

Consultation

Consultation on changes to the Initial Project Assessment of the Nautilus Offshore Hybrid Asset

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Nautilus is an Offshore Hybrid Asset (OHA) project being assessed for our OHA Pilot Scheme. The OHA Pilot Scheme is in its Initial Project Assessment (IPA) stage, in which Ofgem considers which projects should be granted a regulatory regime in principle. Since the assessment described in our minded-to consultation of 1 March 2024, two key characteristics of the Nautilus project have changed – GB connection location and the modelled capacity of cables linking the Belgian offshore island to the Belgian shore. These changes may influence our assessment of its benefit to GB consumers. In this consultation we have presented updated IPA analysis for specific criteria to reflect these material changes to the project and are now asking stakeholders if these new findings change any of the feedback received in response to our previous IPA consultation. We welcome views from all interested stakeholders and aim to take a final decision on the IPA in autumn 2024.

This document outlines the scope, purpose and questions of the consultation and 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 response.

Consultation – Consultation on changes to the Initial Project Assessment of the Nautilus Offshore Hybrid Asset

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Executive Summary

On 1 March 2024 we published our consultation on our minded-to positions for the IPA of the Window 3 and OHA Pilot projects, which included a minded-to reject position on the Nautilus project. This was due to 1) its high constraint cost impact, and 2) the uncertainty in the project's configuration meaning its GB welfare impact is uncertain.

In response to the OHA Initial Project Assessment (OHA IPA consultation),¹ the developer, National Grid Ventures (NGV), has made the decision to change the GB connection point for Nautilus from Grain in Kent to Leiston in Suffolk. We understand that this change is being proposed to reduce the projected constraint costs for this project and therefore mitigate concerns that we raised as part of our minded-to reject position on Nautilus.

Additionally, authorities in Belgium have resolved the uncertainty on the project's configuration, by confirming that the capacity connecting the offshore island to the Belgian shore will be 1.4GW, rather than 3.5GW as we had previously modelled and assessed. We are also able to update the analysis using updated cost and revenue sharing assumptions for the project, enabling a fuller assessment of the project's likely impacts.

These changes to the key characteristics of the Nautilus project merit a re-consultation on the assessment of its benefit to GB consumers. The change in connection location, undertaken to improve Nautilus' prospects of receiving regulatory approval, reduces constraint costs on Nautilus considerably but also impacts constraint costs to varying degrees on other applicant projects. Clarification over the Belgian Energy Island configuration improves our assessment of the project's maturity, and we provide updated analysis of the socio-economic welfare (SEW) impact of the project.

Scope of this consultation

This consultation document describes only the impacts that the changes mentioned above have on the Nautilus project and on other applicant projects to the OHA Pilot scheme and Window 3.

Constraint costs have been reassessed by the National Grid System Operator (NG ESO) to update the connection location of Nautilus to Leiston, and the modelled cable capacity changes, and results are presented for the Marginal Additional (MA) analysis only.

A sensitivity to the market modelling has been created by Arup to account for the change in capacity of Line 2 to 1.4GW, and to reflect the latest proposed cost and

¹ [Initial Project Assessment of the Offshore Hybrid Asset pilot projects | Ofgem](#)

revenue sharing arrangement with Belgium. The market modelling outputs have been re-assessed and presented for the Marginal Additional case only.

Overview of results

The analysis shows that modifications to Nautilus' location and Line 2 capacity indicates a reduction in constraint costs of over 50%, from the original range of £1.3bn to £3.3bn to the updated range £0.5bn to £1.4bn when comparing lowest and highest scenarios.

All applicant projects except Cronos face an increase in projected constraint costs resulting from Nautilus' move to Leiston. These are lowest for LirIC and MaresConnect (ca. £0.04bn increase) and highest for Lion Link and AQUIND (ca. £0.6bn increase).

The updated energy island configuration and updated cost and revenue assumptions improve our assessment of the project's maturity by providing certainty on direction of development, and mean the project retains a positive total SEW.

Table 1: Summary of Nautilus' updated IPA results owing to changes in location, capacity, and cost and revenue sharing

	Maturity	Total SEW for GB £bn (real 2022 GBP, NPV 3.5% discount rate)	Balancing market impacts (constraint costs) £bn
Nautilus (original IPA)	Configuration TBC	£0.4 to £1.0	£1.3 to £3.3
Nautilus (with revisions to connection and capacity)	Configuration confirmed	£0.1 to £0.4	£0.5 to £1.4

Next steps

We are now seeking views on the outcomes of this analysis, and welcome responses from all interested stakeholders.

We will take into account the impacts of the changes to the project, responses to this consultation, and any other relevant evidence in deciding either to reject or accept Nautilus's application at IPA stage. Any other considerations that were part of the original OHA assessment and consultation will remain as they were within the original consultation, for the determination of the project's success in gaining regulatory approval. At this stage we cannot comment on a change in the minded-to position on the Nautilus project or any other applicant project to either the OHA Pilot or Window 3.

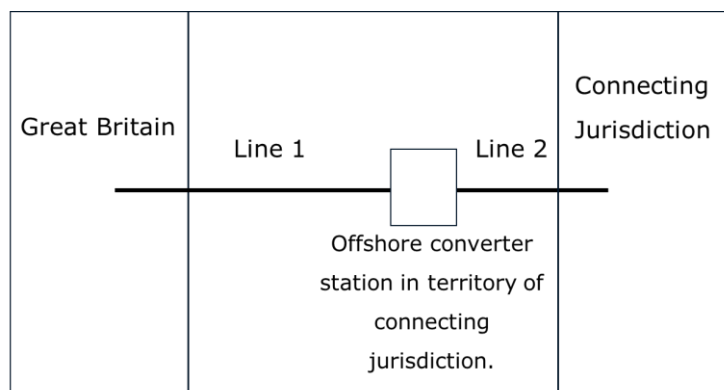
Stakeholders should submit responses to Cap.Floor@ofgem.gov.uk by **15 August 2024**. We expect that a final decision will follow in autumn 2024.

