be developer-led (either Generator build or OFTO build) or not, as it will set out the works for developers to undertake.

A2.17 If TOs, supported by the NETSO on the needs case, consider that development works are needed that are not specified in a BCA for a developer to undertake, then our lead option is for them to submit for preliminary works funding through onshore price control processes. Demonstration of engagement with developers will be a key aspect of our consideration of the request for funding.

A2.18 In developing the framework for offshore system planning and network development, we are seeking to build upon the existing framework and roles of parties that exist onshore and offshore.

Who undertakes preliminary works for investment to support coordination

A2.19 In the March consultation we focused on who should undertake preliminary works for WNBI. This was in response to concerns that for WNBI, developers may not have the same incentives to ensure these assets are built in a timely and fit-for-purpose manner compared to where they are building connection assets for their own generation project. There were also concerns around whether they would be willing and have sufficient resources to take on the responsibility for developing such assets. In addition to a 'do nothing' approach, our initial impact assessment considered the following options:

a. Having the local TO undertake the preliminary works for offshore transmission assets that are significantly driven by wider network benefits.

b. Continuing to give developers the choice of undertaking preliminary works, but with the local TO taking on the activity should the developer be unwilling or unable to. It is expected that this may be the case where significant WNBI is not a natural fit with the works being taken forward by that developer.

c. Ofgem run a tender exercise for the preliminary works. We noted that there may be limited value to this approach where the cost of the preliminary works is relatively small.

A2.20 Responses to the March consultation generally preferred options (b) and (c) above. Following further consideration we have decided not to take forward option (c) at this stage. At this stage we do not consider that, due to the relatively small value of preliminary works, the potential benefits of competition would offset the costs incurred in the tender exercise. We are not proposing to take forward option (a) at this stage as we consider that there may be opportunities where a developer is well placed to take forward the WNBI where it is included in their connection offer.

A2.21 In response to stakeholder feedback in support of option (b), the July open letter asked whether the NETSO could have a role in undertaking preliminary works for non developer-led WNBI. We set out this option as an alternative option to TOs undertaking these works. However, most respondents considered that the NETSO was not the most appropriate party for undertaking preliminary works, mainly because it did not have skills and experience in this area.

A2.22 We consider that where there is a need to seek to introduce a new route for a party other than a developer to take forward preliminary works for WNBI. We have therefore put forward our proposals for **non developer-led WNBI**, where our lead option would allow onshore TOs to be able to submit proposals for funding for preliminary works for WNBI through onshore price control mechanisms.

A2.23 In line with option (b) in the March consultation, we are not proposing that all WNBI should be brought forward through this route. Our proposals **for developer-led WNBI** provide flexibility by allowing developers to take forward development of WNBI where they have agreed to do so as part of their BCA. We are not proposing to introduce any restrictions at this time on which assets developers can take forward, as discussed further in the next section.

Who undertakes construction works for investment to support coordination

A2.24 In the March consultation we focused on who should undertake construction works for WNBI. This was in response to concerns that for WNBI, developers may not have sufficient incentives to ensure these assets are built in a timely and fit-for-purpose manner. Where a developer has a BCA which includes assets to support coordination, the March initial impact assessment considered the following options:

a. Developers continue to have the choice of Generator build and OFTO build options for all offshore assets, including those that are significantly driven by wider network benefits.

b. Assets that are significantly driven by wider network benefits would be exclusively developed through the OFTO build option.

A2.25 In responses to the March consultation, developers generally thought that the choice between Generator build and OFTO build for WNBI should remain as open as possible. Several responses suggested that if a developer's generation assets are highly dependent on the WNBI, then there may be sufficient incentives for developers to undertake these works (to ensure timely connection of their generation), in addition to incentives through the BCA and cost assessment process.

A2.26 We consider that assets that are being driven primarily by wider network benefit may be less suitable for developer-led options, particularly Generator build. However, our analysis and stakeholder feedback suggests that defining a class of assets that could not be taken forward by developers would be problematic and there may be benefits to be had in allowing flexibility as to how projects are progressed. We recognise these points and therefore at this time are not proposing to introduce any restrictions on which assets developers can take forward.

A2.27 Our framework proposes to maintain the current level of flexibility around a developer's ability to choose between Generator and OFTO build, with consumers protected from unnecessary risks through the gateway and cost assessment processes. However, where the WNBI represents a significant proportion of the works being taken forward by the developer, we consider that there may be a natural tendency for developers to select the OFTO build option.

A2.28 **For non developer-led WNBI**, our lead option is to have these works taken forward through OFTO build. This will allow these assets to build on the existing regime and maintain the competitive approach.

