

# Decision

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## Decision on the Regulatory Framework for the Non-Standard Interconnectors of the Offshore Hybrid Asset pilot scheme

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Publication date:	8 February 2024
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In June 2023, we published a consultation (the **June 2023 Consultation**) on the Regulatory Framework for Offshore Hybrid Assets (**OHA**s): Multi-Purpose Interconnectors (**MPI**s) and Non-Standard Interconnectors (**NSI**s). The purpose of the June 2023 Consultation is to enable the development of the OHA sector. The first stage of this process is to provide the high-level regulatory regime for the NSI projects participating in our OHA pilot scheme (the **Pilot NSI**s), which have been undergoing our Initial Project Assessment (**IPA**).

This decision document summarises the responses to the June 2023 Consultation relevant to the Pilot NSIs and provides our final decision for the high-level regulatory regime that could apply to the Pilot NSIs.

MPIs and any other future NSIs are outside the scope of this decision, pending further policy work by Ofgem and a decision by the Department for Energy Security and Net Zero (**DESNZ**) on, among other things, the eligibility for Contracts for Difference (**CfD**) of MPI-connected offshore wind farms (**OWF**s) and other market arrangements aspects of MPIs. Work is being progressed by DESNZ and by Ofgem on these matters and further information on the MPI regime will be published in due course.

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## Executive Summary

### Background

Following the programme of work that commenced with the Interconnector Policy Review<sup>1</sup>, we published in June 2023 a consultation (the **June 2023 Consultation**) on the regulatory regime for offshore hybrid assets (**OHA**s) and, jointly with the Department of Energy Security and Net Zero (**DESNZ**), a consultation on market arrangements for Multi-Purpose Interconnectors (**MPI**s). This took account of analysis and feedback from industry through the MPI Framework Development Group (**MFDG**) since late 2022.

We received 20 responses to the June 2023 Consultation from offshore transmission developers, system operators, developers of offshore wind farms (**OWF**s), and other interested parties. This document contains our decisions in respect of the Non-Standard Interconnectors (**NSI**s) in the Ofgem OHA pilot scheme (the **Pilot NSI**s) only. Further policy work on market arrangements and Contracts for Difference (**CfD**s), which are key aspects of a regime for MPIs, is being progressed in DESNZ and Ofgem. Any future NSIs may have a different regulatory regime than the Pilot NSIs, depending on how the OHA sector develops.

### Overview of the June 2023 Consultation

In the June 2023 Consultation<sup>2</sup>, we proposed separate licences for MPIs and NSIs. We proposed five regime options for MPIs and two for NSIs ranging from a full regulated asset base (**RAB**) to a full cap and floor model. We also consulted on issues such as scope and boundaries and Anticipatory Investment.

Overall, most responses were supportive of our proposals, although there was an almost equal split in opinion in favour of progressing a full RAB or the narrow cap and floor regime option for OHAs. Most of the responses did not differentiate between MPIs and NSIs in stating their preference.

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<sup>1</sup> [Interconnector Policy Review - Decision | Ofgem](#)

<sup>2</sup> [Consultation on the Regulatory Framework for Offshore Hybrid Assets: Multi-Purpose Interconnectors and Non-Standard Interconnectors \(ofgem.gov.uk\)](#)

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**Summary of decisions on regulatory framework for Pilot NSIs**

The topics applicable to Pilot NSIs addressed in the June 2023 Consultation and our decisions on them are summarised below. The decisions are set out, with supporting detail, in sections 2-4, 6-8 and 10 of this document. The Pilot NSIs are first NSI projects and first OHA projects in GB. As the development and negotiation of these complex projects proceeds, we will develop and adjust the regulatory regime, and project specific arrangements, as appropriate. The decisions in this document reflect the current stage of high-level regulatory regime development and are subject to further additions and modification. The summary of decisions below follows the order of the June 2023 Consultation, and the question numbers relevant to the Pilot NSIs from that consultation are also shown for ease of reference. As in the cap and floor regime for point-to-point interconnectors, regime/licence variations may be requested by developer(s) of the Pilot NSI(s) in certain specified areas.

Licensing arrangements (Questions 1-3)

- We will use, when appropriate, the wider common term of an offshore hybrid asset that applies to both: category 1 assets (non-standard interconnectors) and category 2 assets (MPIs).
- We will use the term non-standard interconnectors (NSIs) for category 1 assets.
- We have decided to modify the regulatory description of a NSI (category 1 asset) for the purpose of the OHA pilot scheme, because the Pilot NSIs constitute a part of a wider OHA asset. The revised regulatory description of a NSI is at pg 17.

Principles of the Regulatory Regime (Question 4)

- We have decided that the principles of the regulatory regime for Pilot NSIs shall address economic viability, integration in energy system, consumer protection, cost and revenue alignment, co-ordinated regulatory treatment, and level playing field. These principles are set out in Table 1 at pp 21-22.

Cross-border sharing of costs and revenues (Questions 5,6)

- We will take account of legal and regulatory constraints in connecting jurisdictions and the interests of GB consumers in considering the cost and revenue sharing boundaries of a Pilot NSI. We will contribute to ongoing international discussion and development of regulatory arrangements on this topic with a view to achieving fair sharing of costs and benefits on Pilot NSIs and other OHAs to support the growth of the sector and protect the interests of GB consumers.
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### Proposed regulatory regime packages (Questions 9-11)

- For the Pilot NSIs, we have decided that a narrow cap and floor regime is appropriate, but its detailed design will depend upon project specific revenue and risk matters.

### Design parameters of the regime (Question 12)

- We have decided that the high-level regime parameters for the Pilot NSIs shall be as described in the June 2023 Consultation. Detailed regime parameters for the Pilot NSIs will be the subject of a future consultation (see Next steps below).

### Anticipatory Investment (Question 17)

- We have decided not to extend our offshore AI policy to the Pilot NSIs.

Regarding ownership unbundling (Question 22) please see section 9, and regarding regulatory safeguards and compliance requirements for NSI operators (Questions 23–25) please see section 10.

## **Next steps**

We will consult on the detailed regime parameters for the Pilot NSIs, including timelines and incentives and also taking account of the feedback relevant to NSIs received from the OHA part (section 2) of the consultation<sup>3</sup> on changes to the financial parameters of the cap and floor regime for Window 3 electricity interconnectors and risk considerations for offshore hybrid assets. We expect to publish in early 2024 our minded-to Initial Project Assessment (**IPA**) consultation on which applicant project(s) for the OHA pilot scheme will receive a regulatory regime in principle.

Regarding MPIs, further policy work is being undertaken by Ofgem and DESNZ on market arrangements and other matters and by DESNZ on the eligibility for CfDs of MPI-connected OWFs. Following this work, we will consult on the next steps for the MPI regime.

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<sup>3</sup> Consultation on changes to the financial parameters of the cap and floor regime for window 3 electricity interconnectors and risk considerations for offshore hybrid assets, of 1 September 2023

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## **1. Introduction**

### **Background - the OHA pilot scheme**

- 1.1 In the Interconnector Policy Review decision in 2021, we committed to opening a pilot scheme for MPIs (now the OHA pilot scheme), and this was open for applications in September-October 2022. The objective of the OHA pilot scheme regulatory framework is to aid the development of early opportunity OHAs by working collaboratively with developers and other regulators to develop a project-specific regulatory framework solution.
- 1.2 We have changed our use of the term MPI, as explained in the June 2023 Consultation, using the term OHAs to refer to a wider array of projects and using the term MPI only to refer to OHAs that connect to offshore generation located in GB.
- 1.3 The proposed assets in the OHA pilot scheme that form part of a wider OHA by connecting to an offshore converter station only in the connecting jurisdiction are NSIs for the purposes of this pilot scheme – see revised definition of a NSI for the OHA pilot scheme at page 17. In this decision we also provide some further clarification of the conceptual description of a NSI (see section 2).
- 1.4 Lessons learnt through the OHA pilot scheme, combined with the feedback from the June 2023 Consultation on both NSIs and MPIs, will be used to develop the framework for potential future OHA applications into an enduring regime. Any future NSIs may have a different regulatory regime, depending on how the OHA sector develops.
- 1.5 We established the MFDG in late 2022 to engage industry stakeholders, collaboratively discuss risks and opportunities, test thinking, and ultimately inform the positions to take forward on commercial and regulatory frameworks to consultation. The MFDG is concerned with both NSIs and MPIs, but has retained its original name which was given before the June 2023 Consultation and the change in terminology from MPIs to OHAs as the broader description. The MFDG forum will continue beyond this decision to support development of the MPI regime.