1. Introduction

- 1.1 OHAs combine interconnection with the transmission of offshore wind, providing the potential for coordination and transmission asset efficiency benefits compared to standalone point-to-point interconnectors and radial offshore wind connections. Additionally, a meshed grid in the North Sea could enable more efficient sharing of renewable electricity between countries in North-West Europe. There is significant strategic value in coordinated development to reach extensive international offshore wind ambitions for 2050. For further detail on the strategic benefit of OHAs, see Section 2 of the OHA IPA consultation of 1 March 2024 (the "**OHA IPA consultation**").
- 1.2 Non-Standard Interconnectors (NSIs) are a subset of OHAs where the offshore generation is located in the connecting jurisdiction rather than GB. For the purposes of the OHA pilot scheme the regulatory description of an 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. This means that the Pilot NSIs comprise the assets that connect GB to the offshore converter stations in the connecting states. We call this Line 1, as shown in Figure 1 below.
- 1.3 For each wider OHA, the line from the offshore converter stations in the connecting states to the onshore electricity systems of these states is referred to by Ofgem as Line 2 and is outside the scope of the relevant Pilot NSI project. However, the total cable capacity between the energy island and the Belgian shore, and how they are operated, is important for the IPA analysis and any changes are reflected within the analysis due to its impacts on Line 1.
- 1.4 The OHA IPA consultation in March 2024 presented a minded-to rejection for Nautilus.
- 1.5 The Nautilus NSI project is being developed by NGV in cooperation with Elia (the Belgian Transmission System Operator). It is a proposed 1.4GW OHA connection to an offshore converter station on the Modular Offshore Grid 2 (MOG2) Belgian energy island, also known as the Princess Elisabeth Island. The asset will have a 1.4GW Line 1 capacity.

² See page 17 [Decision on the Regulatory Framework for the Non-Standard Interconnectors of the Offshore Hybrid Asset pilot scheme \(ofgem.gov.uk\)](https://www.ofgem.gov.uk/consultation/decision-on-the-regulatory-framework-for-the-non-standard-interconnectors-of-the-offshore-hybrid-asset-pilot-scheme)

Figure 1: A schematic demonstrating the configuration of a shore-to-shore Offshore Hybrid Asset, of which each Pilot NSI comprises Line 1



What are we consulting on?

- 1.6 Since the March 2024 consultation on the OHA IPA, there have been material changes to the Nautilus project. The developer has changed the connection location in GB, the Belgian authorities have confirmed a 1.4GW capacity on Line 2 of the OHA, and proposed cost and revenue sharing arrangements have been revised for the project. These changes have an effect on the market modelling and system impacts analyses, and merit updated analysis and re-consultation. This consultation presents additional analysis for the relevant aspects of the IPA which have changed owing to the changes to Nautilus. We now ask stakeholders to consider this new analysis.
- 1.7 We will take into account the impacts of the changes to the project, responses to this consultation, and any other relevant evidence in our final decision to either grant or not grant the Nautilus project an OHA regulatory regime. Any other considerations that were part of the original OHA assessment and consultation will remain as they were within the original consultation, for the determination of the project's success in gaining regulatory approval.

Related publications

Context for the introduction of Window 3 for interconnectors and the OHA pilot scheme

[Interconnector Policy Review: Decision \(ofgem.gov.uk\)](https://www.ofgem.gov.uk/publications/interconnector-policy-review-decision)

[Targeting Analysis for the Third Cap and Floor Window and MPI Pilot Regulatory Framework | Ofgem](#)

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

[Cap and Floor Third Window and MPI Pilot Needs Case Framework \(ofgem.gov.uk\)](#)

[Decision on Multi-Purpose Interconnector pilot project Selection | Ofgem](#)

OHA regulatory framework and the OHA pilot projects IPA Consultation

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

[Decision on the Regulatory Framework for the Non-Standard Interconnectors of the Offshore Hybrid Asset pilot scheme | Ofgem](#)

[Initial Project Assessment of the Offshore Hybrid Asset Pilot Projects \(ofgem.gov.uk\)](#)

Consultation stages

Table 2: Consultation stages

Stage 1	Stage 2	Stage 3	Stage 4
Consultation open	Consultation closes (awaiting decision). Deadline for responses	Responses reviewed and published	Full IPA decision
15/07/2024	15/08/2024	Q3 2024	Autumn 2024

How to respond

- 1.8 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.
- 1.9 We've asked for your feedback in each of the questions throughout. Please respond to each one as fully as you can.
- 1.10 We will publish non-confidential responses on our website at www.ofgem.gov.uk/consultations.

Your response, data and confidentiality

- 1.11 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.