Potential Ofgem assessment points

A2.29 In addition to a 'do nothing' approach, the March initial impact assessment considered the following options for potential Ofgem assessment points to support coordination:

a. Ofgem assesses the economic case of proposals to take forward coordinated assets through annual assessments. Our initial impact assessment set out that this may be a burdensome approach for industry and Ofgem, which could potentially add time delays to developing these projects.

b. Ofgem assesses the economic case of proposals to take forward coordinated assets at either one or two points. Our March consultation set out a 'straw-man' for how a two stage process might work. The straw-man set out that the gateways could take place to inform decisions on preliminary works and construction works respectively.

A2.30 The aim of these assessments would be to give developers taking forward coordinated investments greater clarity on their route to cost recovery for those elements. At the same time, the assessments would also serve to allow Ofgem to judge whether the likely benefits to consumers outweighed the costs and risk of the investment. A particular risk that would need to be considered is the risk that the WNBI would end up being stranded due to changes in the needs of the transmission network.

A2.31 Responses to the March consultation broadly welcomed the principle of earlier clarity on how including investment to support coordination within the scope of the preliminary and construction works might be treated when Ofgem determines the transfer value of the assets in line with option (b). Responses broadly agreed that a two-stage gateway assessment is appropriate, but noted the need for flexibility in the timing of these gateways to allow for differences between projects.

A2.32 Feedback and further analysis has led us to consider further options **for developer-led GFAI** since the March consultation:

A2.33 Option 1: 'Do nothing'. No industry framework changes and no steps to improve clarity on how Ofgem will treat the overcapacity at cost assessment. Under this option, if transfer of the GFAI for the economic and efficient value is permitted, consumers may be exposed to undue stranding risk post transfer.

A2.34 Option 2: We provide improved clarity on the route to cost recovery via a tender exercise through early cost benefit analysis. This option would require

the provision of detailed information to Ofgem at an early stage so a cost benefit analysis could be undertaken on the proposed GFAI in advance of the investment being undertaken. This option would not be focused on user commitment. Any advance view would be subject to appropriate caveats, and would include only the scope of the GFAI, leaving the detailed cost assessment to be undertaken as part of the tender exercise. There are a number of issues with such an option. We consider the key issues are:

- An up-front approach would not be consistent with that onshore or what would be applied under OFTO build, where developers would be liable for the costs of their attributable works under user commitment arrangements. The fact that attributable works require significant user commitment from generators is a reflection of the limited likelihood of the assets being re-used for other purposes if that specific generation project fails to proceed. We consider this holds equally for offshore transmission assets constructed under the Generator build option that would involve GFAI.
- The owners of the generation projects for which the GFAI is constructed, and not Ofgem (on behalf of consumers), are best placed to manage the stranding risk from that GFAI as they have greatest knowledge of and control over whether their project is taken forward.
- The owners of the generation projects also stand to benefit from the GFAI, as they will benefit from lower transmission charges to the extent that it does enable a more cost-effective connection.
- It is not clear how Ofgem could evaluate the probability of the later specific project coming forward to allow the transfer of risk to consumers.

A2.35 In our view, while this option might provide greater clarity to the developer and make it easier for GFAI to be taken forward from a developer's perspective, it would not provide sufficient likely benefits to consumers given the scale of stranding risk to consumers.

A2.36 Option 3: We provide improved clarity on the route to cost recovery via a tender exercise through the application of additional cost assessment criteria in the tender exercise. This option would not be focused on user commitment. These criteria would inform our analysis on the decision to include GFAI in the project scope, and we would aim to ensure that stranding risk to consumers is minimised. The principles of economic and efficient investment and robust cost assessment for a given scope would still apply. Examples of criteria might include:

- Expected connection date for the later generator (e.g. within a certain time period).
- Evidence of financing for the later generator's project.
- Regular reporting on construction progress by the later generator.
- Backstop date for the later generator to connect (and possibly a security payment for failure).

A2.37 If the developer responsible for meeting the criteria failed to do so, the costs associated with the GFAI built for the later generator would be disallowed from the transfer value. While consumers would be protected, the developer's exposure would remain.

A2.38 Option 4: We consider that the generator who will benefit from the GFAI is best placed to manage, and hence should retain, the stranding risk. We believe that extending user commitment arrangements could provide an appropriate way for the industry itself to manage the stranding risk under GFAI. This is our preferred option set out in the main body of this consultation. We consider that it would not be necessary to consider in the scope of the cost assessment whether the benefits of the investment outweigh the risks, only whether the included scope has been carried out economically and efficiently. If respondents agree with our analysis of the options, we would look to industry and NGET as the Connectiion and Use of System Code (CUSC) Administrator to bring forward suitable CUSC Modification Proposals for consideration.

