

Revised Minded-to Decision and further consultation on delivery models in Pathway to 2030

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This document sets out our revised minded-to decision and further consultation for the delivery models which will be used for non-radial offshore transmission assets under the Pathway to 2030 (**PT2030**) workstream of the Offshore Transmission Network Review (**OTNR**).

In May 2022, we issued a minded-to decision and further consultation on the delivery model for non-radial offshore transmission assets. In that publication we proposed a very late competition generator build delivery model. Based on consultation feedback and the publication of the Electricity System Operator's (**ESO**) Holistic Network Design (**HND**) we have revised our position.

This document is published alongside a draft impact assessment, which sets out our analysis of the impact of our minded-to decision.

We invite views from people with an interest in offshore transmission, transmission, offshore generation, and interconnection, particularly developers who are exploring options for coordination of projects now or in the future, or developers who are required to coordinate in the delivery of shared assets. We would also welcome responses from other stakeholders and the public.

This document outlines the scope, purpose and questions of the consultation and explains how you can get involved. Once the consultation is closed, we will consider all responses. We want to be transparent in our consultations. We will publish the non-confidential responses we receive alongside a decision on next steps on our website at [Ofgem.gov.uk/consultations](https://www.ofgem.gov.uk/consultations). If you want your response – in whole or in part – to be considered confidential, please tell us in your response and explain why. Please clearly mark the parts of your response that you consider to be confidential, and if possible, put the confidential material in separate appendices to your responses.

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Executive summary

On 20th May 2022 we published a minded-to decision on delivery models within the context of the Pathway to 2030 (**PT2030**) workstream of the Offshore Transmission Network Review (**OTNR**). We proposed that non-radial offshore transmission assets should proceed under the very late competition generator build delivery model. We invited a round of feedback on this minded-to decision, and our consultation closed on 16th July 2022.

We have since analysed stakeholder feedback, a significant amount of which suggested that our minded-to decision needed further consideration. In addition, the Holistic Network Design (**HND**) has now been published by National Grid Electricity System Operator (**NGESO**) and Ofgem has confirmed new policy in relation to Anticipatory Investment (**AI**) and asset classification.

This document outlines our revised minded-to decision to expand the choices available to developers in the delivery of non-radial offshore transmission assets. In particular, we are proposing to give developers the choice of either a very late competition generator build model or a late competition Offshore Transmission Owner (**OFTO**) build model for delivery of non-radial offshore transmission assets.

We further outline our minded-to decision to extend the option for AI for assets within the scope of the PT2030 workstream, in a similar way that this policy applies to projects within the Early Opportunities workstream. We set out proposed AI policy on how the risks and costs associated with AI will be allocated and how the charging regime will apply in situations where developers have made AI.

We now consider that providing increased options, in the form of expanding our AI policy and allowing for the late competition OFTO-build model, alongside our initial proposal of coordinated generator-build, is the best way to ensure that projects are constructed on time and that the government's 2030 ambitions for offshore wind can be met.

We have also broadened the application of this minded-to decision on delivery models to include all projects within the scope of the HND and HND Follow-Up Exercise (**HNDFUE**), including the proposed floating wind projects in the Celtic Sea.

1. Introduction

Section summary

This section provides details on the background to the OTNR, the PT2030 workstream, and particularly to delivery models and AI, which are the subject of this minded-to decision. We also provide information on our previous consultation in the PT2030 workstream.

Background

The Offshore Transmission Network Review

- 1.1. The OTNR¹ was launched in July 2020 with the objective to ensure that the transmission connections for offshore wind generation are delivered in an optimal way, considering the United Kingdom's ambitions for offshore wind energy in achieving net zero. This aims to balance environmental, social and economic costs.
- 1.2. The government's Ten Point Plan for a Green Industrial Revolution in November 2020² set an ambitious offshore wind target of 40GW by 2030. In April 2022, the then Prime Minister announced a new British Energy Security Strategy (**BESS**)³ which built on previous offshore wind targets to set an ambition of 50GW of offshore wind by 2030.
- 1.3. Under the current regulatory framework, offshore wind farms are connected to the onshore network via radial (point-to-point) connections which must be owned and operated by an OFTO. These point-to-point connections can present a barrier to the further scaling up of the offshore wind sector, and impose more of an impact upon the seabed and upon the local communities that host the connections.
- 1.4. To achieve the objectives of the OTNR, there are four workstreams operating in parallel. These are PT2030, Multipurpose Interconnectors (**MPIs**), Early Opportunities and Future Frameworks (formerly the Enduring Regime).

¹ [Offshore transmission network review - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/offshore-transmission-network-review)

² [The ten point plan for a green industrial revolution - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/ten-point-plan-for-a-green-industrial-revolution)

³ [British energy security strategy - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/british-energy-security-strategy)

Pathway to 2030

- 1.5. PT2030 is the medium-term workstream, covering largely the projects delivered through the Crown Estate (**TCE**) Leasing Round 4 (**LR4**) and Crown Estate Scotland (**CES**) ScotWind leasing round which will make a significant contribution to the government's 50GW ambition for offshore wind by 2030.

Context – Stakeholder Feedback and Further Considerations

- 1.6. On 20th May 2022, we published our minded-to decision and further consultation on PT2030⁴ (referred to as our 'May 2022 publication') outlining our intention to apply a very late competition generator build model to non-radial offshore transmission assets in scope of the PT2030 workstream. We invited feedback on our minded-to decision. The window for feedback closed on 16th July 2022 and we received 29 responses. We have been analysing the views of stakeholders and working on policy changes as a result of that feedback.
- 1.7. In addition to this, since our May 2022 publication, the HND⁵ has been published by NGENSO. The HND sets out the network requirements to facilitate the connection of 23GW of in-scope offshore wind projects, recommending potential locations of infrastructure, including offshore cable route corridors and new substations, and pointing to technology choices for the network.
- 1.8. As a result of the HND being published, we have issued our decision on the asset classification process.⁶ We set out in this decision the regulatory framework, our decision-making process, and resulting classifications and delivery models for the first round of HND assets. This resulted in three asset categories: onshore reinforcement, radial offshore transmission and non-radial offshore transmission. By refining and applying our asset classification process to the HND, we have concluded that 3 of the 21 in-scope assets have been classified as non-radial offshore transmission, a lower number than we assumed in our previous publication.
- 1.9. The further development of Ofgem policy on asset classification and AI, along with points made in stakeholder feedback, provide us with good reasons to further

⁴ [Minded-to Decision and further consultation on Pathway to 2030](#)

⁵ [A Holistic Network Design for Offshore Wind | National Grid ESO](#)

⁶ [Offshore Transmission Network Review: Decision on asset classification | Ofgem](#)

consider our minded-to position on delivery models set out in our May 2022 publication.

1.10. Based on revised analysis and consultation feedback, we are broadening the position set out in our May 2022 publication in relation to the proposed delivery model for non-radial offshore transmission assets within the scope of the PT2030 workstream.

1.11. We are minded-to expand the choice for developers, by including the option of an OFTO build model for the delivery of non-radial offshore transmission assets. We are also minded to expand the application of the AI policy from the Early Opportunities workstream to PT2030.

What's in this publication?

1.12. This document sets out our revised minded-to decision with regards to non-radial offshore transmission assets within the scope of the PT2030 workstream. In particular:

- Including Celtic Sea projects within the scope of this workstream;
- Giving the developers a choice between very late competition generator build or late competition offshore transmission owner build as delivery models for non-radial offshore transmission; and
- Extending the option for AI from the Early Opportunities workstream to PT2030.