- 1.12 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'll 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.
- 1.13 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 will be the data controller for the purposes of GDPR. Ofgem uses the information in responses in 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 4.
- 1.14 If you wish to respond confidentially, we'll keep your response itself confidential, but we will publish the number (but not the names) of confidential responses we receive. We won't 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

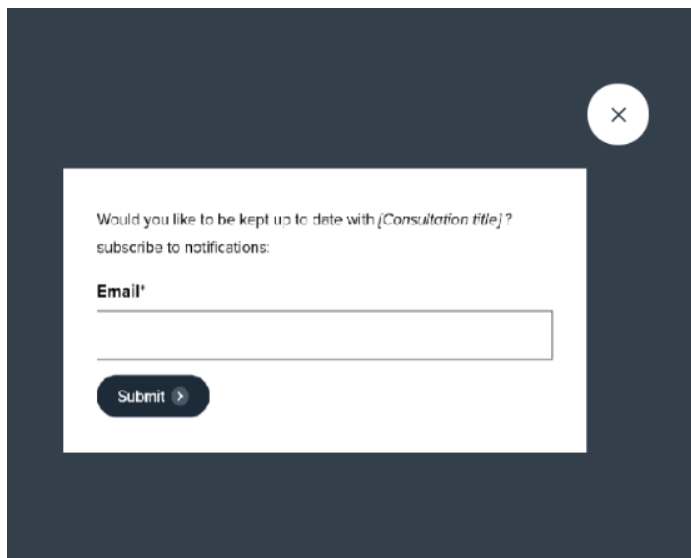
- 1.15 We believe that consultation is at the heart of good policy development. We welcome any comments about how we've run this consultation. We'd also like to get your answers to these questions:
- Do you have any comments about the overall process of this consultation?
 - Do you have any comments about its tone and content?
 - Was it easy to read and understand? Or could it have been better written?
 - Were its conclusions balanced?
 - Did it make reasoned recommendations for improvement?
 - Any further comments?
- 1.16 Please send any general feedback comments to stakeholders@ofgem.gov.uk

How to track the progress of the consultation

- 1.17 You can track the progress of a consultation from upcoming to decision status using the 'notify me' function on a consultation page when published on our website. [Ofgem.gov.uk/consultations](https://www.ofgem.gov.uk/consultations).

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Notify me 



A dark blue modal window with a white close button (X) in the top right corner. Inside the modal is a white rectangular form. The form contains the text: "Would you like to be kept up to date with [Consultation title]?" followed by "subscribe to notifications:". Below this is a label "Email:" and a text input field. At the bottom of the form is a dark blue button with the text "Submit" and a right-pointing arrow.

Once subscribed to the notifications for a particular consultation, you will receive an email to notify you when it has changed status. Our consultation stages are:

Upcoming > **Open** > **Closed** (awaiting decision) > **Closed** (with decision)

2. Context and background

Minded-to position on Nautilus

- 2.1 In our March 2024 OHA IPA consultation, we proposed to reject Nautilus for an OHA regulatory regime. The main reason was that the project is expected to incur particularly high constraint costs, and because of the uncertainty in the project's configuration meaning its GB welfare impact is uncertain.

Changes since our IPA consultation

- 2.2 As a response to the minded-to position stated in the consultation, we have been notified by Nautilus' developer, NGV, that it is moving the connection location in GB from Grain in Kent to Leiston in Suffolk, the generalised locations of which can be seen in Figures 2 and 3 below.

Figure 2: Map showing original indicative connection points for the OHA pilot scheme applicants

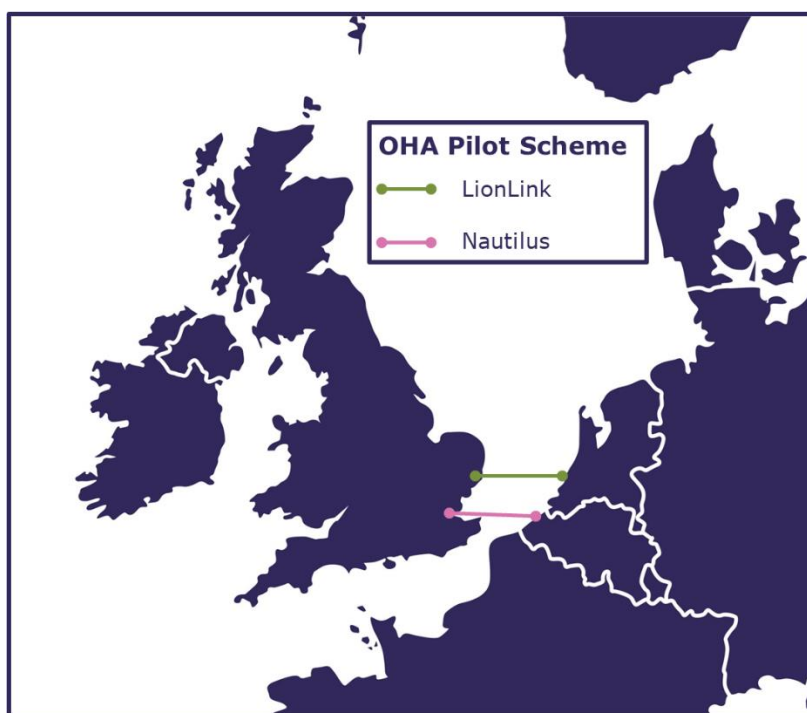
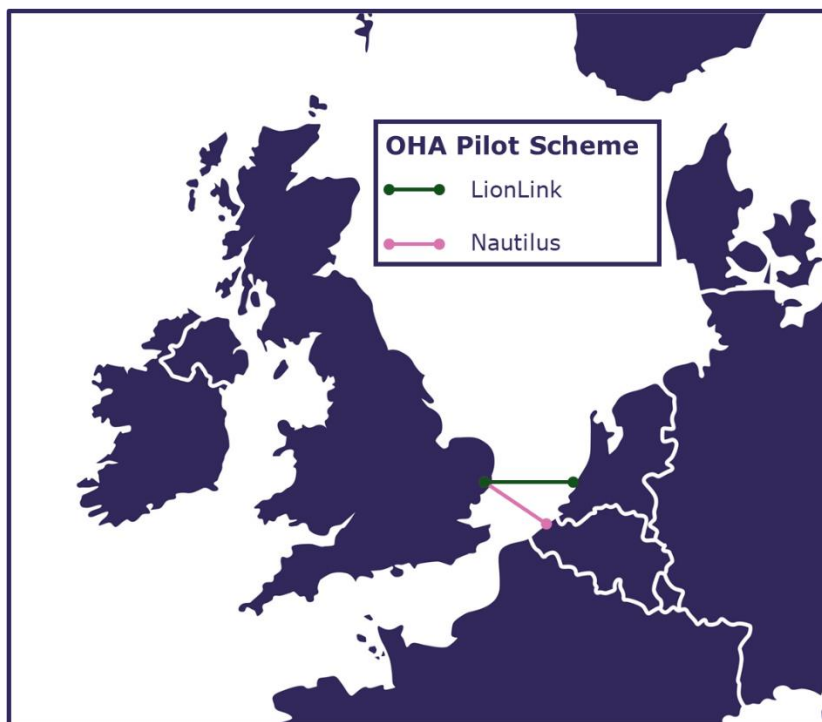