A2.39 **For WNBI**, we consider that a gateway approach remains a suitable option. WNBI has the potential benefit of achieving a more efficient transmission system overall, but also introduces potential stranding risks if the wider network need does not materialise. Unlike GFAI, which is driven by the need of a limited number of specific generation projects, WNBI has a much wider group of potential users. Therefore, we consider that there is a case for sharing some stranding risk across a wider base of transmission users and consumers. At the same time, given the lack of risk attribution to specific users, we consider that there is stronger need for a role for Ofgem in ensuring that any stranding risks are allocated and managed appropriately and that the likely benefits outweigh potential risks.

Ofgem assessment criteria

A2.40 In the March consultation we outlined three criteria that Ofgem could look at in assessing proposals to take forward coordinated offshore assets: needs case; timing and scope; and technical readiness. We have since expanded on this list of criteria, which is set out in Appendix 3 with the explanation of our rationale.

A2.41 The following sections of this updated impact assessment focus on the impacts of:

- our proposed framework, including options for GFAI that we have considered since March
- an overview of the impacts of pursuing a coordinated offshore network when compared to a radial approach.

A2.42 Where appropriate, we refer back to our initial impact assessment and the Redpoint Energy report[28].

Impacts on consumers

A2.43 The OTCP commissioned a cost-benefit analysis (undertaken by TNEI/PPA Energy and Redpoint Energy) in order to assess the benefits of pursuing coordination when developing offshore transmission assets for the connection of Crown Estate Round 3 zones. The analysis, taken across four different offshore generation deployment scenarios, suggests coordination has the potential to deliver savings of around 8-15% (£0.5-3.5 billion) when compared to a radial configuration. The impacts of these savings on the sustainable development of the transmission network are assessed later in this updated impact assessment.

A2.44 The total cost of developing, operating and maintaining GB transmission assets is paid for by both generation and demand through the Transmission Network Use of System (TNUoS) charging arrangements. In the long-term, we expect that lower capital and operational expenditure associated with developing a coordinated network will drive a reduction in the total amount of money recovered under TNUoS. We expect this will lead to a reduction in consumer bills.

A2.45 The OTCP also identified that some coordinated investment could result in stranded transmission assets, with the potential to reduce the benefits of coordination. However, this reduction can be mitigated in part if the approach to support coordinated investment ensures that these risks are effectively managed.

A2.46 Our proposed framework seeks to ensure that the benefits of coordination are captured, whilst ensuring that risks are allocated appropriately amongst those who can best manage them, and who stand to benefit from the investment (i.e. following cost reflective principles).

A2.47 **For GFAI** we consider that stranding risks should be allocated to the owners of the generation projects, since they are best placed to manage the certainty of their own projects connecting and also stand to benefit directly from the GFAI.

- Under option 2, 'cost benefit analysis', consumers (not the developer who would benefit from the GFAI) could be exposed to stranding risk. This stranding risk could potentially increase costs to consumers.

- The approach under option 3 would protect consumers from undue stranding risk but would leave the developer undertaking GFAI exposed to

[28] Redpoint Energy: Offshore Transmission - assessment of regulatory, commercial and economic issues and options, December 2011

stranding risk from the later generator(s) not connecting. On this basis the developer would not be willing to take forward GFAI and again opportunities for efficient investment could be missed.

- Option 4 is our preferred option. Extending user commitment arrangements would address the identified stranding risks, by ensuring that the developer who will benefit from the GFAI bears the stranding risk, and that consumers do not bear undue stranding risk.

A2.48 **For WNBI**, we are proposing to introduce two gateway assessments to support developers and TOs in taking forward these investments. Our proposals mitigate and manage potential risks to consumers by:

- assessing whether consumers are likely to receive sufficient benefits where they are likely to take on stranding risks

- ensuring proposals assess potential stranding risks, with developers and TOs seeking to mitigate them where economic and efficient through maintaining flexibility between designs.

A2.49 Further details of the benefits and risks of coordination, including short term impacts, are detailed in our initial impact assessment in the March consultation.

Impacts on competition (including effects on small businesses)

A2.50 Competition is central to the existing offshore regulatory regime, with OFTO licences granted by Ofgem through competitive tender exercises. To date, the existing offshore regime has succeeded in attracting competitive tender bids and allowing new entrants to enter the energy sector.