1.13. We set out how we intend to proceed with this minded-to decision and are seeking stakeholder input on our proposals.

1.14. This document is published alongside an additional draft impact assessment, which provides our analysis of the impact of our minded-to decision.

Related Publications

Minded-to Decision and Further Consultation on Pathway to 2030 - [Minded-to Decision and further consultation on Pathway to 2030 | Ofgem](#)

Draft impact assessment on Pathway to 2030 workstream's minded-to decision on the Delivery Model option - [Minded-to Decision and further consultation on Pathway to 2030 | Ofgem](#)

Decision on asset classification for assets included in the NGESO Holistic Network Design - [Decision on asset Classification - Offshore Transmission Network Review: Decision on asset classification | Ofgem](#)

The Pathway to 2030 Holistic Network Design - [The Pathway to 2030 Holistic Network Design | National Grid ESO](#)

Consultation on our Minded-to Decision on Anticipatory Investment and Implementation of Policy Changes - [Offshore Coordination - Early Opportunities: Consultation on our Minded-to Decision on Anticipatory Investment and Implementation of Policy Changes | Ofgem](#)

Initial impact assessment on allocating Anticipatory Investment risk in offshore transmission systems in Early Opportunities - [Offshore Coordination - Early Opportunities: Consultation on our Minded-to Decision on Anticipatory Investment and Implementation of Policy Changes | Ofgem](#)

Decision on Anticipatory Investment and Implementation of Policy Changes - [Decision on Anticipatory Investment and Implementation of Policy Changes | Ofgem](#)

Impact assessment on allocating Anticipatory Investment risk in offshore transmission systems in Early Opportunities - [Decision on Anticipatory Investment and Implementation of Policy Changes | Ofgem](#)

Next Steps

The consultation is scheduled to close on 26th January 2023. Following consideration of responses to this consultation, we expect to reach a decision in early 2023 on the issues on which we are consulting, together with a final impact assessment. Once we've reached our final decision, we expect to consult further on the associated implementation measures.

How to respond

1.15. We want to hear from anyone interested in this consultation. Please send your response to the person or team named on this document's front page.

- 1.16. We've asked for your feedback in each of the questions. Please respond to each one.
- 1.17. We will publish non-confidential responses on our website at www.ofgem.gov.uk/consultations

Your response, data and confidentiality

- 1.18. As set out within **Appendix 3** privacy notice on consultations, we may share your response (including personal data) with the Department for Business, Energy & Industrial Strategy (**BEIS**). If you do not wish us to do so, please clearly let us know in your response.
- 1.19. You can ask us to keep your response, or parts of your response, confidential. We'll respect this, subject to obligations to disclose information, for example, under the Freedom of Information Act 2000, the Environmental Information Regulations 2004, statutory directions, court orders, government regulations or where you give us explicit permission to disclose. If you do want us to keep your response confidential, please clearly mark this on your response and explain why.
- 1.20. If you wish us to keep part of your response confidential, please clearly mark those parts of your response that you do wish to be kept confidential and those that you do not wish to be kept confidential. Please put the confidential material in a separate appendix to your response. If necessary, we will get in touch with you to discuss which parts of the information in your response should be kept confidential and which can be published. We might ask for reasons why.
- 1.21. If the information you give in your response contains personal data under the General Data Protection Regulation (Regulation (EU) 2016/679) as retained in domestic law following the UK's withdrawal from the European Union (**UK GDPR**), the Gas and Electricity Markets Authority (the Authority)⁷ will be the data controller for the purposes of UK GDPR. Ofgem uses the information in responses in

⁷ The Gas and Electricity Markets Authority is the regulator of gas and electricity markets in Great Britain. Ofgem is the Office of Gas and Electricity Markets, which supports the Authority in performing its statutory duties and functions. Whilst the terms "Ofgem", "the Authority", "we" and "our" are used interchangeably in this document, it is the Authority which is responsible for exercising the relevant statutory powers.

performing its statutory functions and in accordance with section 105 of the Utilities Act 2000. Please refer to our Privacy Notice on consultations, see **Appendix 3**.

- 1.22. If you wish to respond confidentially, we will keep your response itself confidential, but we will publish the number (and not the names) of confidential responses we receive. We will not link responses to respondents if we publish a summary of responses, and we will evaluate each response on its own merits without undermining your right to confidentiality.

General feedback

- 1.23. We believe that consultation is at the heart of good policy development. We are keen to receive your comments about this report. We would also like to get your answers to these questions:

1. Do you have any comments about the overall quality of this document?
2. Do you have any comments about its tone and content?
3. Was it easy to read and understand? Or could it have been better written?
4. Are its conclusions balanced?
5. Did it make reasoned recommendations?
6. Any further comments?

Please send any general feedback comments to stakeholders@ofgem.gov.uk

2. Amended scope of this workstream

Section summary

We will be applying the models available for the delivery of offshore transmission infrastructure under the PT2030 workstream, to Celtic Sea projects. By doing so, this will provide more certainty to bidders on delivery models ahead of TCE's leasing round in 2023.

What we said in our May 2022 publication

- 2.1. Our May 2022 publication outlined the scope of our decision and minded-to decision as being offshore projects progressing through TCE, LR4 and CES ScotWind connecting to the transmission system by 2030, alongside one project from a previous leasing round.
- 2.2. Our publication further outlined that the NGENSO had made planning assumptions in relation to a future leasing round for floating wind in the Celtic Sea for the HND. Within this publication, we also confirmed that going forward, we would work with industry and stakeholders to provide clarity on the delivery model for Celtic Sea.
- 2.3. Whilst Celtic Sea was not originally confirmed as being in scope of this workstream, it has since been included within the HND and expected to appear in the HND FUE. Therefore, we consider that the delivery models available for the delivery of offshore transmission infrastructure under the PT2030 workstream should also apply to the Celtic Sea projects.

Amended scope of our Minded-to Decision

- 2.4. The Celtic Sea region contains proposed offshore wind developments in NGENSO's HND and expected HND FUE, connecting 4GW of floating wind power by 2035 to shore in the Celtic Sea region.

- 2.5. 1GW of this capacity is captured in the first round of the HND and is expected to connect by 2030. The HND FUE⁸ is expected to include the full 4GW capacity of options for Celtic Sea works.
- 2.6. The remainder of the Celtic Sea capacity is not due to be connected by 2030 and was therefore initially considered to be outside the scope of the PT2030 workstream. As noted above, we said that we would work with industry and stakeholders to provide clarity on the delivery model for Celtic Sea in future.
- 2.7. We had originally anticipated that the Celtic Sea projects would be included within the scope of Future Frameworks workstream. However, as TCE's Celtic Sea leasing round will commence in 2023, it is essential that TCE is able to provide certainty to bidders on the delivery models for the works required so that bidders can make appropriate assumptions in their bids.
- 2.8. In addition to the reasoning as set-out above, delivery of some of the Celtic Sea projects will happen at the same time as other projects included in PT2030. Therefore, we believe it is appropriate that the projects within the scope of the Celtic Sea Leasing Rounds should be included in the scope of the delivery models under the PT2030 workstream.

⁸ The ESO is currently developing the HND FUE, which aims to provide in-scope developers with follow up recommendations in Q1 2023.