Figure 3: Map showing updated indicative connection points for the OHA pilot scheme applicants



- 2.3 Secondly, updated information has been provided to Ofgem by the Belgian regulator CREG, the Federal Ministry for the Economy in Belgium (FPS Economy), and Elia, which confirmed how the MOG2 energy island would operate. This means that the available capacity between the offshore island and the Belgian shore will be 1.4GW and not 3.5GW as originally modelled in our analysis. Paragraph 4.20 of the OHA IPA consultation notes that the uncertainty on the configuration of the Belgian energy island bears substantially on the economics of Nautilus, and a change would impact the SEW calculation, interconnector revenue projections, and NG ESO's analysis. With that in mind, we have returned to reassess these points.
- 2.4 The clarified and updated configuration of Nautilus is shown in Figures 4 and 5 below. They show that the original analysis assumed that the total capacity from MOG2 to the Belgian shore would amount to 3.5GW (1.4GW + 2.1GW), however, it has since been clarified and confirmed that there is a difference in the topology of the energy island and its operational mode. While the energy island will have a single node topology but will operate as a "split node" maintaining separation between the 1.4GW HVDC cables and 1.4GW windfarm,

from the 2.1GW windfarm and 2.1GW HVAC cables. This means that the capacity of Line 2 of Nautilus will only be the 1.4 GW.

Figure 4: The original configuration of the shore-to-shore OHA between GB and Belgium, as modelled in our analysis, in which Nautilus comprises Line 1

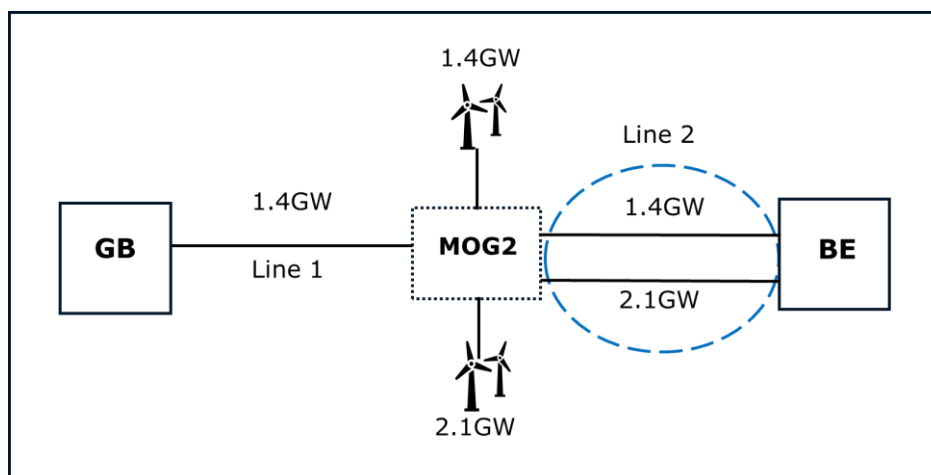
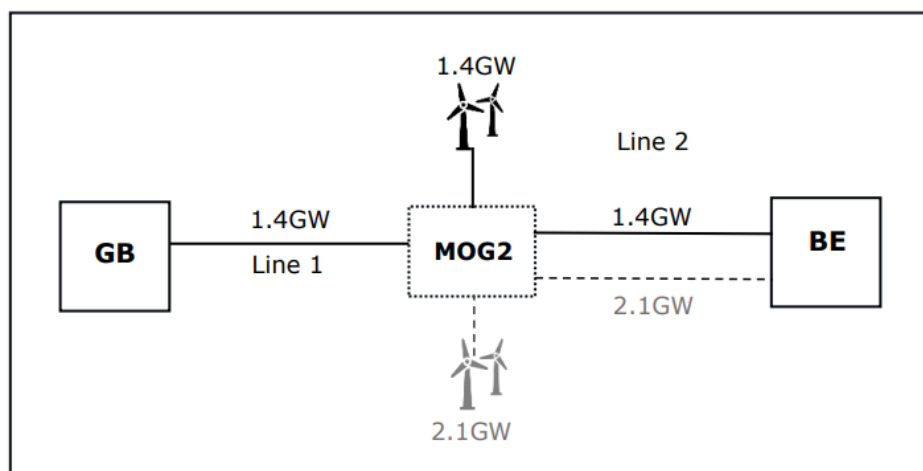


Figure 5: The updated configuration of the shore-to-shore OHA between GB and Belgium, as modelled in our revised analysis, in which Nautilus comprises Line 1



2.5 Finally, since the original IPA consultation, an updated proposed cost and revenue sharing arrangement has been used in our analysis of the Social Economic Welfare.