A2.51 Our proposals to support GFAI and developer-led WNBI represent incremental enhancements to the current offshore regulatory regime. This will ensure that the current benefits of the competitive offshore regime are maintained. Our lead option of OFTO build for the construction of non developer-led WNBI would also ensure that the benefits of competition are retained. We will also be examining whether the current business separation arrangements are adequate in maintaining fair and competitive tenders under any proposed approach.

A2.52 We do not foresee impacts on competition for GFAI, but we would welcome views if respondents are able to identify any specific concerns. In particular we would appreciate evidence/quantification of any anticipated effects.

A2.53 Our March consultation considered whether some coordinated assets could be developed by third parties at the preliminary works stage. Upon further review, there are some key practical constraints to this option, especially surrounding the methods of remuneration, as discussed in paragraph 5.10 in Chapter 5 of this consultation. However, over the longer term we may explore further options under ITPR that could bring other parties into the process.

A2.54 By enabling more efficient and timely offers, our framework has the potential to improve competition in the generation sector by supporting reductions in the cost of offshore generation.

A2.55 We do not foresee that our framework has substantially different effects on small or large firms but welcome views on this.

Impacts on sustainable development

Managing the transition to a low carbon economy

A2.56 The UK Renewable Energy Roadmap (2011) central range suggests that there could be between 11 to 18GW of offshore wind capacity by 2020. In addition, DECC has a target of reducing the costs of offshore wind (development, construction and operations) to £100/MWh by 2020. We expect that our proposed framework could support these targets by facilitating the efficient and timely development of offshore generation.

Eradicating fuel poverty and protecting vulnerable customers

A2.57 We do not foresee that our initial proposals will have any significant impacts in this area but welcome views on this.

Promoting energy savings

A2.58 Although we recognise that design choices and technology will impact on transmission losses, our analysis has not attempted to quantify any potential effects. Within the tender exercise cost assessment, we would expect that a consideration of transmission losses would be relevant to the economic and efficient test.

Ensuring a reliable electricity supply

A2.59 A coordinated network may increase the security of both the onshore and offshore transmission networks by providing multiple export routes for offshore generators and providing new opportunities for a more economic and timely reinforcement of the onshore network.

A2.60 In some cases, coordination may also lead to a decrease in the security of supply in transmission assets during the early build out of the offshore wind farm compared to a radial build out. However, coordinated assets would still need to comply with the System Security and Quality of Supply Standard (SQSS). This ensures that the overall security of supply remains within an appropriate range.

Developing improved environmental performance

A2.61 Where coordination is implemented in an economic and efficient manner it has the potential to minimise environmental impacts (and necessary planning applications) by reducing cabling and landing sites in sensitive areas.

Impacts on health and safety

A2.62 We do not foresee that our proposals will have any significant impacts in this area but welcome views on this.

Risks and unintended consequences

A2.63 We consider asset stranding to be one of the key risks identified in the OTCP conclusions report and our initial impact assessment. Our proposals seek to ensure that asset stranding risks are allocated appropriately amongst those who can best manage them, and who stand to benefit from the investment.

A2.64 Potential risks and unintended consequences relating to our proposed framework are set out below.

A2.65 **For GFAI**, compared to the current arrangements, the extension of the user commitment arrangements could carry with it the requirement for additional parties to provide user commitment. We do not believe that the effects of this would be disproportionate to the benefits of our proposal.

A2.66 **For developer led WNBI** one potential risk of our proposal could be undue delays to the development of transmission assets due to the introduction of Ofgem gateway assessments. Our proposals seek to mitigate this by ensuring that: developers do not have to pass through the gateways where they are already comfortable in taking forward the coordinated assets, and by providing flexibility in the timing of gateways, providing that the evidence to support the WNBI is sufficient to meet the assessment criteria. Going forward, we will also be considering whether there is a potential for further options to support the development of specific types of low cost WNBI outside of a gateway assessment route.

A2.67 Responses to the March consultation requested clarity as to what might cause Ofgem to be convinced of the rationale for the WNBI at the first gateway but then not at the second gateway. We consider that the factors which could influence whether developing the WNBI at the construction stage will be project specific. We are keen to work with developers and the NETSO to ensure that the likelihood and impact of potential stranding risks are appropriately considered by the proposed design solution submitted to us at the first gateway.

A2.68 **For non developer-led WNBI**, one potential risk identified by stakeholders could be that if onshore TOs are enabled to undertake preliminary works, they may exclude WNBI assets from a developer's connection offer even if the developer would be well placed to undertake the works. If we proceed with TOs undertaking preliminary works for non developer-led WNBI, we would seek to mitigate this risk by ensuring that the TO engages with stakeholders and other industry participants ahead of taking forward these works and during their development.