3. May 2022 Publication: Minded to Decision and summary of consultation responses

Section summary

This section summarises the consultation responses we received to our May 2022 publication. We received mixed responses to our position on the delivery models for non-radial offshore transmission assets in the PT2030 workstream. This was echoed during extensive stakeholder engagement during the consultation period. In general, respondents supported the proposed new Tender Entry Condition and the gateway assessment process. Respondents requested further clarity on ancillary matters such as the generator commissioning clause, the OFTO availability incentive, Tender Revenue Stream and asset life.

Minded-to decision and draft impact assessment on delivery model of non-radial offshore transmission assets

- 3.1. Our position in our May 2022 publication was that the very late competition generator build model would be the model for the delivery of non-radial offshore transmission assets.
- 3.2. In reaching the May 2022 minded-to decision, we considered a number of different options for delivery models – early vs late competitions – with different options for the party responsible for delivery.
- 3.3. Our draft impact assessment covered multiple assumptions, including delay cost factors (carbon and option fees) and saving and delay estimates.
- 3.4. The draft impact assessment also assessed the various delivery partners, competition and the feedback received from the July 2021 consultation on the delivery models.⁹ It is Ofgem’s statutory duty under the Electricity Act (**EA1989**), to promote competition wherever appropriate.¹⁰ By promoting effective

⁹ [Consultation on changes intended to bring about greater coordination in the development of offshore energy networks | Ofgem](#)

¹⁰ Electricity Act 1989, (s.3A(1B))

competition, this can help achieve our principle objective of protecting the interests of existing and future consumers.

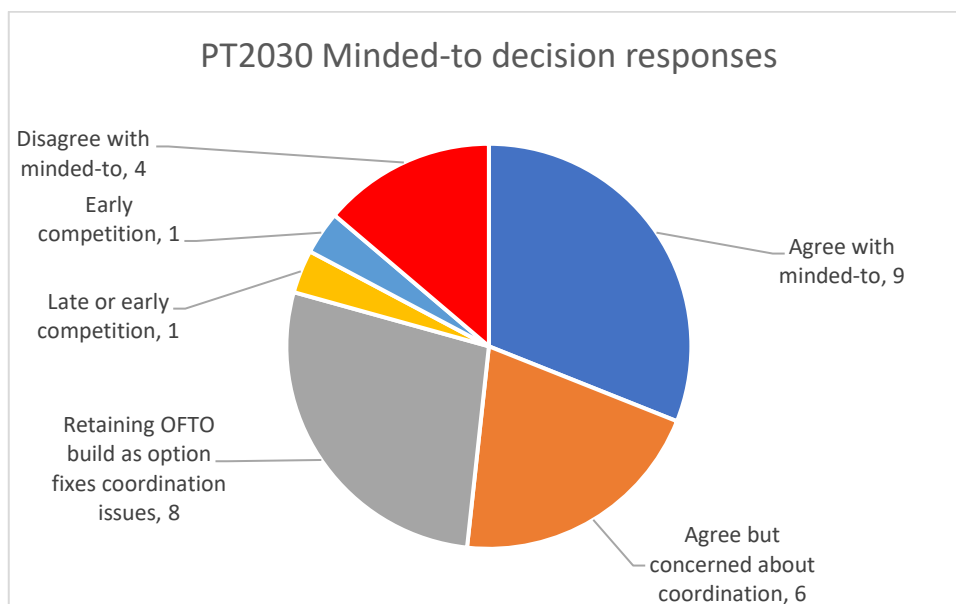
Consultation responses on the preferred delivery model and draft impact assessment findings

Question 1: Do you agree with the findings of the draft impact assessment published alongside this document?

Question 2: Where you disagree with the draft impact assessment, does this raise any issues with our minded-to decisions?

3.5. Questions 1 and 2 received 29 responses. The responses showed a range of opinions.

Figure 1 – PT2030 Minded-to decision responses



3.6. Nine responses broadly agreed with our minded-to position, with a small number of these respondents noting the tight timescales and the strong track record of developers in offshore transmission delivery. A small number of these nine responses felt the assumptions on delivery timescales included within the impact assessment were too optimistic. Three of these responses wanted further clarity on

delivery arrangements, such as guidance for developers on how coordination would work.

- 3.7. Six responses agreed with our minded-to position in principle but flagged issues regarding the practicalities of developer coordination. These six responses were concerned about developers trying to coordinate in a competitive environment, such as in procurement and Contracts for Difference (**CfD**) rounds. They indicated that this could lead to highly complex and lengthy commercial agreements and negotiations. Five of these responses were concerned about potential challenges securing project financing due to additional risks and costs of a project with shared infrastructure and dependencies beyond the project's control.
- 3.8. Eight respondents explicitly asked that the late competition OFTO build model be introduced as an option. They pointed to the importance of allowing developers to select the most appropriate route forward for their specific project to reflect a range of different potential circumstances around project development and delivery. They also argued that the late competition OFTO build model could ease coordination pressures in the post-consenting phases of development. Developers would be less reliant on each other, but instead they would be reliant on a third, non-competitive party, meaning the OFTO. There would also be less of a need to draw up joint ventures or to set up governance, decision making and accountability structures between developers. The model could also ease financial pressure because it frees up developers' cashflow earlier in the process. Additionally, a developer would not face the cost disallowance risk for another developer's assets. Within the model, there would also be less of a need to share sensitive timeline, engineering and technology designs with competitors.
- 3.9. Five stakeholders also challenged our suggestion that introducing a new regulatory framework for the OFTO build model would risk delays in the development schedule. Instead, they argued that there is sufficient time to develop the regulatory framework in advance of projects receiving their consents. Two respondents said that the OFTO build model should not be discounted due to a lack of GB offshore wind construction experience but could instead bring about new solutions and players into the GB market.
- 3.10. Four responses expressly disagreed with our minded-to position. Two of these responses cited the draft impact assessment's lack of consideration towards community and environmental risks. The third response argued that Transmission

Owners' (**TOs**) competencies had been downplayed in delivery and that associated costs were not properly assessed. The fourth response argued that the minded-to decision would place too much financial risk on developers when delivering non-radial assets.

Consultation responses regarding Anticipatory Investment

3.11. 16 responses across all the questions wanted further clarity on the extension of AI policy from the Early Opportunities workstream to the projects in scope of the PT2030 workstream.¹¹ Ten of these responses wanted certainty on what would be considered as AI within the workstream. Seven responses saw the gateway assessment process as a suitable way of indicating what level of AI was available to the developers when designing shared assets. Six responses emphasised that the first developer should not bear the financial risk for developing assets, that are bigger than those required in the HND, for the developer's specific windfarm. They emphasised the risk to be especially high in the case that the second project does not proceed.

Consultation responses regarding the supply chain

3.12. Ten responses raised concerns regarding supply chain challenges. These challenges included project procurement needing early confirmation of regulatory decisions and pressures faced by the global and local supply chains, whether cable manufacturers or fabrication yards. Five of the responses flagged challenges related to high voltage direct current (**HVDC**) transmission assets. Three responses expressed a need for clarity on the delivery models and next steps so to enable early engagement with the supply chain. Two responses highlighted that the current design may require items such as HVDC circuit breakers, interconnected offshore platforms, 1.8GW symmetrical HVDC monopole schemes, and higher voltage HVDC cables, which are challenging to design, build and operate. These two responses also cited intellectual property challenges arising from the interface points between parties.