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### **Other matters**

The matters below are not decisions but we provide information on our intended approach in a number of policy areas relevant to the Pilot NSIs which were discussed in the June 2023 Consultation.

Costs, revenues and risks (Questions 7, 8 of the June 2023 Consultation)

- Regarding question 7, we intend to extend the concept of Reasonable Delay Event (**RDE**) to the Pilot NSIs. However, the details of the RDE mechanism for the Pilot NSIs will be subject to a separate consultation and these details of the RDE mechanism put to the consultation are likely to be very similar to the RDE mechanism applicable to Window 3 interconnectors<sup>4</sup>.
- In the case of question 8 for Pilot NSIs, which dealt with risks, the responses will be taken into account in the regime parameters consultation and also if applicable in the timelines and incentives consultation (see Next steps below).

Design parameters of the regime (Question 14 of the June 2023 Consultation)

- The matter of the availability target for the Pilot NSIs will be considered in the consultation on detailed regime parameters for Pilot NSIs. We are not making a decision in respect of question 14 at this time.

### **Our decision-making process**

1.6 The IPA of the Pilot NSIs is in progress at present and a minded-to consultation is expected to be published in early 2024.

1.7 We have also published the consultation<sup>5</sup> on changes to the financial parameters of the cap and floor regime for Window 3 electricity interconnectors and risk considerations for offshore hybrid assets, which closed on 29 September 2023. The responses to this consultation on the risk considerations for the regime parameters of NSIs will be taken into account in the development of the regime parameters for the Pilot NSIs, which will be the subject of a consultation, expected to be in the first quarter of 2024.

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<sup>5</sup> [Consultation on changes to the financial parameters of the cap and floor regime for window 3 electricity interconnectors and risk considerations for offshore hybrid assets | Ofgem](#)

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1.8 We published our decision<sup>6</sup> on the Consultation on Timelines and Incentives changes for the Third Cap and Floor Window<sup>7</sup> for Interconnectors in November 2023. We aim to consult on similar measures for the Pilot NSIs in parallel with our consultation on regime parameters.

**Responses received to the June 2023 Consultation**

1.9 We received 20 responses to the June 2023 Consultation, of which 14 are non-confidential and are available at the Ofgem web page for the June 2023 Consultation. We have also taken account of the confidential responses in our decisions. We express our thanks to all the respondents.

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<sup>6</sup> [Decision on Timelines and Incentives changes for the Third Cap and Floor Window for Interconnectors](#)

<sup>7</sup> The terms 'Window 3' and 'third window' are used interchangeably by Ofgem to refer to the third cap and floor application window for electricity interconnectors.

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## **Related publications**

[Consultation on the Regulatory Framework, including Market Arrangements, for Offshore Hybrid Assets: Multi-Purpose Interconnectors and Non-Standard Interconnectors | Ofgem](#)

[Multi-purpose Interconnectors Pilot Regulatory Framework | Ofgem](#)

[Consultation on changes to the financial parameters of the cap and floor regime for window 3 electricity interconnectors and risk considerations for offshore hybrid assets | Ofgem](#)

[Decision on Timelines and Incentives changes for the Third Cap and Floor Window for Interconnectors](#)

[Interconnector Policy Review - Decision | Ofgem](#)

## **General feedback**

We believe that consultation is at the heart of good policy development. We are keen to receive your comments about this report. We'd 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](mailto:Stakeholders@ofgem.gov.uk)

## **2. Decision on Licensing Arrangements for the Pilot NSIs**

2.1 The June 2023 Consultation proposed to categorise the pilot OHAs in order to progress policy development on the licensing arrangements for operators of these novel assets. The key distinction in the proposed categorisation was whether offshore transmission activities occur in GB or not:

- 1) Category 1 assets: NSIs connected to an offshore generator in the connecting jurisdiction but not in GB, and which will conduct interconnection activities in GB and the connecting jurisdiction as well as offshore transmission activities only in the connecting state; and
- 2) Category 2 assets: MPIs connected to an offshore generator in GB, which will conduct interconnection activities in GB and the connecting state as well as offshore transmission activities in GB (and optionally in the connecting state).

2.2 The regulatory description of a NSI is modified in our decision, for the Pilot NSIs only, as described in section 2.28 (see pg 17).

2.3 We asked the following questions covering licensing arrangements for OHAs:

Q1: Do you have any views on our proposal to use, when appropriate, a wider common term of an offshore hybrid asset that could apply to both: category 1 assets (non-standard interconnectors) and category 2 assets (MPIs)?

Q2: Do you have any views on our proposal to use the term of non-standard interconnectors (NSIs) for category 1 assets?

Q3: Taking into account the relevance of the provisions of the Electricity Act for the type of the licence that can be granted to an applicant, do you have any views on how we propose to license the operators of category 1 assets (non-standard interconnectors) and category 2 assets (MPIs)?

### **Consultation responses on licensing arrangements**

2.4 Twelve respondents commented on the licensing questions in their submissions. In general, respondents supported the differentiation between Category 1 assets (NSIs) and Category 2 assets (MPIs) for licensing purposes. Examples of the comments made by respondents are set out below.

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***Q1: Do you have any views on our proposal to use, when appropriate, a wider common term of an offshore hybrid asset that could apply to both: category 1 assets (non-standard interconnectors) and category 2 assets (MPIs)?***

- 2.5 Twelve responses addressed this question and 11 of these responses agreed with the proposed use of the wider common term of an offshore hybrid asset. One did not express a view on this point but welcomed the distinction being made between NSIs and MPIs.
- 2.6 The developer of the Pilot NSIs provided one aggregated response to Questions 1-3. They agreed with Ofgem’s proposal to use the wider common term of an offshore hybrid asset replacing the “catch-all” usage of MPI. They noted that OHA aligns to EU and partner Transmission System Operator (**TSO**) terminology when discussing offshore hybrids. They agreed with the separation of category 1 and category 2 assets, and they also agreed with retaining MPI as the term for category 2 assets. The electricity system operator, National Grid Electricity System Operator Limited (**ESO**), expressed similar views.
- 2.7 A transmission developer agreed with the proposed use, where appropriate, of the wider common term of an offshore hybrid asset.
- 2.8 An offshore wind power developer agreed with the use of the term offshore hybrid assets. They also agreed “that this term may also include different build permutations like simultaneous build and sequential build” and with the proposal to use the specific wording of recital 66 of the EU Electricity Regulation.
- 2.9 A developer of transmission and offshore generation requested that Ofgem “should clarify whether the term OHA is meant to include only hybrid interconnectors or also any other type of offshore hybrid assets”, noting that there will be in future other types of hybrid assets beyond NSIs and MPIs such as energy islands. A response from a transmission developer sought to have the NSI definition, for projects outside the OHA pilot scheme, widened to include projects that would connect non-GB offshore generation to the GB market.