A2.69 Another risk associated with onshore TOs undertaking preliminary works for offshore coordinated assets is that it may create an unfair advantage in a competitive OFTO build tender. Measures to mitigate this are set out in paragraph A2.51.

Other impacts (including implementation costs)

A2.70 Our proposals represent incremental changes to the current competitive offshore regime. We do not consider that there are substantial implementation costs associated with our proposals. However we do consider that the introduction of gateway assessments would incur additional costs in running a tender exercise. However, where a gateway takes place we would expect the cost of the gateways to be relatively small in comparison to potential benefits of coordination. Going forward, we will also be considering whether there is a potential for further options to support the development of specific types of low cost WNBI outside of a gateway assessment route.

Post-implementation review

A2.71 This consultation sets out our proposed framework to support the delivery of economic and efficient coordinated transmission assets. Any decision to implement these proposals will be informed by stakeholder responses. If implemented, we anticipate that we would assess the effectiveness of our framework through routine monitoring and regular engagement with parties involved in the offshore regime.

Conclusion

A2.72 Following stakeholder feedback and further analysis, we have refined the options set out in the initial impact assessment to form a proposed framework to support the delivery of economic and efficient coordinated transmission assets. The proposed framework set out in this consultation seeks to ensure that the benefits of coordination are captured and, where possible, makes only incremental changes to the current offshore regulatory regime.

A2.73 Based on the analysis in this updated impact assessment, we believe that our proposals would deliver benefits to consumers, while supporting competition and sustainable development. Where our proposals could give rise to unintended consequences, we are taking steps to mitigate unnecessary risks.

A2.74 We welcome consultation responses on all of the issues covered in this updated impact assessment and will consider these comments before arriving at a final decision.

Appendix 3 – Proposed Assessment Criteria at WNBI Gateways

A3.1 In our March consultation we suggested three criteria that we would use to assess proposals for anticipatory investment. These were based largely on the criteria used to assess onshore proposals under the Transmission Investment Incentives (TII) framework, which has subsequently been transitioned into the Strategic Wider Works (SWW) process under Revenues = Incentives + Innovation + Outputs (RIIO-T1). As we have further developed the assessment gateways for Wider Network Benefit Investment ((WNBI) both developer and non-developer led), it has become clear that the assessment process could benefit from some additional gateway criteria.

A3.2 Generally, we propose to use the following criteria for the gateway assessments for WNBI, for both developer led and non developer led WNBI:

- **Needs case:** We would look at the economic case for the WNBI, considering whether it would be economic and efficient in the context of the electricity transmission network as a whole. Proposals would need to include information on the costs and benefits of the proposals as opposed to alternatives. Within the needs case, we would expect the proposal to outline enough information that Ofgem could assess the overall benefit for consumers, including the level of risk and uncertainty associated with the project. We would expect this to be linked to the specific drivers of the investment, including Security and Quality of Supply Standards (SQSS) requirements.

- **Timing and scope:** We would want a submission to provide a rationale for the proposed timing and explain what risks could impact this timing. We would look to see that the scope of the project represents an economic and efficient response to the needs case, and what other alternatives were considered.

- **Technical readiness:** We would look at how the developer or Transmission Owner (TO) proposes to overcome any technical challenges, and how these may impact on the overall economic case for the project.

A3.3 We anticipate that developer-led WNBI will also look to include the following additional criteria.

- **Commitment to a tender:** The first gateway assessment may take place during the early stages of preliminary works. To inform the need for an Ofgem gateway, we will look to see evidence that the developer can show appropriate commitments to developing the WNBI at the preliminary works stage and to triggering a subsequent tender exercise.

- **NETSO-developer engagement:** we would look to see how the developer and NETSO intend to ensure that the WNBI remains an economic and efficient response to the needs case after the first and second gateways.

A3.4 Preliminary works proposals at the first gateway for non developer-led WNBI would also have the following additional criteria:

- **Eligibility**: We would check that there is a reasonable expectation that the proposals relate to specific offshore generation and would therefore be classified as offshore transmission. We would also verify that the relevant costs are not already within the scope of any RIIO-T1 funding.

- **Outputs:** We would want to ensure that the pre-construction proposal commits the TO to bringing forward the outputs required to successfully transition the project to an OFTO build tender. Further discussion of these outputs is contained in Chapter 5. In addition to completing the outputs, we would require the TO to commit to outputs that will be fully transferable to the party constructing and owning the assets.