¹¹ [Offshore Coordination - Early Opportunities: Consultation on our Minded-to Decision on Anticipatory Investment and Implementation of Policy Changes | Ofgem](#)

Ofgem response to feedback

- 3.13. We recognise the general desire throughout the feedback for the position set out in our May 2022 publication to be developed further. We maintain our view that the very late competition generator build model will allow for a proven and efficient method of delivery for assets in-scope of this workstream.
- 3.14. We have taken respondents' feedback on-board, and we are minded to expand the options available for developers for non-radial assets. As set out above, we are therefore proposing the additional option of late competition OFTO build model, for non-radial assets. We set out further reasoning in section 4, and our impact assessment, published alongside this document.¹²
- 3.15. We are also now minded to extend the AI policy in the Early Opportunities workstream to the projects in the PT2030 workstream. We did not previously consult on this proposal in the context of PT2030, however responses to our May 2022 publication have indicated that the AI principles could be applied to this workstream. We consider that the extension of this policy to PT2030 will help address the concerns regarding financial risk on generators and delays. We cover this in further detail in section 5.
- 3.16. In assessing the deliverability of recommended HND options, the NGENSO applied an assessment framework which considered a range of factors including the supply chain for technologies. However, we recognise that demand for key components needed to deliver electricity transmission infrastructure is rising globally.
- 3.17. This matter is being considered by BEIS who are leading discussions and the work on mapping out supply chain related challenges and solutions.
- 3.18. With regards to community and environmental risks, whilst the HND is a recommendation, the design must comply with the objectives of the OTNR, ie the design must be economic and efficient, whilst respecting social, environmental, community constraints.

¹² <https://www.ofgem.gov.uk/publications/revise-d-mind-d-ecision-and-further-consultation-pathway-2030>

3.19. As with any project outside of the HND, developers will still be required to undertake environmental Habitat Regulations Appraisal (**HRA**) and to gain the necessary planning and consenting approvals.

Consultation responses on gateway assessment

3.20. We proposed the addition of a new Tender Entry Condition (**TEC**) which would require the offshore transmission system infrastructure to be economic, efficient and coordinated for developer led projects. This would be similar to the existing Project Qualification (**PQ**) requirement for OFTO Build.¹³

3.21. We also proposed a mandatory gateway assessment process which would be initiated with an application by any developer, or combination of developers, whose project's transmission system is classified as non-radial under the HND. We set out our view that creating a gateway assessment process for the PT2030 projects would help address a developer's concerns with coordination and provide a degree of certainty when delivering new types of complex shared assets.

3.22. In-line with the updated terminology in the Early Opportunities workstream, we no longer refer to the gateway assessment process. Going forward, we now refer to this as the early-stage assessment process. The early-stage assessment will form an integrated process for both Early Opportunities and PT2030 projects.

Consultation responses to the new Tender Entry Condition and gateway assessment process

Question 3: Do you agree with the proposed introduction of a new Tender Entry Condition in the Tender Regulations requiring the confirmation of the offshore transmission system as 'economic, efficient and coordinated'?

3.23. For question 3, 21 out of the 24 responses broadly agreed with the proposed introduction of a new TEC in the tender regulations. However, these respondents

¹³ Paragraph 1(d) of Schedule 1 of the Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2015, states that any developer for an OFTO build is required to have "satisfied the Authority that the terms of each construction phase contract, if any, are conducive to the development of an efficient, coordinated and economical system of electricity transmission".

wanted further clarity on the terms and how they would be defined and implemented.

- 3.24. Six of these respondents wanted assurance that a radial connection indicated in the HND would be considered 'coordinated' for the purposes of compliance with any new TEC. Three responses wanted more clarity on how AI, and investments towards providing coordination in general, would be considered under the economic, efficient, and coordinated requirement.

Question 4: Do you agree with the introduction of the proposed gateway stage assessment process?

- 3.25. For question 4, 25 responses were in broad agreement with the introduction of the proposed gateway stage assessment process. Four responses did not provide an answer or give a definite view on the question. Five responses, that broadly agreed, asked for further clarity on what would happen if the developer provided an alternative design to the HND. Two responses emphasised the need for transparency in the gateway process. They also queried which developer would take the lead on the gateway assessment process.
- 3.26. A further two respondents also proposed extending the gateway process to radial assets arguing that the assessment could provide certainty and increase confidence for radial developers.

Question 5: Do you think the information sought as part of the gateway assessment process is appropriate and proportionate? Is anything missing?

- 3.27. Question 5 received 24 responses. Of those who responded, the majority wanted further clarity on the level of detail needed for the gateway assessment process. They highlighted the need for flexibility as projects have different levels of information and some projects are more advanced than others. Nine responses stated that the level of information needed was appropriate and proportionate. Six respondents emphasised that sharing information as part of the gateway assessment process could be challenging due to the sensitive and competitive nature of the CfD process.

Question 6: Do you have any views on the timing of the gateway assessment process?

3.28. Question 6 received 24 responses. Seven responses agreed with the timeline provided. Five responses requested defined time limits for the application responses from Ofgem. Three responses saw the 12-month timeline delaying their projects and another three wanted flexibility for the most advanced projects who would be sending in their gateway assessment applications first. Further clarity was requested by two respondents on what would happen if Ofgem rejected a project's application.

Question 7: Is there any other information which you believe should be included in the confirmation to developers?

3.29. Question 7 received 22 responses, with more than 23 topics covered. Eleven responses discussed different features of the AI, which we have addressed above in paragraph 3.11 (*Consultation Responses regarding Anticipatory Investment*)^{3.11}. Four responses stated that the proposed confirmation letter was appropriate. Two responses pressed for a transparent gateway assessment process.

Ofgem response to feedback

3.30. We recognise the broad support for the new TEC and the gateway assessment process.

3.31. In line with the Early Opportunities workstream we are proposing a singular process which is intended to provide developer(s) within the scope of PT2030 certainty that their proposals will meet the requirements of the new TEC (or equivalent) requirement. The costs associated with AI will be eligible for recovery at asset transfer (provided they are shown to be economic and efficient), following a cost assessment process. We will continue to develop this as part of the early-stage assessment process.

3.32. As part of this development, we will also need to consider which developer will take the lead on the early-stage assessment process and what will happen where rejected applications are concerned.

3.33. In addition, we expect that the early-stage assessment will provide a mechanism to confirm that radial connections in-scope of PT2030 are considered coordinated.

- 3.34. With regards to creating a new TEC, we are still minded-to include a requirement for coordination for all transmission assets, similar to the PQ requirement set out above for the construction design for OFTO build under the Tender Regulations.¹⁴
- 3.35. Whilst we are still minded to introduce a requirement, we consider that it might be more appropriate to include this requirement within the PQ stage (opposed to the TEC) as previously proposed. We will consider exactly how this will be defined and the stage at which this should be introduced, as part of our policy implementation phase.
- 3.36. We will provide further clarity on the topic of what information is needed for the early-stage assessment, especially with regards to AI proposals. We will also provide further information on how commercially sensitive information is handled by Ofgem in the future publication on the assessment process.

Tender policy and further policy considerations – consultation responses

- 3.37. Our consultation invited views on the current process to facilitate a very late competition model for non-radial assets. We also welcomed views on the changes required to the current package of OFTO obligations and incentives, due to the introduction of non-radial offshore transmission assets. Finally, we asked if other changes are required to other aspects of the OFTO regime, such as asset life and duration of the Tender Revenue Stream (**TRS**).
- 3.38. We received a wide range of responses to questions 8, 9 and 10. The responses covered over thirty topics, ranging from the generator commissioning clause to the availability of helipads on platforms.