***Q2: Do you have any views on our proposal to use the term of non-standard interconnectors (NSIs) for category 1 assets?***

- 2.10 Seven responses addressed this question and three agreed with the proposal to use the term of non-standard interconnectors (NSIs) for category 1 assets. Three agreed with the principle of having such a category but expressed no view as to
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whether NSI was an appropriate term for it. One respondent disagreed with the term “Non-Standard Interconnector”.

- 2.11 The ESO agreed with the use of a sub-term to differentiate NSIs from MPIs “as they will be treated differently from an operability, licensing and contractual aspect.”
- 2.12 The response from the developer of the Pilot NSIs questioned the use of the term ‘Non-Standard Interconnector’ and one suggested an alternative of ‘European Wind Interconnector’. The concerns raised relate to possible negative connotations of the expression ‘non-standard’.
- 2.13 A transmission developer agreed with the use of the term NSI as defined in the consultation.

***Q3: Taking into account the relevance of the provisions of the Electricity Act for the type of the licence that can be granted to an applicant, do you have any views on how we propose to license the operators of category 1 assets (non-standard interconnectors) and category 2 assets (MPIs)?***

- 2.14 Nine responses addressed this question. Four of these agreed with the use of the interconnector licence as the basis for licensing of NSIs, and five did not express a view on this particular point but raised other matters.
- 2.15 The Pilot NSIs’ project developer in its response highlighted the need for NSI licensing to progress at pace and noted that in their view only limited changes are needed from the existing interconnector licence standard conditions.
- 2.16 An offshore wind power developer also requested clarification on the timescales for implementation of the new licences. The ESO commented “that minimal change will be required between a current interconnection licence type and a new category 1 NSI licence”.
- 2.17 A transmission developer raised some queries about the ways in which Ofgem proposes to amend the electricity interconnector licence. In particular, this developer asked whether Ofgem would introduce new standard conditions that are only switched on for NSIs (which would – in their view – represent a more standard approach for NSIs) or whether Ofgem would introduce changes via the special conditions, which (in their view) would make the licence much more bespoke for each project. They also said that they would welcome Ofgem’s
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commitment to work with developers of category 1 assets to develop the required changes.

- 2.18 An offshore wind developer commented that NSI and MPI projects should be treated equally wherever possible because, in their view, OHAs may need to or want to change the configuration from MPI to NSI or vice versa during the development phase of the project. They said that OHA developers should not be disadvantaged or penalised as a result of this as the ability to explore optionality and the potential opportunities presented by OHAs is important to support the early development of this market.

### **Ofgem's response to feedback**

***Q1: Do you have any views on our proposal to use, when appropriate, a wider common term of an offshore hybrid asset that could apply to both: category 1 assets (non-standard interconnectors) and category 2 assets (MPIs)?***

- 2.19 This proposal to use the term of "an offshore hybrid asset (OHA)" found wide agreement amongst the respondents and we will proceed accordingly.
- 2.20 The question whether the term of an offshore hybrid asset should be available to other configurations of offshore hybrid assets is out of scope of this specific decision, which concerns only the projects within our pilot NSI scheme. We will address such questions in our future consultations and publications.
- 2.21 Operators of the Pilot NSIs are not involved in operating the offshore lines transmitting electricity between the offshore converter stations and the onshore electricity systems in the connecting states. For that reason, the Pilot NSIs form part of wider OHAs and do not constitute whole OHAs themselves.
- 2.22 Consequently, we have decided to treat the Pilot NSIs, for the regulatory purposes and for the purposes of our publications as part of wider cross-border OHAs and not whole OHAs themselves.

***Q2: Do you have any views on our proposal to use the term of non-standard interconnectors (NSIs) for category 1 assets?***

- 2.23 In our publications, we have already referred to Category 1 assets as non-standard interconnectors (NSIs). These assets, due to their configuration and licensable activity in GB, will be licensed under the interconnector licence with appropriate modifications to the standard licence conditions and special conditions
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tailored for the regulatory regime applicable to the pilot NSIs. We believe that the development of the OHA sector is still at an early stage and that NSI is a suitable term to refer to the Pilot NSIs, which will form part of an OHA.

***Q3: Taking into account the relevance of the provisions of the Electricity Act for the type of the licence that can be granted to an applicant, do you have any views on how we propose to license the operators of category 1 assets (non-standard interconnectors) and category 2 assets (MPIs)?***

- 2.24 Ofgem is engaging bilaterally with developers of Category 1 projects in respect of changes required to the electricity interconnector licence. In addition, Ofgem will publicly consult with all relevant licence holders and stakeholders on any proposed amendments to the electricity interconnector licence.
- 2.25 We are working on making appropriate amendments to the standard licence conditions of the interconnector licence for Pilot NSIs.

**Our decisions**

***Q1: Do you have any views on our proposal to use, when appropriate, a wider common term of an offshore hybrid asset that could apply to both: category 1 assets (non-standard interconnectors) and category 2 assets (MPIs)?***

- 2.26 We will use, when appropriate, the wider common term of an offshore hybrid asset that applies to both: category 1 assets (non-standard interconnectors) and category 2 assets (MPIs). However, we note that each of the Pilot NSIs constitutes part of a wider cross-border OHA asset, as explained further in this section.

***Q2: Do you have any views on our proposal to use the term of non-standard interconnectors (NSIs) for category 1 assets?***

- 2.27 We will use the term non-standard interconnectors (NSIs) for category 1 assets.



**Q3: Taking into account the relevance of the provisions of the Electricity Act for the type of the licence that can be granted to an applicant, do you have any views on how we propose to license the operators of category 1 assets (non-standard interconnectors) and category 2 assets (MPIs)?**

2.28 We have decided to modify the regulatory description of a NSI, for the purposes of the OHA pilot scheme, to read:

A **NSI** is an electricity interconnector which is connected to an offshore converter station in the connecting jurisdiction and which does not subsist for the purposes of offshore transmission activities in Great Britain.

2.29 The regulatory description has been modified because all relevant Pilot NSI assets end at the point of an offshore converter station in the connecting jurisdictions. Consequently, the Pilot NSIs constitute part of a wider OHA asset.

2.30 Operators of the Pilot NSIs are not involved in operating the offshore lines transmitting electricity between the offshore converter stations and the onshore electricity systems in the connecting states. For that reason, as stated in our decision in respect of Question 1, the Pilot NSIs form part of wider cross-border OHAs and do not constitute whole OHAs themselves.

2.31 However, it is important to note that the offshore transmission lines between the converter stations and onshore electricity systems in the connecting states have a dual function. They transport electricity generated by connected offshore generators and they also host cross-border flows of electricity produced in GB and flowing to the connecting state as well as electricity produced in this connecting state and flowing to GB.

2.32 We further note that from the legal perspective a NSI is an electricity interconnector. It falls under the definition of an interconnector as contained in section 4(3E)<sup>8</sup> of the Electricity Act and as contained in Article 300(1)(f)<sup>9</sup> of the Trade and Cooperation Agreement between the UK and the EU.

2.33 As a NSI, due to the asset's characteristics and the type of the conducted licensable activity, is an electricity interconnector, the appropriate licence for a

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<sup>8</sup><https://www.legislation.gov.uk/ukpga/1989/29/section/4>

<sup>9</sup> [L 2021149EN.01001001.xml \(europa.eu\)](https://eur-lex.europa.eu/eli/dir/2021/149/en/oj)

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NSI operator is the electricity interconnector licence as defined under section 6(1)(e)<sup>10</sup> of the Electricity Act (with necessary amendments reflecting the asset's complex nature).

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<sup>10</sup> <https://www.legislation.gov.uk/ukpga/1989/29/section/6>

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### **3. Decision on principles of the regulatory regime for Pilot NSIs**

3.1 This section addresses the principles of the regulatory regime for the Pilot NSIs. In the June 2023 Consultation we presented six potential principles: 1) Economic Viability, 2) Integration in Energy System, 3) Consumer Protection, 4) Cost and Revenue Alignment, 5) Coordinated Regulatory Treatment, and 6) Level Playing Field.