- **Engagement:** We would want the proposal to include evidence that the TO has consulted other industry participants on the project. Such engagement would help with transparency of the project and options, and surface varying ideas that otherwise may not have been considered. We would also look to ensure that there is commitment to a robust engagement plan for the duration of the project.

A3.5 The onshore SWW assessment process includes some of these same criteria, as well as additional ones that look at the suitability of the project transitioning to construction, among other things.[29] For example, the SWW project assessment includes looking at a TO's process for procurement and selection, and proposals for dealing with construction risk. Offshore, many of these additional assessment areas are captured by the cost assessment that Ofgem uses as part of a tender exercise. Therefore, there may not be a need to include these specifically as part of the gateways.

A3.6 The above list of criteria is not definitive, and we welcome views on what has been set out. We will continue to progress the detail of these criteria as we develop the routes for WNBI to come forward.

[29] See "Appendix 2 – Guidance on Strategic Wider Works Arrangements" of "RIIO-T1: Final Proposals for SP Transmission Ltd and Scottish Hydro Electric Transmission Ltd"

Appendix 4 – Summary of Responses to the July Open Letter

Introduction

A4.1. The Ofgem open letter 'Offshore Transmission - update on Coordination policy developments' was published on 26 July 2012. It updated stakeholders on progress on offshore transmission coordination policy development, other offshore transmission policy developments, and wider policy and regulatory developments. It also gave respondents the opportunity comment on specific issues about improvements to the network planning process and on non developer-led Wider Network Benefit Investment (WNBI). The consultation closed on 20 September 2012.

A4.2. This appendix gives an overview of the key themes from the responses received in response to the questions in the open letter. Copies of all non-confidential responses are available on the Ofgem website[30].

Summary

Improvements to the network planning process

Availability of information around connection offers

A4.3. Respondents generally agreed that the current limitations on the information available around connection offers is a barrier for developers in planning coordinated works, or that at least there could be improvements to the connection offer framework to facilitate the availability of information. Limitations identified included a lack of certainty about commitment from other potential developers in an area. It was noted that developers might be unwilling to share confidential information with other developers as they are essentially competitors for delivering generation assets.

A4.4. Stakeholders set out several options to facilitate the availability of information between developers and OFTOs:

- The National Electricity Transmission System Operator (NETSO) acting as an intermediary, providing 'sanitised' data between developers or Offshore Transmission Owners (OFTOs).

[30] Responses to 'Offshore Transmission - update on Coordination policy developments', July 2012, Ref 72/12

- The NETSO acting as a facilitator between developers, inviting individual developers in an area to explore coordination connection options in principle, and helping them sign confidentiality agreements to enable further discussion (a template for a confidentiality agreement was also thought to be useful).

- The Connections Infrastructure Options Note (CION) process should be expanded to enable engagement between parties in relation to the design of the transmission infrastructure. This process could also facilitate upfront discussions in relation to the efficiency of proposed designs, including those containing coordinated investment.

A4.5. It was noted by a couple of respondents a change to the framework around connection offers would be required to ensure that all parties are aware of, and comply with the obligations to share data. It was also suggested that such a framework would need to apply to onshore generation, interconnectors and connection applications from customers outside the existing GB regimes as well.

90-day period for making/accepting connection offers

A4.6. Responses were varied on the issue of whether the 90-day period for making/accepting connection offers was long enough. Responses were not supportive of a blanket extension as this could introduce unnecessary delays. A few respondents noted the need for flexibility around the 90-day period. There was a suggestion that the extensions should be granted on a case-by-case basis, as, for example, more complex coordinated offers may require a longer timeframe. The current flexibility given to National Grid was noted, with some respondents indicating these existing arrangements should be sufficient in most cases. However, a particularly lengthy extension could fall outside of this flexibility.

Anticipatory investment and investment driven by wider network benefits

A4.7. This section relates to non developer-led WNBI.

NETSO's role in preliminary[31] works

A4.8. Most respondents considered that the NETSO was not the most appropriate party for undertaking preliminary works, mainly because it does not have skills and experience in this area. Other reasons were because of business separation issues, insufficient resources, and inadequate incentives.

[31] In the forthcoming Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations, 'pre-construction works' will be referred to as 'preliminary works' – see the Open Letter: Draft Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2012 for consultation.

A4.9. One respondent was supportive of the NETSO having a role in identification only. Another response stated that if the NETSO were to have a role in identifying or undertaking preliminary works, it would have to ensure the requirements of individual projects and those of wider system requirements were captured on an ongoing basis.