Question 8: Do you think changes are required to the current process to facilitate a very late competition model for non-radial assets?

- 3.39. There were 28 answers to question 8. 12 answers wanted further information on how the Generator Commissioning Clause (**GCC**) would function in relation to non-radial assets.

¹⁴ Paragraph 1(d) of Schedule 1

- 3.40. The GCC in the EA1989¹⁵ allows developers to own and operate offshore transmission infrastructure for up to 18 months after it has become available for the transmission of power, without the need for a transmission licence.
- 3.41. Feedback suggested that this clause could be problematic for coordinated projects delivering in multiple stages where the delivery of subsequent elements of a transmission system takes place more than 18 months after the first element. This could create uncertainty about operating the affected assets without a licence and could impact on the sale of the offshore transmission assets to an OFTO.
- 3.42. Six responses wanted clarity on risk allocation of shared OFTO assets.

Question 9: Do you think changes are required to the current package of OFTO obligations and incentives due to the introduction of non-radial offshore transmission assets?

- 3.43. There were 22 responses to question 9. Twelve responses wanted further clarity on the potential application of the 98% availability incentive for OFTOs with regards to non-radial assets. Six responses wanted further clarity on compensation for generators in case of outages on shared assets.
- 3.44. OFTOs have a licence obligation to facilitate connections to the National Electricity Transmission System (**NETS**) of up to 20% of the original capital expenditure (**capex**) of their assets. During the tender we ask bidders to confirm that they will be able to raise the finance to fund the construction of any incremental capacity.
- 3.45. Two responses thought the 20% original capex cap for new investments by the OFTO was currently at an appropriate level. One response wanted to set the cap at either £100m or at 20% of the original capex. One response wanted us to reconsider the 20% cap due to the more large and complex nature of the non-radial assets.

Question 10: Do you think changes are required to other aspects of the OFTO regime, eg asset life or duration of the tender revenue stream?

- 3.46. There were 21 responses to question 10. All 21 responses commented on the OFTO life span and the TRS.

¹⁵ Section 6F (Offshore transmission during commissioning period) of the Electricity Act 1989

- 3.47. Under the existing OFTO regime, we currently align the duration of the TRS with the economic life of an asset. In 2018 we changed the original revenue period for OFTOs from 20 years to up to 25 years¹⁶, noting this was due to the maturing offshore wind sector, coupled with evolving technology. We further noted within our decision that 25 years is a preferable term for bond financing. Extending the term should encourage a more competitive bond pricing (at the time this was for the larger Tender Round 6 projects), offering value for money for consumers.
- 3.48. Respondents commented on the design life and timing of user specific infrastructure becoming the responsibility of an OFTO at different times from one shared asset to the next. The respondents wanted sufficient flexibility in the OFTO regime in this regard. Similarly, some respondents wanted the lease period and the OFTO regime to be better aligned. They also noted that developers now assume more than 25 years operational lifetime and potential for further extensions as technology improves, OFTO licence and TRS should account for this. Others specified that the length of TRS and longer asset life are now estimated to be over 30 years.

Ofgem response to feedback

- 3.49. We are working closely with BEIS to review the GCC framework for coordinated (non-radial) projects where two or more parties will be constructing and then utilising the transmission infrastructure. BEIS is carrying out an options assessment with the intention to publish a policy statement providing guidance on how the GCC applies to coordinated transmission in early 2023.
- 3.50. With regards to risk allocation of shared OFTO assets, this will depend on which delivery model is chosen and if AI is used.
- 3.51. On TRS, our OFTO team will be shortly publishing a decision on the End of Tender Revenue Stream (**EoTRS**) arrangements.
- 3.52. With regards to the availability incentive for non-radial assets, we will further consider the appropriate package of incentives at a later date, as part of the policy implementation phase.

¹⁶ [OFTO Tender Process Changes for Future Tender Rounds implemented for Tender Round 6 onwards \(ofgem.gov.uk\)](https://www.ofgem.gov.uk)

4. Revised Minded-to Decision on Delivery Models in PT2030

Section summary

We are revisiting the minded-to decision we made on PT2030 Delivery Models in our May 2022 publication. We outline our proposals to expand the range of options for developers by providing for a late competition OFTO build model for the delivery of non-radial offshore transmission assets.

Questions

Question 1: Do you support the introduction of a late competition OFTO build model for non-radial offshore transmission assets?

What we proposed in our May 2022 publication

4.1. In our May 2022 publication, we set out our recommendation that non-radial assets should be delivered under a very late competition generator build model. We did not extend the late competition OFTO build model that exists for radial assets to non-radial offshore transmission assets.

Why are we looking at this again?

4.2. As set out in section 3, stakeholder feedback highlighted the desire for more options for developers so that they can select the most appropriate route forward for their specific project. Some respondents also highlighted the importance of bringing new players and new solutions to market. We have listened to the feedback and recognise that, in some circumstances, a late competition OFTO build model may be an appropriate delivery model, for example, where there are circumstances such that parties cannot coordinate on how to share responsibility, or where this might be particularly complex and time-consuming, risking non-delivery of projects or significant delays.

4.3. Since our May 2022 publication, the HND has been published. As set out earlier in this document, we had originally assumed a higher number of non-radial assets than the HND and asset classification process concluded on. As a result of the lower

number of non-radial assets, we consider there is less delay risk associated with late competition OFTO build, than first anticipated.

4.4. As a result of stakeholder feedback and developments since our May 2022 publication, we are revisiting our recommendations on delivery models in the PT2030 workstream.

Our proposals

4.5. Therefore, in respect of non-radial offshore transmission assets, we propose to give developers a choice between:

- a very late competition generator build model; or
- or a late competition OFTO build delivery model.

4.6. We consider that by providing more than one option, developers can select the best route forward for their project. We also consider that the more options we can keep open for the delivery of offshore non-radial transmission assets, the better in terms of coordination and the timely delivery of 50GW of offshore wind by 2030.¹⁷

4.7. Due to the number of potential shared assets across different developers, it is expected that coordination between stakeholders will be required in order to ensure that projects are delivered in an efficient manner.

4.8. However, there may be circumstances where the development of offshore non-radial transmission assets has no natural leading party. We consider in this scenario, an OFTO build model may be useful for drawing together responsibility for infrastructure delivering power to shore.

4.9. This approach has the potential to expedite project delivery in some situations as it can avoid the need for further work on coordinating responsibility for delivery and interaction between developer boundaries, including commercial negotiation and structuring. Therefore, we recommend that by allowing developers an OFTO build

¹⁷ [Major acceleration of homegrown power in Britain's plan for greater energy independence - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/major-acceleration-of-homegrown-power-in-britain-s-plan-for-greater-energy-independence)

option, this may remedy situations where developers have suggested that there may be specific challenges with developer-led coordination.

- 4.10. In addition, we acknowledge that the HNDFUE is proceeding and will potentially identify more assets for which coordinated solutions may be appropriate.
- 4.11. We recognise that we will need to further develop the process for the late competition OFTO build model, including the tender process and associated tender guidance and cost assessment documents.
- 4.12. Whilst we recognise the development of a late competition OFTO build model for non-radial assets may take time, we consider that due to the smaller number of non-radial assets identified in the HND, there is less delay risk associated with developing the late competition OFTO build model for non-radial offshore transmission assets than first anticipated. We cover this off in further detail within our updated draft impact assessment.
- 4.13. The late competition OFTO build model, along with the extension of the AI policy, can help projects avoid delays and non-delivery. We expect the expansion of options to help developers avoid lengthy commercial negotiations which could delay projects between one to two years. The estimated avoided delay costs are further covered in the additional draft impact assessment.