New evidence obtained to conduct a re-assessment

2.6 To conduct a re-assessment, we commissioned our consultants at Arup to re-run the Nautilus modelling with the configuration changes. We also asked NG ESO to change Nautilus to a project connecting to Leiston with a 1.4GW Line 2 capacity,

and then to re-run the constraint costs analysis to provide results for all relevant projects.

- 2.7 We also obtained updated information from the developer to its IPA submission, such as a valid connection agreement and updated cost profile for the project.

Ofgem's decision making

- 2.8 The re-analysis for this particular project is being completed due to updated information that will materially impact the project's assessment. Window 3 projects are mentioned in this consultation, as these are all projects connecting within the same timeframe, it is therefore appropriate that they are included in the same market modelling and system impacts analysis.

3. Methodology of the updated analyses

Scenarios and approach of Arup and ESO modelling

- 3.1 In Arup's sensitivity, characteristics of Nautilus were updated and then only Nautilus' market modelling assessment was re-run. The interconnector SEW portion of the welfare analysis is the method of understanding how other applicant projects are affected within the re-run analysis.
- 3.2 In NG ESO's sensitivity, characteristics of Nautilus were updated, and then the constraint costs section of the system impacts analysis was re-run for all assessed projects.
- 3.3 In both sensitivities, we present below only the MA approach. Paragraph 3.39 of the OHA IPA minded-to consultation notes that the MA approach is Ofgem's focus in its decision-making because it depicts a more probable view of the world than the FA approach. It is reasonable to assume that more interconnectors rather than less will be constructed between GB and Europe from now to the end of the modelled period, to respond to the needs of an increasingly electrified system. In addition, focusing attention on the MA approach ensures we can assess the impact of the changes on Nautilus for all other applicant projects.
- 3.4 Explanations of the MA approach and each of the chosen scenarios are reiterated below.
- 3.5 **Marginal Additional (MA) approach:** this approach assesses the impact of each project against the baseline of interconnectors, including those currently operational, under construction or under development with regulatory approval, as well as all the other Window 3 and OHA applicant projects. This represents an estimate where the interconnector landscape is the most pessimistic from the perspective of the assessed project as it assumes all other projects in the window are constructed.
- 3.6 Each scenario, detailed below, considers how much energy we would need and where it would come from:
 1. **Leading the Way (LW):** describes the fastest credible decarbonisation journey achieved through a combination of consumer-led and system-led solutions. This scenario includes high levels of cross-border capacity between GB and connected countries.

2. **Consumer Transformation (CT):** this pathway reaches net zero by 2050 driven by consumer-led solutions. It includes lower levels of cross-border capacity than LW.
3. **Falling Short (FS):** represents the slowest credible speed of decarbonisation and does not reach net zero by 2050. It includes relatively low levels of cross-border capacity.

4. Impacts of modifications

Questions

- Q1. Does the updated evidence presented on the needs case of the Nautilus project change your prior feedback submitted for the OHA IPA consultation?
- Q2. Do you think that Ofgem should be considering any other factor for the Nautilus project in light of the material changes in connection location and capacity?

Maturity and deliverability- Updated information owing to the change in connection location

Plans for grid connection in the connecting country

- 4.1 It is important to note that at the time of the OHA IPA consultation the configuration of the energy island was yet to be determined.
- 4.2 This uncertainty on the configuration of the energy island was of material concern to Nautilus' needs case. This is because any change to the modelled cable capacity between the Belgian energy island and the Belgian shore will impact the flows of the NSI, the overall SEW, interconnector revenues, and the NG ESO analysis. Ofgem at the time of the OHA IPA consultation could not be confident in the project's expected impacts on GB consumers.
- 4.3 Since the OHA IPA consultation, we have received clarification on the configuration of the energy island, which has improved our assessment of the project's maturity.

Sensitivity for the confirmed Belgian energy island configuration and updated cost and revenue sharing arrangement

- 4.4 It has now been clarified that the Belgian Energy Island will operate as a "split node" and therefore in operation a split between the 1.4GW Line 2 capacity and the 2.1GW cables also linking the energy island to the Belgian shore.
- 4.5 This change combined with updated cost and revenue sharing arrangements means, overall, the net welfare results for Nautilus in this sensitivity across all scenarios are lower than in the original configuration presented in the OHA IPA consultation, however they remain positive.
- 4.6 Reducing the total cable capacity between the energy island and the Belgian shore decreases the modelled volume of cross-border trade. Line 2 revenues form the majority of Nautilus' overall revenues. Under this configuration, as with the analysis presented in the OHA consultation, Line 1 is primarily used to export from GB to the OBZ and Belgium, and Line 2 is primarily used to dispatch

electricity from the wind farm towards Belgium. Line 2 continues to be more active than Line 1, and the flow direction is predominantly GB to Belgium.

- 4.7 Floor payments are required for Nautilus in the early years of the FS scenario only, and some cap payments are projected in the early years of the LW and CT scenarios.
- 4.8 To clarify, the change in connection location for Nautilus does not impact the market modelling, which only models connections between markets and is agnostic to specific connection locations in GB.