A4.10. Some respondents put forward that a design authority or industry design body could work in conjunction with affected TOs, OFTOs and developers to undertake non developer-led preliminary works. Another suggestion was for the NETSO (or other party) to identify works, with Ofgem then approving a sum of money for them to undertake preliminary works, with the NETSO (or other party) earning a regulated rate of return once the assets are built.

A4.11. One respondent noted the NETSO was the party best placed to put forward opportunities to develop coordinating transmission works, by virtue of its role in connection applications and agreements with developers. Another had concerns over designs being put forward by the NETSO, including whether they would both meet the requirements of generators and provide value for money for consumers.

Proposals being put forward by third parties for preliminary works

A4.12. This issue brought a mixed response. Some respondents noted the importance of transparency and adequate engagement in any process where third parties put forward proposals for preliminary works, including having the opportunity to respond to consultations on proposals. One respondent said a formal role for third parties was not necessary, and it was not clear that it would bring benefits anyway as it is the NETSO and developers that ultimately need to agree connection offers.

Outputs required from third parties undertaking preliminary works

A4.13. We asked what further obligations might be necessary to ensure a fair and competitive tender, including requirements for business separation between the third party undertaking the preliminary works and a related organisation intending to participate in a subsequest competitive tender. Most of the respondents who answered this question thought that outputs should be very similar to those required of a developer in an OFTO-build process. Some thought that there should be incentives that ensure delivery of the outputs.

Further obligations to ensure fair and competitive tenders

Business separation

A4.14. Most respondents stated that business separation requirements would be needed or need strengthening to ensure fair and competitive tenders. There were a number of ideas about what further business separation obligations might be required, including:

- a fixed restriction period for the transfer of staff between National Grid Electricity Transmission (NGET) and National Grid Offshore Limited (NGOL);
- a prohibition on a third party developer retaining a project into the construction stage;
- data from the development stage being made available to all OFTO bidders and transferred to the winning bidder;
- limiting interactions between parties;
- monitoring by Ofgem; and
- consistency with onshore business separation requirements.

Transfer of assets from third party to successful bidder

A4.15. Most respondents to this question noted that assets should be transferred in the same way as they would be under an OFTO-build. One respondent stated that the assets could be contained in a special purpose vehicle, enabling a simpler transfer through a share sale rather than asset transfer.

Appendix 5 - Glossary

A

Anticipatory investment (AI)

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

Authority

The Gas and Electricity Markets Authority

B

BCA

Bilateral Connection Agreement

C

CION

Connections Infrastructure Options Note

CMP 192

Connection and Use of System Code Modification Proposal 192 (CMP192) – Arrangements for Enduring User Commitment

CUSC

Connection and Use of System Code

D

DECC

Department of Energy and Climate Change

De minimis threshold

This threshold relates to developer-led Wider Network Benefit Investment (WNBI). We are considering whether there is the potential to support some specific types of low cost WNBI outside of the gateway assessments. These assets would fall under the de minimis threshold.

Developer

The Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2010 define 'Developer' as 'any person within section 6D(2)(a) of the Electricity Act 1989' (the 1989 Act). Section 6D2(a) of the 1989 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 transmission assets

Transmission works undertaken by a developer as set out in their BCA. The developer could opt to develop the assets under Generator build or OFTO build.

E

Electricity Act

The Electricity Act 1989

Enduring regime

The regulatory regime for future offshore transmission licensing

ENSG

Electricity Networks Strategy Group

ETYS

Electricity Ten Year Statement

G

Gateway assessment

An Ofgem assessment of the rationale for developer or non developer led WNBI being taken forwards at the preliminary and construction works stages

GB

Great Britain

Generator build option

Under the Generator build option, the developer will take responsibility for all aspects of preliminary work, procurement and construction of the transmission assets. A prospective OFTO will bid their approach to the financing, operation, maintenance and decommissioning of the transmission assets, and a Tender Revenue Stream value that includes the costs associated with carrying out these activities.

Generator-Focused Anticipatory Investment (GFAI)

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

GW

Gigawatt

H

HVDC

High Voltage Direct Current

I

Industry codes

The Industry Codes include 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.

Interface

The substation which connects the offshore transmission assets to the onshore transmission system

Integrated Transmission Planning and Regulation Project (ITPR)

A project launched by Ofgem in March 2012, considering how Great Britain's network planning and delivery arrangements will facilitate a future integrated system for onshore and offshore transmission and interconnection

J

July open letter

Offshore Electricity Transmission: Consultation on licence policy for future tenders, November 2012, Ref 159/12

L

Low regret WNBI

Low cost WNBI that is expected to have:

- low risk of stranding of the WNBI and/or
- strong benefits of the WNBI in terms of enabling potential future savings or maintaining future network flexibility. This could include low cost preliminary works which allow the option for taking forward WNBI to be kept open during the preliminary works stage.