5. Minded-to Decision on Anticipatory Investment in PT2030

Section summary

We outline our minded-to decision to extend the AI policy developed in the Early Opportunities workstream to projects within scope of the PT2030 workstream. This section explains what AI is, and how we propose it is applied in this workstream.

Questions

Question 2: Do you support the extension of AI policy to the projects within the scope of the PT2030 workstream?

Question 3: Do you agree with the proposed mechanics of charging (see Appendix 1) to take account of coordinated infrastructure?

Why are we introducing AI policy to the PT2030 workstream?

- 5.1. As outlined in paragraph 3.11, 16 of 29 responses sought clarity on the extension of AI principles from the Early Opportunities workstream to PT2030. Our May 2022 publication did not cover the application of AI policy in the PT2030 workstream.
- 5.2. Given stakeholder feedback, the conclusion of the HND and the completion of the asset classification process, we are now able to outline our minded-to decision to extend the AI policy developed in the Early Opportunities workstream to the projects in-scope of the PT2030 workstream. This will provide developers with more options for the delivery of non-radial transmission assets.
- 5.3. The additional draft impact assessment¹⁸ published alongside this document, contains a section on our assessment of proposals, for AI policy in the PT2030 workstream.

¹⁸ <https://www.ofgem.gov.uk/publications/revise-d-mind-d-ecision-and-further-consultation-pathway-2030>

What is AI?

- 5.4. AI refers to capex in offshore transmission infrastructure by the initial user, to support the later connection of a later development(s). AI is the investment which goes beyond the needs of the immediate offshore development or developments.

Terms and Usage

- 5.5. In this context we have used the following terms our policy options which are set out in this document:

5.5.1. We refer to the developer making the investment in the shared asset as the initial user. We refer to the developer or developers that will use the shared asset in future as the potential later user until such time as they connect, and the later user once connected.

5.5.2. We consider the investment by the initial user in the shared infrastructure comprises an AI element and a non-AI element. We anticipate that these elements would be determined on a case-by-case basis based on the proportional usage of the shared infrastructure.

5.5.3. We refer to the OFTO that is appointed through a tender process to own and operate the shared assets constructed by the initial user.

5.5.4. Where costs are allocated to consumers in a policy option, we are referring in general terms to recovery of costs via Transmission Network Use of System (**TNUoS**) residual charges.

Our Previous Approach and Adopting AI in Early Opportunities

- 5.6. Throughout the existence of the OFTO regime, Ofgem cost assessment guidance contemplated both generator focused AI and investment which would provide wider network benefit. However, there was no accompanying process to provide clarity to developers on how an AI spend would be recovered.

- 5.7. Developers were not incentivised to undertake AI on behalf of future projects because there was no clear route to be able to reclaim any AI as part of the final transfer value of the asset transfer to the OFTO following a cost assessment process. The potential later user whose project would benefit from the AI would

not commit to making a financial contribution ahead of a final investment decision. This was identified as a significant barrier to the development of coordinated offshore infrastructure.

- 5.8. As part of the Early Opportunities workstream, we consulted on changing our AI policy.
- 5.9. In our July 2021 consultation¹⁹, we proposed that AI risk should be shared between consumers and developers, seeking views on the appropriate level of risk which would be appropriate for consumers to bear.
- 5.10. In April 2022, we issued a minded-to decision allocating the risk of AI to consumers for projects in the Early Opportunities workstream:
 - 5.10.1. Until such time as the later user starts paying TNUoS charges; or
 - 5.10.2. If the potential later user fails to connect.
- 5.11. To do this, we also indicated that we were minded-to change our cost assessment guidance documents with regard to the recovery of AI capex. This would mean that economic and efficient costs for the connection of another development should be included in the final transfer value of the relevant shared offshore transmission assets at the end of the relevant tender process. We indicated that the treatment of AI will be subject to an early-stage assessment process and to the usual cost assessment processes which require the developer to demonstrate that the expenditure is economic and efficient.
- 5.12. Following this consultation, we issued a decision in October 2022²⁰ on AI in the Early Opportunities workstream. This confirmed our minded-to decision position. It also confirmed that we are now implementing an early-stage assessment process which will be developed specifically for shared infrastructure and that the user commitment arrangements will be extended to the later user in respect of AI.
- 5.13. Stakeholder engagement on the early-stage assessment process has now commenced with a further consultation expected to be published in the first quarter

¹⁹ [Consultation - Changes intended to bring about greater coordination in the development of offshore energy networks \(ofgem.gov.uk\)](https://www.ofgem.gov.uk/consultation/consultation-changes-intended-to-bring-about-greater-coordination-in-the-development-of-offshore-energy-networks)

²⁰ [Decision on Anticipatory Investment and Implementation of Policy Changes | Ofgem](https://www.ofgem.gov.uk/consultation/decision-on-anticipatory-investment-and-implementation-of-policy-changes)

of 2023. NGESO has already brought forward code modifications to expand user commitment arrangements through the normal industry forum.

Application of AI to PT2030 Workstream

- 5.14. We did not previously consult on the application of our proposed AI policy to the projects in scope of PT2030.
- 5.15. AI in Early Opportunities was intended to assist projects on different project development timescales which wished to coordinate their infrastructure development without the benefit of any centralised design planning. For PT2030, the HND is providing the centralised design aspects and projects have broadly been assumed to have been on similar project timelines to reach connection by 2030.
- 5.16. At the time of the May 2022 publication, the exact scope of the assets the subject of this workstream was unknown ahead of the publication of the HND, and therefore the applicability of AI could not be definitively determined. We therefore did not know the applicability of AI to the PT2030 workstream.
- 5.17. Our original minded-to decision to adopt only a very late competition generator build model, meant that we expected developers of shared infrastructure to formalise commercial arrangements between themselves with potentially less scope for the application of AI.
- 5.18. In responding to feedback on the expansion of delivery options in this workstream, we believe that there is room for the inclusion of AI policy which will act as a further option for developers whose transmission infrastructure is shared with another developer (or other developers).
- 5.19. A number of factors have caused us to address AI in the PT2030 workstream.
- 5.20. As noted in section 3 of this document, consultation feedback suggested that we should consider more options for delivery models for the PT2030 infrastructure. In particular, developers sought options that would ensure they were not 'required' to enter into formal commercial partnerships for delivery which could potentially fall foul of competition law or which could be challenging where projects are on different timelines. Feedback specifically sought clarity on the application of AI to the PT2030 workstream as a method to enable developers to deliver shared infrastructure.