Figure 6: Electricity flows on Line 1 (left) and Line 2 (right) for Nautilus with "split node" operation

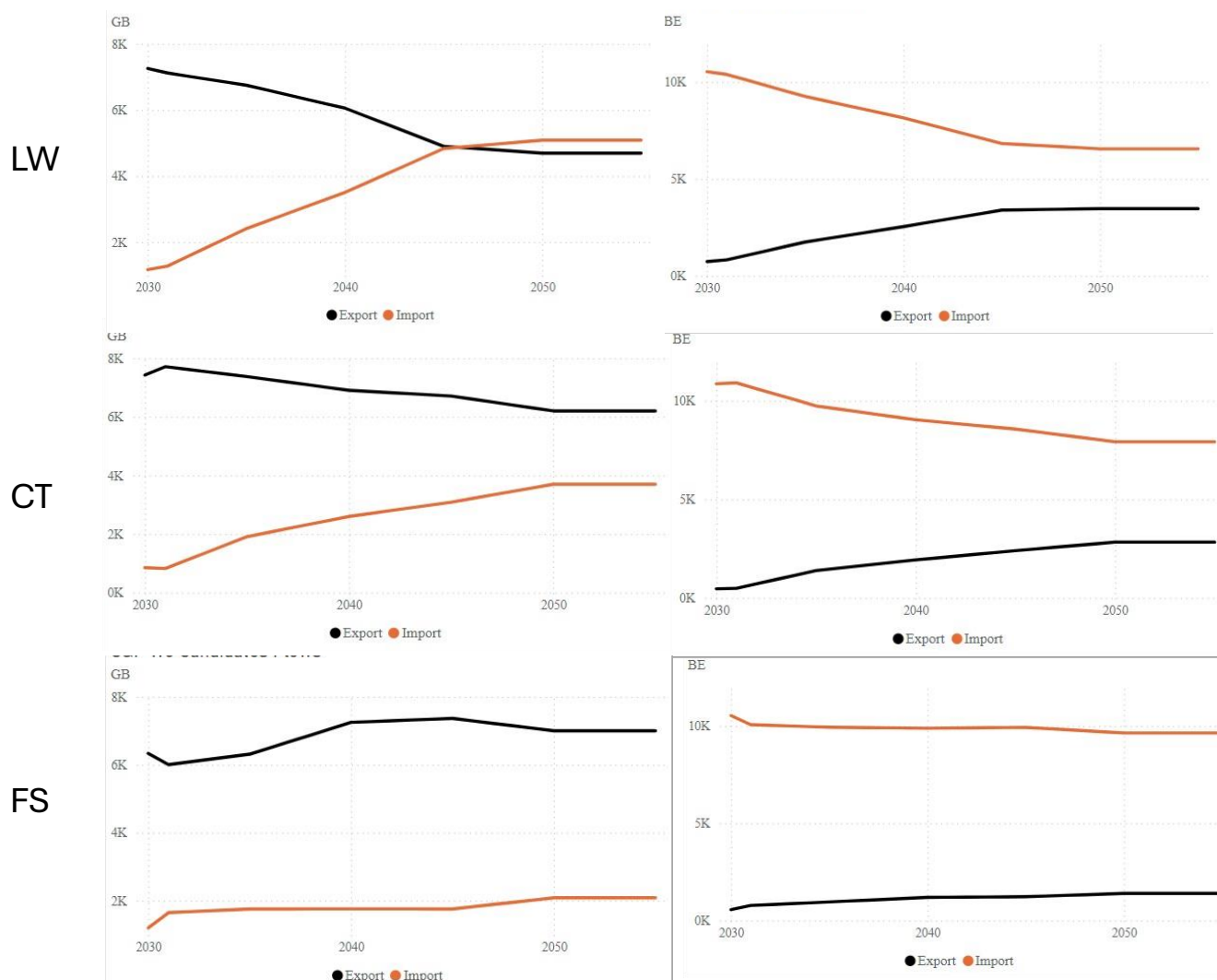


Figure 7: SEW results to GB for Nautilus with "split node" operation and updated cost and revenue sharing

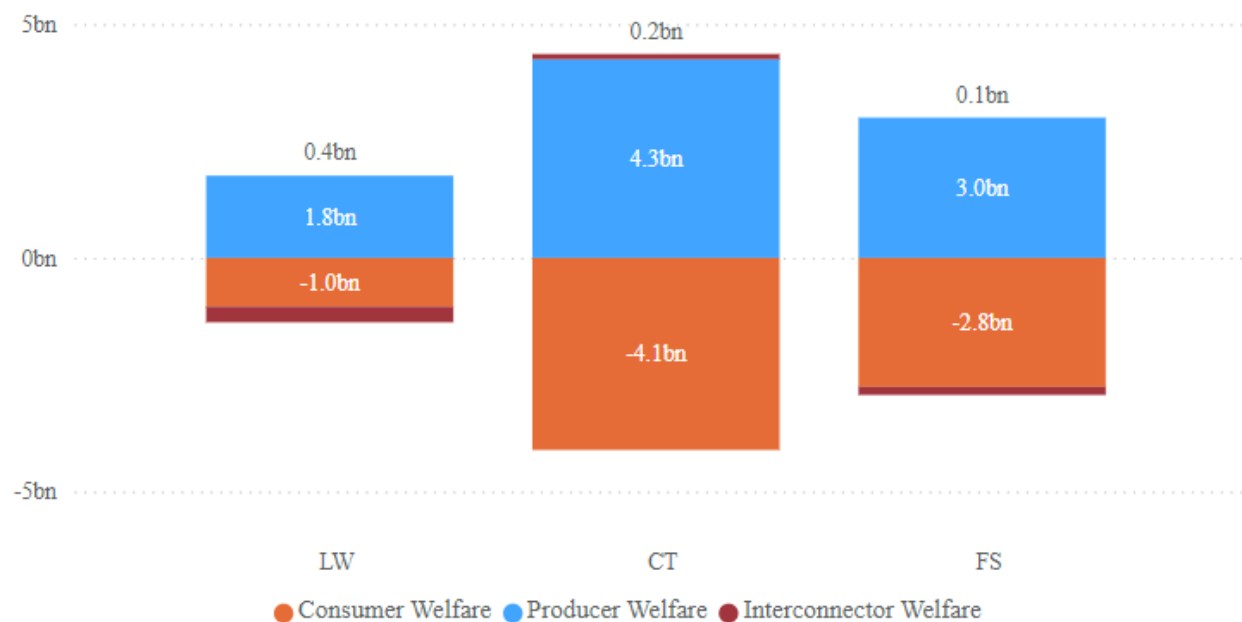


Figure 8: SEW results to BE for Nautilus with "split node" operation and updated cost and revenue sharing