3.2 We asked the following question on this topic:

***Q4: Do our proposed principles capture the basis upon which the OHA Pilot Regulatory Framework should be designed and developed?***

#### **Consultation responses**

3.3 Twelve respondents commented on the principles of the regulatory regime in their submissions. Of these, six agreed with the principles fully and five agreed partly but highlighted various matters they wished to add or emphasise. One respondent did not state whether it agreed or not but raised a point of detail. Examples of the comments made by respondents are set out below. Many of the matters highlighted are to do with connected generation and hence relate to MPIs in GB rather than the Pilot NSIs.

3.4 A transmission developer commented that the Level Playing Field principle should recognise that the regulatory treatment should facilitate third party and TSO led projects both now and for the future. That developer also noted a degree of overlap in principles 1 and 2. The ESO suggested that “increased reliability” should be included in the Integration in Energy System principle.

#### **Ofgem response to feedback**

3.5 These high-level principles will underpin the development and design of the regulatory framework for Pilot NSI projects.

3.6 We will edit the principles to remove overlap between principles 1 and 2, and add “increased reliability” to principle 2. The Pilot NSIs are the first projects in the GB OHA sector and are being developed in the context of a regulatory frameworks in GB and connecting countries for OHAs that are still being completed and with

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higher uncertainties than exist for point-to-point interconnectors and probably also for future OHAs. This may require different features in the regulatory regime for the Pilot NSIs than for point-to-point interconnectors and for future OHAs.

**Our decision**

3.7 We have decided that the principles of the regulatory regime for the Pilot NSIs shall be as shown in the table below.

**Table 1: Six principles of the regulatory regime for the Pilot NSIs**

Economic Viability	The regulatory framework will take into account the commercial viability of a project, as well as considering the wider benefits that efficient levels of interconnection can offer to consumers, for example, security of supply.
Integration in energy system	The regulatory framework will consider the wider benefits of integration in energy systems of Pilot NSIs, including market integration, increased reliability, congestion revenues, and ensuring economically efficient dispatch. The framework will also be developed to be flexible to future changes and developments in infrastructure.
Consumer protection	The regulatory regime will be developed ensuring that consumers are protected from the cost implications of excessive returns or market power that might accrue to operators of the Pilot NSIs. The regime needs to be transparent and robust in its administration.
Cost and revenue alignment	The regulatory framework will seek to align costs and benefits to ensure a fair and proportionate risk and reward balance between the relevant parties.
Co-ordinated regulatory treatment	Ofgem endeavours to develop the regulatory regime in coordination with connecting National Regulatory Authorities,

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	while taking into account stakeholder engagement and consultation processes.
Level playing field	The regulatory treatment in GB for Pilot NSIs should facilitate participation of third-party developers and should be impartial and unbiased between incumbent Transmission System Operators (TSOs) and non-TSO developers.

## **4. Decisions on cross-border sharing of costs and revenues for Pilot NSIs**

4.1 This section addresses cross-border sharing of costs and revenues for Pilot NSIs. In the June 2023 consultation we asked the following questions on this topic:

***Q5: How should the cost and revenue sharing boundaries of an MPI or NSI be defined?***

***Q6: How should costs and benefits of MPIs and NSIs be shared with connecting countries?***

### **Consultation responses**

***Q5 How should the cost and revenue sharing boundaries of an MPI or NSI be defined?***

- 4.2 Ten respondents commented on Question 5. Most respondents agreed with Ofgem’s proposed definition of the cost and revenue sharing boundaries of OHAs as being from system to system and excluding any connected generation.
- 4.3 Two respondents disagreed with this approach. One commented that the proposed approach targets assets in other jurisdictions which already have regulatory arrangements in place, determined by the NRA of each respective country and that instead the extension of the existing onshore grid was the appropriate scope to consider. They also noted “that congestion revenue on the EU side is subject to regional methodology to redistribute congestion income depending on where the congestion lies in the region.” and that “this is already the case within a flow-based region and will naturally be extended towards the interconnectors and offshore bidding zones part of implicit market coupling.”
- 4.4 The ESO stressed that the boundaries should be considered holistically to incorporate charges between multiple generators and knock-on impacts to the wider network (e.g. boundary reinforcements) in GB and the connected EU TSO.
- 4.5 Another developer respondent noted that generally the developer, Ofgem, and the authorities in the connecting country need to agree the approach on a project-by-project basis. They also commented that revenues accrue to different parts of the project – but they are only accruing because the whole project is there – therefore it is appropriate to share revenues equitably.
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***Q6 How should costs and benefits of MPIs and NSIs be shared with connecting countries?***

- 4.6 Seven respondents commented on Question 6. Five of the respondents that commented agreed with Ofgem’s preferred approach of proportional sharing of the total costs and revenues of NSIs between the connecting countries. The other two respondents expressed views as outlined below.
- 4.7 Of the respondents that did not fully agree, an offshore transmission developer said that for the foreseeable future an agreement on how costs and benefits are shared between two connecting countries should be sought on a project-by-project basis.
- 4.8 A TSO OHA developer from another jurisdiction stated that 50/50 sharing must not be from shore-to-shore but on the interconnector part between different (offshore) bidding zones. They commented that CBA studies should clearly indicate that there is a lot of social welfare to be captured by both countries, certainly when it is taken into account the wider benefits (avoidance of RS curtailment, higher security of supply, more robust adequacy etc). They cautioned that a lot of time could be lost in order to agree on a different sharing mechanism.

**Ofgem response to feedback**

***Q5 How should the cost and revenue sharing boundaries of an MPI or NSI be defined?***

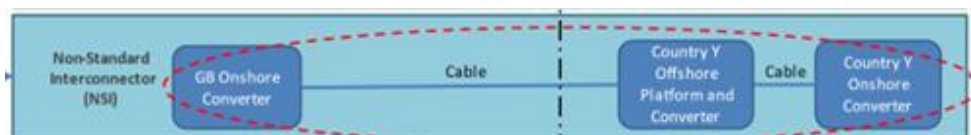
- 4.9 Since congestion revenue accrues asymmetrically on each part of the cross-border cable of an OHA, we consider that the entire system to system scope of the asset should, preferably, be used in setting boundaries for sharing the costs and revenues of Pilot NSIs within their wider OHAs (see Figure 1 below). An OBZ (if applicable to the OWF connected to the offshore converter station to which a Pilot NSI connects) affects the location of congestion revenues on the two lines of the wider OHA. These congestion revenues are created by the presence of the cross-border trade in electricity in the system-to-system project.
- 4.10 This means that we would, where feasible, include in the cost and revenue sharing calculations the relevant components of the wider OHA assets, of which the Pilot NSI forms part, in the connecting jurisdiction. This approach is
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consistent with the existing approach to point-to-point interconnectors, where the whole asset is typically taken into consideration for the purpose of sharing its costs and revenues.

**Figure 1: Cost and revenue sharing boundaries - system to system**



- 4.11 However, we recognise that this area of Pilot NSI regulation also needs to take account the legal and regulatory arrangements in the connecting jurisdiction. These arrangements can vary between connecting jurisdictions.