- 5.21. The outcome of the HND and the asset classification process has indicated that there are infrastructure assets which a generator could opt to construct partly for the benefit of other users. The inclusion of AI policy in PT2030 may provide an alternative route to asset delivery in addition to the coordinated very late competition generator build model (as previously proposed for non-radial assets) or the late-competition OFTO build model which is included as delivery option in this minded-to decision.
- 5.22. The extension of AI principles to PT2030 would allow for a single developer, the initial user, to construct offshore transmission infrastructure appropriate for the needs of a project that will connect later. In some cases, building infrastructure which benefits a later user may assist in avoiding any delay and delivery risks associated with commercial arrangements between multiple parties or with the need to run a new tender process.
- 5.23. This is of particular use in situations where projects are on different timescales ensuring that one developer can proceed with its development should the later have a later project development timeline or be delayed during the development process.
- 5.24. The publication of the HND has also shown that there are a number of non-radial offshore transmission assets which will be used for wider network benefit. These assets will not only for the transmission of power from offshore generation to shore, but also for facilitating the dispatch of power from north to south. In this case the later user is a TO rather than a second wind farm. The ability for a wind farm to use AI to complete these assets independently can facilitate timely delivery, especially where affected parties are working under different applicable licensing regimes.
- 5.25. Overall, we believe that expanding the application of AI to PT2030 will be beneficial to a faster delivery of the assets and therefore meeting the government's ambitious 2030 targets.
- 5.26. Should PT2030 developers opt to use AI policy, they will have a route to the recovery of the relevant capex associated with that AI in the same manner as that envisaged in the Early Opportunities workstream, that is via the transfer sum paid to the developer by the OFTO following the cost assessment process.
- 5.27. To be eligible to seek recovery of AI in cost assessment, the developer(s) in question will be required to submit AI proposals through an early-stage assessment

process which will consider the proposals, whether they meet the objectives of the OTNR, ie respecting economic, environmental and social considerations. In the case of the PT2030 workstream, this will necessarily include an evaluation of the proposals by reference to the HND or HNDFUE as appropriate. It will provide an indicative assessment to developers on the amount of capex recoverable and the infrastructure that is allowable within it.

- 5.28. This early-stage assessment process is currently in development for the Early Opportunities workstream, and stakeholder engagement is ongoing. Further consultation is expected in Q1 2023. We intend to align the PT2030 early-stage assessment process with that of the Early Opportunities workstream.

Mitigating the Risks

- 5.29. Expanding our AI policy to the PT2030 workstream will mean that consumers are asked to bear costs associated with AI until such time as a later user connects to the system or that the later user never actually connects to use the investment which was made on its behalf.
- 5.30. We believe that there are a number of factors which mitigate this. Firstly, the development of the HND and HNDFUE mean that the scope of shared infrastructure has in many cases already been determined. Should developers wish to come forward with voluntary coordination proposals, these will be considered but will be by reference to meeting the objectives of the OTNR. There is no expectation that AI will be developed or applied to the highly speculative AI (eg undetermined or unknown future projects).
- 5.31. While our policy accepts that consumers will sit with the costs associated with AI until such time as the later user connects, this period is not expected to be unduly lengthy for PT2030 assets. This is because of the centrally planned nature of the transmission infrastructure providing a clear scope on the assets required and the benefitting projects. LR4 projects which form part of P2030 workstream have high option fees meaning that developers are incentivised to connect as quickly as possible, thereby minimising the period of time during which consumers will underwrite the AI costs.
- 5.32. As with Early Opportunities, we propose to extend user commitment arrangements to AI for the later user who will benefit from the shared infrastructure but who is not making capital investment upfront. As with Early Opportunities, we expect

NGESO to bring forward the code modifications required to give effect to this and for these to progress through the normal code governance and industry processes for codes and standards modifications.

- 5.33. PT2030 is novel in the manner in which offshore transmission will be delivered. We recognise that the coordination of development presents more challenges than has previously been seen in the development of point-to-point connections, including the need for developers to coordinate design, delivery and timescales. There may be circumstances where this coordination is difficult to achieve, and we are keen to ensure that there are options available to mitigate the risk of non-delivery.

Charging Mechanics to Give Effect to allocation of AI

- 5.34. Under the current charging regime (ie without any code modification), the initial user would be liable for the TNUoS charges associated with both the AI element and the non-AI element. This would result in the initial user paying higher TNUoS charges than it would otherwise have done had it not made the AI. This would act as a disincentive for the initial user to make the AI.
- 5.35. We have previously indicated in our April 2022 Early Opportunities publication²¹ that we believe the initial user will continue to be liable for the TNUoS charges in respect of the non-AI element. In respect of the AI element, charges associated with this will be allocated to the later user at the time the later user connects. These charges will also accrue during the period between asset transfer of the transmission assets (including the AI element) to an OFTO and the connection of the later user. These accrued charges will also be allocated to the later user on connection.
- 5.36. If the later user fails to connect, the charges which would otherwise have been paid by the later user, will be allocated to the demand residual, therefore effectively being paid by consumers.
- 5.37. In the case of PT2030, the later user of the AI element may in fact be a TO rather than an offshore wind farm. In this case, it is our expectation that in respect of the AI element, amounts which would have been chargeable under the TNUoS regime, will remain in the demand residual.

²¹ [Offshore Coordination - Early Opportunities: Consultation on our Minded-to Decision on Anticipatory Investment and Implementation of Policy Changes | Ofgem](#)

- 5.38. We have set out in **Appendix 1** to this document further proposals on how we expect the charging regime will need to evolve to give effect to our AI policy, both for Early Opportunities and for PT2030 workstreams.
- 5.39. We welcome industry feedback on our view on charging set out in **Appendix 1**.
- 5.40. We expect that there will be multiple changes required to industry codes and standards to give effect to the adaption of AI policy. These will be dealt with through the normal code governance and modification process and we continue to work with NGESO to establish which changes may be needed and the appropriate timescales for their delivery.

Appendices

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Appendix 1 – Anticipatory investment charging regime options

This Appendix sets out additional information relating to charging offshore assets and reflects our current thinking in respect of any co-ordinated infrastructure rollout. We have outlined several scenarios/issues below which we expect NGENSO and industry to explore when setting out the changes required to the charging regime to accommodate offshore investments. Unless otherwise indicated, none of the below constitutes or should be considered to reflect formal or finalised positions of the Authority.

1. Anticipatory Investment – Cost apportionment between users

- 1.1 Under the current charging regime, the initial user would be liable for the TNUoS charges associated with both the AI element and non-AI element of any spend. The AI element would be costs incurred by the initial user to install offshore infrastructure to support the later connection of a later development(s). This would result in the initial user paying higher TNUoS charges than it would otherwise have done had it not made the AI.
- 1.2 Currently, there is no mechanism in place to reflect how these costs are allocated between users and/or the beneficiaries of this investment.
- 1.3 In principle, we consider that, similarly to today's Offshore Local Circuit and Local Substation charging framework²², users should pay charges in respect of the assets utilised relative to their capacity/utilisation. In practice, we think there is merit to a charging framework that splits the costs of shared assets between specific users based on their effect on the shared asset, ie based on the capacity of their plant as compared the capacity rating of the assets deployed.
- 1.4 In respect of non-asset related expenditure, for instance civil works, where one user may conduct and pay for activity which benefits them and another network user, we consider the initial user could see a reduction in the TRS sums paid to the

²² As outlined in Section 14 of the Connection and Use of System Code

OFTO, with a commensurate increase in the TNUoS sums paid by the later user to bridge the cost gap.

- 1.5 As we have set out previously, we believe it is appropriate that an AI cost gap (that is, the costs incurred by the initial user which relate to a later user, but which are not paid by the later user until they have connected) should be funded initially through the TNUoS Demand Residual charge and then, critically, repaid by the later user and deducted from the TNUoS Demand Residual in the years post-connections.