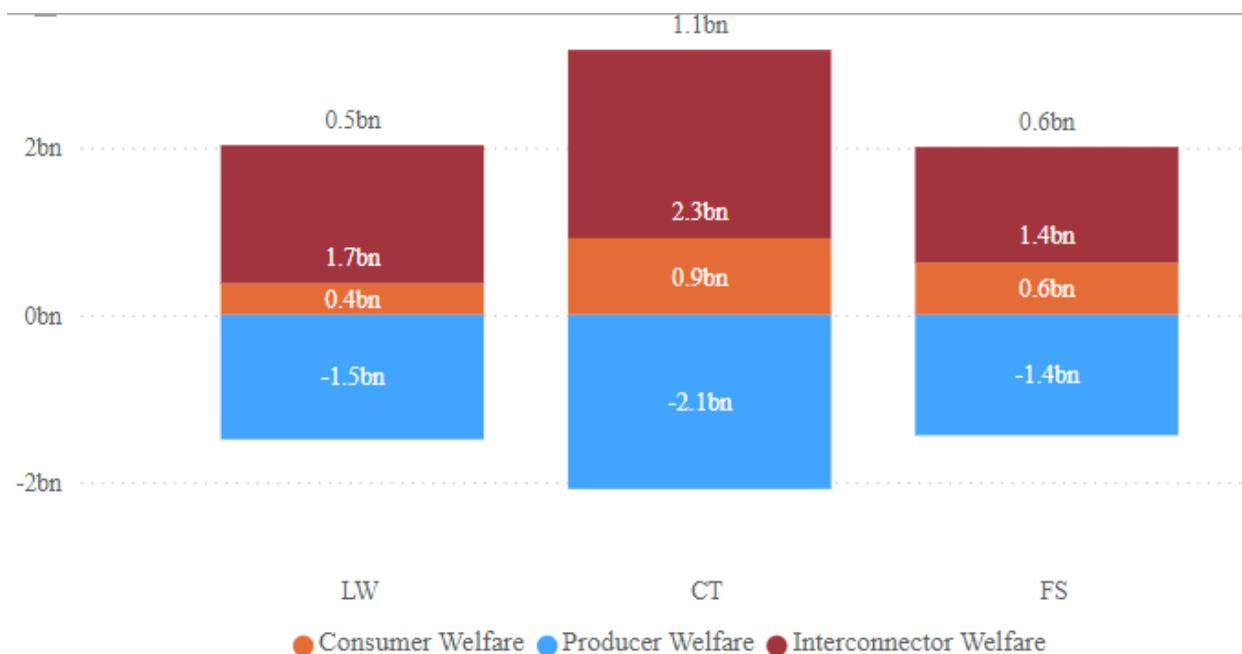
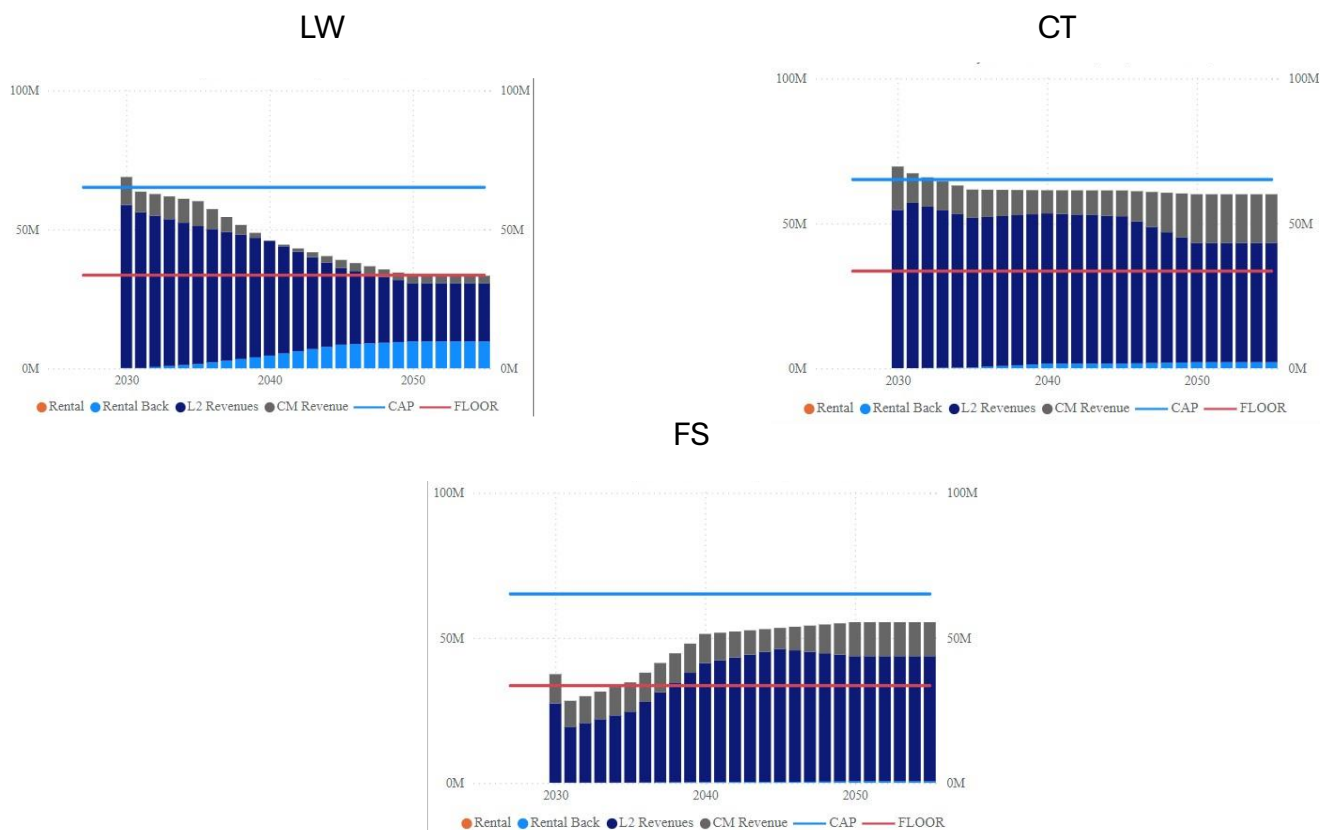