**Q6 How should costs and benefits of MPIs and NSIs be shared with connecting countries?**

- 4.12 Ofgem’s preferred approach to defining the cost and revenue sharing boundaries above enables the preferred approach of proportional sharing of the total costs and revenues of Pilot NSIs between the connecting countries.
- 4.13 We recognise that the other jurisdiction may already have a regulatory funding arrangement in place, for relevant assets, with the incumbent TSO and these arrangements should be considered in agreeing the sharing of costs and benefits of Pilot NSIs between GB and other jurisdictions.
- 4.14 Some connecting countries are building “energy islands” rather than offshore converter platforms, which are built to accommodate multiple energy projects and are substantially more capital intensive. In these cases, it may be possible to separate out the costs of the relevant converter station on the energy island (and the relevant pro-rated civil engineering costs of the island that relate to this converter station). Costs not applicable to the Pilot NSI, or the OHA of which the Pilot NSI forms part, could be allocated to the appropriate other parties.
- 4.15 If there are other legal or regulatory considerations in the connecting jurisdiction affecting the cost and revenue sharing for a Pilot NSI, these can be discussed and an appropriate approach found taking into account the interests of consumers in GB and the connecting country.
- 4.16 We continue to engage in discussions, with relevant NRAs and governments, to establish how the boundaries and cost and revenue sharing arrangements for
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Pilot NSIs should be defined. In some circumstances this activity may overlap with establishing a regulatory framework to apply to the Pilot NSIs on the GB side.

**Our decision**

***Q5 How should the cost and revenue sharing boundaries of an MPI or NSI be defined?***

**and**

***Q6 How should costs and benefits of MPIs and NSIs be shared with connecting countries?***

4.17 We will take account of legal and regulatory constraints in connecting jurisdictions and the interests of GB consumers in considering the cost and revenue sharing boundaries of a Pilot NSI. We will contribute to ongoing international discussion and development of regulatory arrangements on this topic with a view to achieving fair sharing of costs and revenues on Pilot NSIs and other OHAs to support the growth of the sector and protect the interests of GB consumers.

## **5. Decisions on costs, revenues and risks of Pilot NSIs**

- 5.1 This section addresses costs, revenue and risks in relation to the Pilot NSIs.
- 5.2 In the June 2023 Consultation, we noted that we may adopt a RDE Mechanism as a project delivery delay mitigation mechanism for OHAs. Such a mechanism has been adopted for interconnectors in the third cap and floor window<sup>11</sup>. In the June 2023 Consultation, there was also discussion of the additional risks faced by OHAs relative to point-to-point interconnectors. These included: additional technical and regulatory measures to remain adaptable to further changes (such as the UK and EU moving towards an offshore meshed grid); higher coordination risks; a greater risk profile due to first-of-a-kind technical risk; and difficulties in cost estimates due to being a new regulated asset type.
- 5.3 In the June 2023 Consultation we asked the following questions on these topics:
- Q7: Do you agree that the Reasonable Delay Event mechanism should also apply to MPIs and NSIs?***
- Q8: Are there any additional risks faced by MPIs and NSIs relative to point-to-point interconnectors?***
- 5.4 Many aspects of the responses to these two questions are applicable to MPIs only and these parts of the responses will be addressed in the publication on the MPI regime. In the case of question 8 for Pilot NSIs, the responses will be taken into account in the regime parameters consultation and also if applicable in the timelines and incentives consultation (see Next Steps, section 12).

### **Consultation responses**

#### ***Q7 Do you agree that the Reasonable Delay Event mechanism should also apply to MPIs and NSIs?***

- 5.5 Eight of the nine respondents that commented were in favour of extending the RDE mechanism to NSIs. The developer of the Pilot NSIs said that the mechanism would need to be strengthened to take account of the greater risk of NSIs relative to point-to-point interconnectors.

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<sup>11</sup> [Decision on Timelines and Incentives changes for the Third Cap and Floor Window for Interconnectors | Ofgem](#)

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## **Ofgem response to feedback**

### ***Q7 Do you agree that the Reasonable Delay Event mechanism should also apply to MPIs and NSIs?***

- 5.6 Means to mitigate delay impacts outside of developers' control exist in the cap and floor regime for interconnectors, such as pre-operational force majeure events, and these will be available for Pilot NSIs. In addition, Window 3 interconnectors will have access to the RDE mechanism.
- 5.7 We intend to extend the concept of RDE to the Pilot NSIs. However, the details of the RDE mechanism for the Pilot NSIs will be subject to a separate consultation and these details of the RDE mechanism put to the further consultation are likely to be very similar to the RDE mechanism applicable to Window 3 interconnectors.

## **6. Decision on regulatory regime for Pilot NSIs**

6.1 This section addresses the regulatory regime for Pilot NSIs. In the June 2023 Consultation, we considered a range of existing regulatory approaches for offshore infrastructure that could apply to OHA projects, as well as novel regime design options and combinations of the existing approaches. We noted that there are common characteristics between the existing regulatory regimes used in GB for offshore infrastructure. Using an asset value assessed by Ofgem, for example, is a key feature. The established regimes also commonly adopt the idea of a maximum allowable revenue stream for such assets based on an approved initial investment.

6.2 The June 2023 Consultation (Appendix B) contained two options for NSIs, one with a narrow cap and floor and one with a RAB. We stated that our preference was for a narrow cap and floor model to apply to NSIs (Option 6 in Appendix B).

6.3 In the June 2023 Consultation we asked the following questions on this topic:

***Q9: Which of our proposed regime concepts- Pure RAB, Narrow Cap and Floor, Partial RAB or Cap and Floor with IRR, do you consider most appropriate and why?***

***Q10: Do you agree with applying the features of a RAB regime to the offshore converter platform element of an MPI project? Is there a better form of regime for the offshore converter platform element and, if so, what would be the rationale for it?***

***Q11: Which of our proposed offshore hybrid asset package options is most appropriate in your view and why? Within your response consider if there are other viable options not considered here, if we can disregard any options entirely, and which options best reflect the draft principles.***

6.4 Responses to Q9 in respect of MPIs and to Q10 and Q11 will be addressed in the publication on the MPI regime.

### **Consultation responses on proposed regime concepts**

6.5 The seven respondents to this question favoured either the Pure RAB or Narrow Cap and Floor regime packages with three respondents favouring narrow cap and floor and three favouring RAB. One respondent did not express a preference.

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However, two respondents, supporting narrow cap and floor, also stated that RAB was an acceptable solution. One respondent favouring RAB was also open to the narrow cap and floor option with suitable developments.

- 6.6 Respondents noted that in EU connecting countries OHAs are developed under a RAB regime thereby significantly de-risking the projects. The stability of the RAB model was also noted. One OWF developer and one transmission owner expressed the view that beyond the OHA pilot the regulatory treatment of interconnectors should fall under the enduring Offshore Transmission Network Review (**OTNR**) regime being developed, as future interconnectors become incorporated into the integrated onshore and offshore transmission system. In part, this concern seemed to stem from the respondent's view that the cap and floor regime does not provide sufficient financial stability to support future interconnector projects and thereby increases regulatory and financial risk related to connecting offshore wind generators and transmission operators, which is more a consideration for MPIs.
- 6.7 The Pilot NSI developer commented that, subject to suitable adjustments that take account of the OHA risk, a narrow cap and floor could remain appropriate in maintaining commercial incentives to maximise congestion revenue whilst at the same time deliver the maximum benefit to consumers and that Option 6 – a narrow cap and floor for NSIs - is a framework consistent with the position of reducing uncertainty and striking the right balance between risk and reward.
- 6.8 Another developer commented that a narrow cap and floor appears to provide helpful flexibility for projects to move towards cap and floor or RAB-style revenue depending on the adjusting methodology used. They also commented that the regime policy, from the start, should support the widest range of funding and financing options (balance sheet, project finance etc) for projects. A different developer noted that a narrow cap and floor regime would have a narrower collar (difference between cap and floor levels) to reflect the higher risk rating and therefore reduce exposure to merchant risk and increase revenue certainty for the OHA owner.
- 6.9 A further developer expressed a preference for RAB but was open to development of the narrow cap and floor regime to mitigate the risk of other future connections in the overseas country/territory materially changing the levels of congestion revenues available to its project.
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- 6.10 One overseas TSO favoured RAB but also stated a narrow cap and floor as a second preference. It noted the cannibalisation effect under a merchant model based primarily of congestion revenue (such cap and floor regime) wherein existing interconnector owners would have a negative incentive to invest in additional assets. Three respondents noted the potential to add incentives to the RAB model, such as for availability, cost over-run provisions and other liquidated damages as seen in other jurisdictions.
- 6.11 One response stressed the importance of including market-based incentives for operators to: (i) offer their capacity in volumes and at times that most benefit market needs in terms of liquidity; and (ii) operate at maximum efficiency, for example by minimising outages.
- 6.12 Some respondents provided feedback looking out at the prospect of future windows and further development of NSI policy beyond the OHA pilot scheme. Whilst these are helpful considerations, these matters are outside the scope of this decision document.