2. AI where one user is a network licensee

- 2.1 Similarly, to the above, we anticipate that the initial user of offshore assets would be charged costs which reflect their use of the network assets, based on their capacity. In the case of a later user connecting who is not a generator, for instance a TO (ie the additional capacity confers a wider network benefit and is not attributable to a or a specific group of users), we consider that the costs not paid by the initial user would be collected through the Transmission Demand Residual (**TDR**)²³.

3. Changes to infrastructure prior to a later user connecting

- 3.1 In the case of changes made to infrastructure prior to a later user connecting, we expect that the initial user will have a view of the assets being built for them, and any AI.
- 3.2 It is possible that the later user might agree a variation to the relevant bilateral agreement held between them and NGENO which necessitates a change to the physical assets being deployed for both users.
- 3.3 Therefore, in these cases, we consider that NGENO should facilitate changes to contractual arrangements and applicable charges in respect of both the initial and the later user.

²³ The residual component of TNUoS charges recover the remaining allowed revenue for network companies set under the price controls.

4. Extension of the Main Integrated Transmission System

- 4.1 A 'MITS Node' is currently a point on the network with four or more transmission lines, or two transmission lines and a Grid Supply Point (**GSP**).
- 4.2 We recognise that it is possible that a substation supporting offshore wind, could act as a 'MITS Node' in the event that multiple transmission lines are electrically connected to it.
- 4.3 From an onshore charging perspective, the costs of utilising the MITS are shared between users in the relevant zone. However, we recognise that current arrangements do not reflect the possibility of offshore MITS Nodes, or the costs of offshore assets within a charging zone.
- 4.4 We consider that there is a significant degree of quantitative analysis required before we can reach a position on the approach to this classification or the appropriate charging regime. We anticipate that the Workgroup for any Connection of Use and System Code (**CUSC**) Modification Proposal looking at this issue would conduct such analysis.

5. Interaction with the €2.50/MWh annual average limit on generator transmission charges

- 5.1 We recognise that co-ordinated offshore investment should deliver more efficient outcomes than radial connections. The now-retained Commission Regulation 838/2010 (the **ITC Regulation**) sets out that annual average transmission charges paid by generators must fall within the range of €0-2.50/MWh. To note that certain charges are to be excluded from the calculation of annual average charges, for example charges for 'physical assets required for connection' or 'ancillary services'.
- 5.2 Where relevant annual average charges are forecast to fall outside the range at the point of tariff-setting, NGE SO will apply a credit to generator Wider charges bringing the level of estimated charges back into the range.
- 5.3 The classification of charges and whether they will be fall within the exclusions for charges for "physical assets required for connection" will require to be determined on a case-by-case basis. Therefore, it is not possible to provide a definitive

statement as to how charges for offshore generation will be categorised in terms of the ITC Regulation. We have set out in several decisions, namely that relating to CUSC Modification Proposals 317 and 327, how, “physical assets required for connection” should be determined.

- 5.4 We expect that any changes to the charging methodology should reflect not only commercial arrangements but to deliver charges which meet legal requirements, including compliance with the ITC Regulation.

Appendix 2 - List of consultation questions by chapter

Chapter 4. Revised Minded-to Decision on Delivery Models in PT2030

Question 1: Do you support the introduction of a late competition OFTO build model for non-radial offshore transmission assets?

Chapter 5. Minded-to Decision on Anticipatory Investment in PT2030

Question 2: Do you support the extension of AI policy to the projects within scope of the PT2030 workstream?

Question 3: Do you agree with the proposed mechanics of charging (see **Appendix 1**) to take account of coordinated infrastructure?

Appendix 3 – Privacy notice on consultations

Personal data

The following explains your rights and gives you the information you are entitled to under the UK General Data Protection Regulation (**UK GDPR**).

Note that this section only refers to your personal data (your name address and anything that could be used to identify you personally) not the content of your response to the consultation.

1. The identity of the controller and contact details of our Data Protection Officer

The Authority is the controller, (for ease of reference, Ofgem). The Data Protection Officer can be contacted at dpo@ofgem.gov.uk

2. Why we are collecting your personal data

Your personal data is being collected as an essential part of the consultation process, so that we can contact you regarding your response and for statistical purposes. We may also use it to contact you about related matters.

3. Our legal basis for processing your personal data

As a public authority, the UK GDPR makes provision for Ofgem to process personal data as necessary for the effective performance of a task carried out in the public interest. ie a consultation.

4. With whom we will be sharing your personal data

We may share consultation responses with BEIS. If you do not wish us to do so, please clearly let us know in your response. Please note that responses not marked as confidential will be published on our website. Please be mindful of this when including personal details.

5. For how long we will keep your personal data, or criteria used to determine the retention period.

Your personal data will be held for six months after the project is closed, including subsequent projects or legal proceedings regarding a decision based on this consultation, is closed.

6. Your rights

The data we are collecting is your personal data, and you have considerable say over what happens to it. You have the right to:

- know how we use your personal data
- access your personal data
- have personal data corrected if it is inaccurate or incomplete
- ask us to delete personal data when we no longer need it
- ask us to restrict how we process your data
- get your data from us and re-use it across other services
- object to certain ways we use your data
- be safeguarded against risks where decisions based on your data are taken entirely automatically
- tell us if we can share your information with 3rd parties
- tell us your preferred frequency, content and format of our communications with you
- to lodge a complaint with the independent Information Commissioner (ICO) if you think we are not handling your data fairly or in accordance with the law. You can contact the ICO at <https://ico.org.uk/>, or telephone 0303 123 1113.

6. Your personal data will not be sent overseas.

7. Your personal data will not be used for any automated decision making.

8. Your personal data will be stored in a secure government IT system.

9. More information

For more information on how Ofgem processes your data, click on the link to our "[Ofgem privacy promise](#)".

Appendix 4 – 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.

The Authority

The Gas and Electricity Markets Authority established by Section 1(1) of the Utilities Act 2000. The Authority governs Ofgem.

Anticipatory investment cost gap / the cost gap

The recovery of the AI element of the offshore generator TNUoS tariff in the period between the shared asset transfer to the OFTO and the point when the later user(s) will start using the shared assets and paying TNUoS charges

B

BEIS

Department for Business, Energy & Industrial Strategy

BESS

British Energy Security Strategy

C

Capex

Capital Expenditure

CES

Crown Estate Scotland

CfD

Contracts for Difference

CUSC

Connection and Use of System Code

E

Electricity Act or the Act

The Electricity Act 1989 as amended from time to time.

EoTRS

End of Tender Revenue Stream

G

GCC

Generator Commissioning Clause

GSP

Grid Supply Point

H

HND

Holistic Network Design

HNDFUE

Holistic Network Design Follow-Up Exercise

HRA

Habitat Regulations Appraisal

HVDC

High Voltage Direct Current

I

IA

Impact Assessment

L

LR4

Leasing Round 4

N

NGESO

National Grid Electricity System Operator

NETS

National Electricity System

O

Ofgem

Office of Gas and Electricity Markets. Ofgem, “the Authority” and “we” are used interchangeably in this document.

OFTO

Offshore transmission owner

OFTO Licence

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

OTNR

Offshore Transmission Network Review

P

PQ

Project Qualification

PT2030

Pathway to 2030

T

TCE

The Crown Estate

TDR

Transmission Demand Residual

TOs

Transmission Owners

TRS

Tender Revenue Stream

TNUoS

Transmission Network Use of System