M

March consultation

Offshore Transmission - Consultation on potential measures to support efficient network coordination, March 2012, Ref 26/12

MW

Megawatt

MWh

Megawatt hour

N

Needs case

In this consultation, needs case covers the economic case for investment, considering whether it would be economic and efficient in the context of the electricity transmission network as a whole, and the uncertainties that exist around the offshore transmission anticipatory investment needs case.

NETS

National Electricity Transmission System

NETSO

National Electricity Transmission System Operator

NGET

National Grid Electricity Transmission

Non developer-led transmission assets

Transmission works which are not identified for a developer to take forward as part of their BCA

O

Offshore Transmission Coordination Project (OTCP)

A project launched jointly by Ofgem and DECC to assess the potential costs, risks and benefits that may arise from the development of a more coordinated offshore and onshore electricity transmission network

Ofgem

Office of Gas and Electricity Markets

OFTO

Offshore Transmission Owner

OFTO build option (as proposed in December 2011 consultation)

Under the OFTO build option, the generator would obtain the connection offer and undertake high level design and preliminary works. A prospective OFTO would bid their approach to the procurement, financing, construction, operation, maintenance and decommissioning of transmission assets, and the costs associated with carrying out these activities.

OFTO licence

The licence awarded following a tender exercise, allowing an OFTO to own and operate the offshore transmission assets. The licence sets out an OFTO's rights and obligations as the offshore transmission asset owner.

P

Phase

A grouping of transmission assets to be built out over a period of time, where the grouping is defined by certainty of build out (for example in relation to a Final Investment Decision and/or key contractual commitments). A phase may include stages.

Preliminary works

In the forthcoming Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations, what we have previously called 'pre-construction works' will be referred to as 'preliminary works'.

R

Radial connection

A single, standalone connection from one windfarm to shore

RIIO

Revenues = Incentives + Innovation + Outputs

RIIO (Revenue = Incentives + Innovation + Outputs)

The RIIO price control model builds on the success of the previous RPI-X price control regime, but better meets the investment and innovation challenge by placing much more emphasis on incentives to drive the innovation needed to deliver a sustainable onshore energy network at value for money to existing and future consumers.

RIIO-T1

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

S

SQSS

System Security and Quality of Supply Standard

Stage

Transmission assets built out incrementally in a discrete group within a phase

Stranding risk

Where anticipatory investment is undertaken and expected build out is not reached, some coordination could result in underutilised transmission assets

Strategic wider works (SWW)

Transmission reinforcement works planned by an onshore transmission owner that are designed to reinforce or extend the National Electricity Transmission System in order to make it compliant with the terms of the National Electricity Transmission System Security and Quality of Supply Standard (or such other standard of planning and operation as Ofgem may approve from time to time).

T

Tender regulations

Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2010 (or Draft Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2012). The tender regulations set out the legal framework and powers for the Gas and Electricity Markets Authority to run a competitive tender process for both transitional and future offshore projects.

Tender Revenue Stream (TRS)

The payment an OFTO receives over its revenue to term.

Transmission Network Use of System (TNUoS)

Charging arrangements that reflect the cost of installing, operating and maintaining the transmission system

Transmission owner (TO)

An owner of a high-voltage transmission network or asset.

Transmission assets

Transmission assets are defined in Paragraph 1(3)(a) of Schedule 2A to the Electricity Act 1989 as, 'the transmission system in respect of which the offshore transmission licence is (or is to be) granted or anything which forms part of that system'. The transmission system is expected to include subsea export cables,

onshore export cables, onshore and offshore substation, and any other assets, consents, property arrangements or permits required by an incoming OFTO in order for it to fulfil its obligations as a transmission operator.

Transitional regime

The transitional offshore regulatory regime. Transitional projects were required to meet the qualifying project requirements set out in the Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2010 by 31 March 2012.

W

Wider Network Benefit Investment (WNBI)

Investment driven by the need to reinforce the wider network

Appendix 6 - Feedback Questionnaire

A6.1 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 consultation?
3. Was the consultation easy to read and understand, could it have been better written?
4. To what extent did the consultation's conclusions provide a balanced view?
5. To what extent did the consultation make reasoned recommendations for improvement?
6. Please add any further comments.

A6.2 Please send your comments to:

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