### **Ofgem response to feedback**

- 6.13 The Pilot NSIs have significant similarities to point-to-point interconnectors apart from the difference of connecting to an OBZ in the connecting state and only forming part of an OHA. This gives them the potential to earn certain congestion revenues, subject to the cross-border cost and revenue sharing arrangements. We consider that a narrow cap and floor regime is the most suitable for the Pilot NSIs. The incentives on and signals to developers that are provided via the cap and floor regime remain valid, although they are reduced in the narrow form of the cap and floor regime. More risk protection is likely justified for the Pilot NSIs, due to the higher uncertainties and risks that these projects face relative to point-to-point interconnectors, and therefore the narrower cap and floor regime has been selected. The degree of narrowing of the cap-floor range can be decided based on the risks of the projects, available revenues, consumers' interests, and bearing in mind what the comparator of a RAB regime might be (equivalent to a position where the cap and the floor revenue levels are equal).
- 6.14 Responses to Q9 in respect of MPIs and to Q10 and Q11 will be addressed in the publication on the MPI regime.
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**Our decision**

6.15 For the Pilot NSIs, we have decided that a narrow cap and floor regime is the most appropriate regime design option, but its detailed design will depend upon project specific revenue and risk matters.

## **7. Decisions on regime parameters for Pilot NSIs**

7.1 In the June 2023 Consultation, for options that include an element of the cap and floor regime, we proposed to align the MPI and NSI regulatory regime design parameters with the regime design parameters used for point-to-point interconnectors in Window 3, but with certain divergences where appropriate to reflect different balances of revenue and cost and different levels of risk while protecting consumers' interests. Appendix C of the June 2023 Consultation outlined the regime parameters proposed at high level. We asked the following questions on this topic:

***Q12: Do you agree that these regime parameters would be applicable for MPI and NSI pilot projects as described above? If not, what changes should be considered?***

7.2 The following question also pertained to NSIs:

***Q14: What would be an appropriate availability target for MPIs and NSIs? Could a similar methodology as used for interconnectors be applied?***

7.3 We note that the responses to Questions 12 and 14 are relevant to NSIs. Questions 13 and 15 relate to MPIs only and will be considered, with the MPI-related parts of Questions 12 and 14, in the publication on the MPI regime. On 1 September 2023, Ofgem also published the consultation on changes to the financial parameters of the cap and floor regime for Window 3 electricity interconnectors and risk considerations for Offshore Hybrid Assets<sup>12</sup> which included risk considerations relevant to regime parameters for the Pilot NSIs and questions for consultation on that topic.

### **Consultation responses on regime parameters for Pilot NSIs**

***Q12 Do you agree that these regime parameters would be applicable for MPI and NSI pilot projects as described above? If not, what changes should be considered?***

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<sup>12</sup> [Consultation on changes to the financial parameters of the cap and floor regime for window 3 electricity interconnectors and risk considerations for offshore hybrid assets | Ofgem](#)

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- 7.4 Five respondents commented on this question. In general, the responses were in agreement with the applicability of the regime parameters proposed in the June 2023 Consultation but many noted that adjustments may be needed in more detailed parameters to reflect higher risk of Pilot NSIs relative to point-to-point interconnectors.
- 7.5 The Pilot NSIs' developer agreed in principle with the proposals in the June 2023 Consultation to align the NSI regulatory regime design parameters with those used for Window 3 point-to-point interconnectors, subject to certain divergences where appropriate to reflect different balances of revenue and cost and different levels of risk. They were of the view that there should be risk premia applied to the floor and cap returns for the Pilot NSIs, in order to maintain a level playing field and a risk-reward balance.
- 7.6 An OWF developer noted that, at a more granular level, the specific underlying inputs used to calculate the value of certain parameters might need to be adjusted to reflect the different riskiness of OHAs relative to point-to-point interconnectors. For example, the cap and floor return rates used to calculate the cap and floor return building blocks of the overall cap and floor levels would likely need to be adjusted to reflect this risk differential (for example, by using different benchmark indexes for the cost of debt and different asset betas for the cost of equity).

***Q14 What would be an appropriate availability target for MPIs and NSIs? Could a similar methodology as used for interconnectors be applied?***

- 7.7 Five respondents commented on this question and had a variety of views.
- 7.8 An offshore transmission developer said that the default availability targets that Ofgem applies to point-to-point interconnectors could also be applied to NSIs. An OWF developer took a similar view.
- 7.9 The developer of the Pilot NSIs suggested that Ofgem should consider the first of a kind nature of the OHAs and set a lower availability target for the pilot projects.
- 7.10 One OWF developer commented that it would seem appropriate to align the availability target between NSIs and MPIs.
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## **Ofgem response to feedback**

***Q12 Do you agree that these regime parameters would be applicable for MPI and NSI pilot projects as described above? If not, what changes should be considered?***

7.11 Many of the responses focused on risk factors that could justify different detailed regime parameters for Pilot NSIs relative to point-to-point interconnectors. The more detailed regime parameters will be developed for the Pilot NSIs, also taking into account the OHA parts of responses to the consultation on changes to the financial parameters of the cap and floor regime for Window 3 electricity interconnectors and risk considerations for offshore hybrid assets, of 1 September 2023, and further analysis.

***Q14 What would be an appropriate availability target for MPIs and NSIs? Could a similar methodology as used for interconnectors be applied?***

7.12 The availability target for the Pilot NSIs will be considered in the consultation on detailed regime parameters for Pilot NSIs. We are not making a decision in respect of question 14 at this time.

## **Our decision**

***Q12 Do you agree that these regime parameters would be applicable for MPI and NSI pilot projects as described above? If not, what changes should be considered?***

7.13 We have decided that the high-level regime parameters for the Pilot NSIs shall be as described in the June 2023 Consultation (see Appendix 1). Detailed regime parameters for the Pilot NSIs will be the subject of a future consultation (see Next Steps, section 12).

## **8. Decisions on Anticipatory Investment for Pilot NSIs**

- 8.1 Anticipatory Investment (**AI**) refers to expenditure in offshore infrastructure by an initial user, to efficiently enable the connection of a later development or developments. AI comprises the investment which goes beyond the needs of the immediate offshore development or developments. The user connecting later to the deliberately oversized infrastructure benefits from the AI made by the initial user and the consumer benefits from cost savings due to the increased efficiency of coordination. There is substantial discussion of AI, sequential/simultaneous build, user commitment, and cost recovery in sections 4.5-4.44 of the June 2023 Consultation, mostly in the context of MPIs.
- 8.2 Our minded-to position in the June 2023 Consultation was that AI policy would not extend to NSIs to account for AI made for the requirements of an OWF connecting in the neighbouring jurisdiction (i.e., not in GB) because an OWF connected in a neighbouring jurisdiction falls within the regulatory regime(s) of the competent authorities of that state and not within Ofgem’s regulatory remit. We saw a potential scenario in which a NSI developer invests in oversized infrastructure in GB waters to accommodate the needs of an OWF in the neighbouring jurisdiction, connecting at a later stage (i.e., there is an AI element to the investment made in the infrastructure in GB waters). In this instance, we have no jurisdiction over the potential later user benefitting from the AI. It is our view that in this scenario any AI will not be considered, as there will be no route to recover the AI from the OWF in the neighbouring jurisdiction.
- 8.3 Should a NSI developer invest in oversized infrastructure in GB to accommodate the needs of an OWF in the neighbouring jurisdiction, connecting simultaneously (i.e., there is no anticipatory nature to the investment), this cost could be recoverable under the cost assessment provided it is economic and efficient.
- 8.4 We asked the following question on this topic:

### **Q17: Do you support our minded-to position that AI policy should not apply to NSIs?**

- 8.5 Questions 16, 18, 19, 20, and 21 on this topic area relate to MPIs and will be addressed in the publication on the MPI regime.
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## **Consultation responses on AI for NSIs**

- 8.6 Four respondents were in favour of extending AI policy to NSIs, six were not in favour, and one did not express a view. Examples of the responses are provided below.
- 8.7 The developer of the Pilot NSIs made a case for not excluding Pilot NSIs from AI, urging cooperation to continue with Ofgem’s EU counterparts to ensure compatible arrangements are created. They noted that fully excluding Pilot NSIs from the policy ignores scenarios in which Pilot NSIs contribute further to GB offshore coordination by connecting to an OWF in an EU Member State.
- 8.8 As an example, they stated that AI should apply to Pilot NSIs in the scenario where the GB interconnector connects into an EU Member State’s energy island, with the energy island expected to be increased in capacity in the future. In that case, they may apply for a higher GB project cable capacity than is in the project’s current GB connection agreement, in anticipation of increase in the capacity of the energy island (in the waters of connecting state). This increased capacity would presumably be additional capacity in other cables to the island and in connected generation and likely also in the offshore converter station on the island. They also cited the possible scenario, where the Pilot NSI capacity is required to be increased, beyond the currently proposed GW capacity of the GB interconnector element of the Pilot NSI. This may be done in order to increase the capacity on the Pilot NSI to match the capacity of the connecting EU partner’s infrastructure.
- 8.9 An offshore wind developer put the opposite case supporting exclusion of Pilot NSIs from AI policy as these would be treated and licensed as interconnectors from a GB perspective, given that they would not have any connecting OWFs in GB waters. In the absence of these, NSI developers would be the only relevant parties delivering a single purpose asset (from a GB perspective), which would not include any shared infrastructure for the benefit of later GB users. Therefore, there would be no AI based on Ofgem’s definition of this concept.
- 8.10 An overseas TSO expressed the view that all the discussion on AI and the related parameters and models arises due to the complexity of the definition of the OHA. They continued that if a simpler definition were adopted, and if a simple RAB
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revenue model were chosen, along with a more central planning of the grid development, the discussion about AI would essentially not be required.

### **Ofgem response to feedback**

- 8.11 As noted in the June 2023 Consultation, should a Pilot NSI invest in oversized infrastructure in GB to accommodate the needs of an OWF in the neighbouring jurisdiction, connecting simultaneously (i.e., there is no anticipatory nature to the investment), this cost could be recoverable under the cost assessment provided it is economic and efficient.
- 8.12 The current User Commitment arrangements are contained in Section 15 of the Connection and Use of System Code (CUSC) in GB. The extension of these arrangements to the later user(s) of shared offshore infrastructure subject to AI, is a key part of our AI policy as it applies to the Early Opportunities and Pathway to 2030 workstreams of the OTNR.
- 8.13 User Commitment requires that the later user(s) of shared infrastructure secures liabilities in respect to the AI being undertaken on their behalf. It demonstrates seriousness of intent and goes some way to mitigate the consumer's exposure to AI risk.

### **Our decision**

- 8.14 We have decided not to extend our offshore AI policy to the Pilot NSIs.

## **9. Ownership unbundling requirements for NSI operators**

- 9.1 This section addresses ownership unbundling aspects for NSI operators as covered in the June 2023 Consultation.
- 9.2 We note that the purpose of the June 2023 Consultation was not to amend or create any additional unbundling requirements for NSIs but rather bring to the attention of stakeholders the existing unbundling requirements that will apply to NSI operators and seek views of stakeholders on how these existing requirements may influence the delivery of the NSI assets.
- 9.3 In particular, we sought stakeholders feedback on the following question related to unbundling requirements:

**Q22: Do you have any views on how the ownership unbundling requirements applicable to MPI and NSI operators may influence the delivery of these assets (and/or delivery of offshore generators connected to MPI assets)?**

### **Consultation responses on ownership unbundling requirements for NSI operators**

- 9.4 We note that this question concerned both NSIs and MPIs and the consultation responses we received relate mainly to considerations related to MPIs. Therefore, the responses related to MPIs will be covered, in due course, in the Ofgem publication on the regime for MPIs.

### **Ofgem response to feedback**

- 9.5 For the purposes of this publication we bring to the attention of stakeholders that the unbundling and certification requirements that apply to electricity interconnector operators will also apply to the NSI operators. This is because the NSI asset falls under the legal definition of an electricity interconnectors (as contained in section 4(3E) of the Electricity act) and its operators will be required to hold an electricity licence (as defined in section 6(1)(e) of the Electricity Act).

## **10. Decision on regulatory safeguards and compliance requirements for NSI operators**

- 10.1 In our June 2023 Consultation, we stated that we were in the process of establishing the appropriate level of regulatory safeguards and compliance requirements that should apply to NSI operators and which should be reflected in the interconnector licence held by NSI operators.
- 10.2 In our June 2023 Consultation, we further noted that the OFTO licence contains explicit provisions on business separation which do not appear in the electricity interconnector licence. However, we added that interconnector licence holders (as much as OFTO licence holders) are required to comply with licence provisions related to prohibition of discrimination and cross-subsidies as well as with general provisions on disclosure of information. We also pointed out that the ownership unbundling rules that already apply to the electricity interconnector licence holders would also apply to NSI operators and will require these licensed operators to be certified as independent.
- 10.3 In addition, we also made a point that the GB REMIT Regulation prohibits market manipulation and insider trading and requires wholesale energy market participants to publicly disclose inside information. The related enforcement regulations provide the enforcement framework that deals with relevant non-compliance and offences.

### **Consultation responses on regulatory safeguards and compliance requirements for NSI operators**

- 10.4 We note that the consultation questions related to the topic of the regulatory safeguards and compliance requirements (questions 23–25) contained in June 2023 Consultation concerned only MPIs. Therefore, stakeholders’ responses will be taken into account in the relevant future Ofgem publication concerning MPIs.
- 10.5 Overall, for the purposes of this decision that provides the high-level regulatory regime for the NSI projects participating in our OHA pilot scheme, we have not identified any specific additional regulatory safeguards and compliance requirements.
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10.6 If we identify any in the future, our intention is to implement them via the licence modification process. This means that the stakeholders will be duly publicly consulted on any such proposed licence modifications.

**Our decision**

10.7 We have decided not to introduce any additional regulatory safeguards and compliance requirements for the purposes of this decision on the high-level regulatory regime for the NSI projects participating in our OHA pilot scheme.

10.8 We have further decided that if any appropriate regulatory safeguards and compliance requirements applicable to the Pilot NSIs are identified by Ofgem, they shall be:

- (1) contained in the electricity licence granted to Pilot NSI operators and amended as appropriate;
- (2) not stricter or higher than is necessary for regulatory purposes; and
- (3) if any are proposed to be introduced, duly consulted upon via the licence modification process, including a clear explanation as to why they are necessary.

Further, we have decided that NSI operators holding interconnector licences and operators holding interconnector licences for operation of standard interconnectors may all constitute subsidiary companies under a single parent company.



## **11. Connection and onshore charges for offshore generators connecting to an MPI and NSI**

11.1 This section covers connection and onshore charges for offshore generators connecting to an MPI and NSI in the June 2023 Consultation. For NSIs, in the June 2023 Consultation we said that the electricity interconnector licence provides a charging methodology setting out how users of an interconnector should be charged for access to (and use of) the interconnector’s assets. We also stated that we consider that the local charges for connection to, and use of the NSI asset in the connecting jurisdiction will be dealt with under a commercial agreement between the OWF and NSI owners. Ofgem does not have jurisdiction over connected generators in foreign jurisdictions.

We asked the following question on this topic:

**Q26: Do you agree with the above principles relating to connection and onshore charges for offshore generators connecting to an MPI and NSI?**

### **Consultation responses on connection and onshore charges for offshore generators connecting to a NSI**

11.2 Three responses dealt with this question in relation to NSIs and all agreed with Ofgem’s position.

#### **Ofgem response to feedback**

11.3 For Pilot NSIs, we note that the form of electricity interconnector licence to be used provides a charging methodology setting out how users should be charged for access to (and use of) the assets.

11.4 Any local charges for connection to, and use of the NSI asset in the connecting jurisdiction, will be dealt with under a commercial agreement between the OWF and NSI owners. Ofgem does not have jurisdiction over connected generators in foreign jurisdictions.

## **12. Next steps**

- 12.1 We will consult on the detailed regime parameters for the Pilot NSIs, including timelines and incentives and also taking account of the feedback relevant to NSIs received from OHA part (section 2) of the consultation on changes to the financial parameters of the cap and floor regime for Window 3 electricity interconnectors and risk considerations for offshore hybrid assets. We expect to publish, in early 2024, our minded-to IPA decision on which applicant project(s) for the OHA pilot scheme will receive a regime in principle.
- 12.2 Regarding MPIs, further policy work is being undertaken by Ofgem and DESNZ on market arrangements and other matters and by DESNZ on the eligibility for CfDs of MPI-connected OWFs. Following this work, we will consult on the next steps for the MPI regime.

## Appendices

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## Appendix 1 – High level regime parameters for Pilot NSIs

A1.1 In this appendix we describe at high level the regulatory regime parameters for Pilot NSIs.

### Appendix Table 1: High level regulatory regime parameters for Pilot NSI projects

A1.2 The regime parameters below will be supplemented by further detailed regime parameters for the Pilot NSI projects in a future consultation and decision.

Form of revenue stream attributable	Narrow cap and floor based on existing point-to-point interconnector cap and floor methodology. Ofgem will decide the overall risk levels for financing purposes and the degree to which the cap and floor levels should be narrowed, and any other project-specific adaptations.
Profile	The cap and floor would be flat in real terms over the regime duration. The separate cap and floor returns would be used to calculate the annuities for the cap and floor levels.
Regulatory reporting	Developers would be required to report annually during the operational phase on revenues, availability, and costs. Developers would also be required to report during the construction phase on progress and costs development. This reporting must be in line with the 'regulatory instructions and guidance' (RIGs) issued by Ofgem.
Regime duration and regime start date	The regime duration would be set for 25 years. We propose to align, in general, with the timelines and incentives changes proposed for Window 3 interconnectors (and this will be the subject of consultation together with detailed regime parameters for Pilot NSIs). This means that the 25-year regime should be maintained and that project-specific connection dates are accommodated to maximise project delivery by the end of 2032. If a reasonable delay event or a pre-operational force majeure event occurs that leads to project delivery delays (and which is approved by the Authority), then we would update the regime start date accordingly.
<i>Cost-related regime parameters</i>	
Additions to the asset value used in the annuitisation	Approved capital expenditure (capex) would be remunerated through annuitised depreciation and return allowances generated from a Regulatory Asset Value (RAV). These additions would thus contribute to the relevant portion of the revenue stream of a Pilot NSI project. There would be a review of all approved capex elements before construction, and a final, post-construction review of some capex elements to consider changes in costs and remaining cost items not yet assessed. Other costs also feed into the revenue streams through the RAV annuitisation process.

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**Decision** – Decision on the Regulatory Framework for the Non-Standard Interconnectors of the Offshore Hybrid Asset pilot scheme

Interest During Construction (IDC)	IDC will be treated as a cost incurred in the construction period which is capitalised and feeds into the revenue stream. IDC will be based on the actual approved costs and thus contribute to the relevant portion of the revenue stream.
Operating costs (opex)	An ex-ante assessment of opex will be undertaken ahead of operation – and this will be set for the length of the regime with a possible re-assessment and re-set no earlier than 10 years into the regime duration. In terms of non-controllable costs (defined as Crown Estate Lease Fees, GB Property Rates; and GB Licence Fees), we will set a baseline allowance as part of the opex assessment. Any changes in the economic and efficient costs of non-controllable opex relative to the baseline allowance will be passed through as a revenue adjustment at the end of an assessment period.
Tax	Tax will be treated on an actual tax paid rather than notional basis. There is no tax-trigger mechanism for tax changes (i.e., the tax will be set for the length of the regime). This approach aligns with the approach taken for Window 3 point-to-point interconnectors.
Financial transaction costs (i.e., costs of raising finance)	The approach will seek to make greater use of actual project information, subject to protecting consumers’ interests. If using an assumed capital structure an allowance will be made for financial transaction costs of debt and, to the extent applicable, equity. We may either assume 50% notional gearing during operation with the gearing assumption from the IDC calculation used during construction, or actual gearing of the specific project.
<i>Revenue-related regime parameters</i>	
Indexation	Indexation would use the CPIH index but we will keep under consideration issues around liquidity raised by stakeholders. We aim to retain the option to change to CPI if necessary and justifiable, as proposed for Window 3 point-to-point interconnectors.
Assessment periods	Assessments would be carried out either on a 1 year, or on a 5-yearly, discrete basis (each 5-year period is considered in isolation). At the end of the five-year period, cumulative revenue would be assessed against the cap and floor levels on a net present value neutral basis.  It would be possible to request within-period adjustments within an assessment period. This adjustment is subject to a decision by us based on justification from the project developer (and providing revenue is below the floor/above the cap). It will be considered on a cumulative basis. If at the end of the assessment period the cap and floor are not breached, then any such within-period payment would need to be returned on an NPV-neutral basis.  There would also be the option of a regime variation in which assessments are carried out on a 1 yearly basis and within-period adjustments could not be raised.
Availability incentives	An adjustment of up to +/-2% of the cap level would be available, if availability exceeds or falls short of a target availability. The target availability would be set by us on a project-by-project basis

**Decision** – Decision on the Regulatory Framework for the Non-Standard Interconnectors of the Offshore Hybrid Asset pilot scheme

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	<p>based on the established methodology used for point-to point interconnectors.</p> <p>Developers will lose automatic eligibility for floor payments for each individual year if availability is below 80% in that year. We will retain eligibility for floor payments if the outage that caused availability to fall below 80% is approved by us as caused by an 'exceptional event'.</p> <p>Developers with an approved regime variation request could, similar to Window 3 point-to-point interconnectors, receive a temporary top up payment loan equal to a maximum of four times the annual floor, where availability falls below the 80% minimum for reasons other than force majeure and where merchant revenues are insufficient for developers to repay annual debt obligations to lenders. Such outstanding loans would be required to be paid back in full before developers can recover their equity investment and dividends.</p>
Financial assistance and refinancing	Any grants would be netted off the relevant investment value incorporated into the revenue stream levels. Refinancing gains would be retained by the developer.
Income adjusting events during operation	<p>Should the developer experience an income adjusting event during the regime ie an event of force majeure nature, it may claim efficient costs caused by that event.</p> <p>Where a claim is made, we would carry out an assessment of the efficiency of the costs. Should we accept the claim, the costs would be netted off the relevant asset's revenue stream for the purposes of the periodic revenue assessments.</p>

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