Figure 9: Revenue and cap and floor projections for Nautilus with “split node” operation and updated cost and revenue sharing



Impact on other projects

- 4.9 The interconnector SEW portion of the welfare calculation demonstrates the impact of Nautilus' connection on the revenue of other interconnectors in the model. This includes the baseline of operational interconnectors, and as this sensitivity covers the MA approach, it also includes all other applicant projects under Window 3 and the OHA Pilot scheme. With a change in Line 2 capacity and the updated cost and revenues sharing arrangement, Nautilus has a negative overall effect on interconnector welfare in all scenarios modelled. This is driven by the limited revenues earned by Nautilus and reduced congestion revenues for other interconnectors.

Figure 10: GB Interconnector SEW breakdown for “split node” operation and updated cost and revenue sharing, CT scenario only

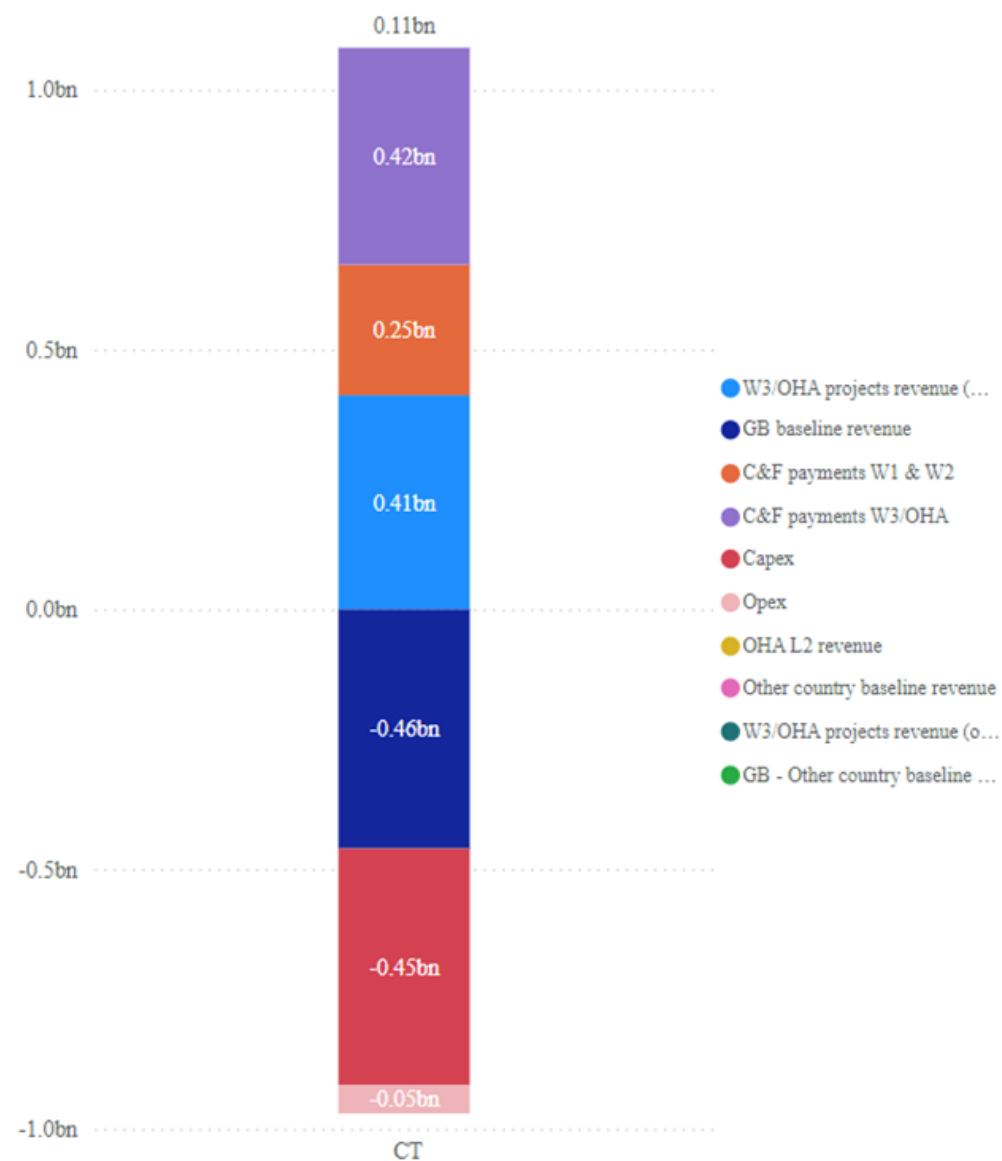
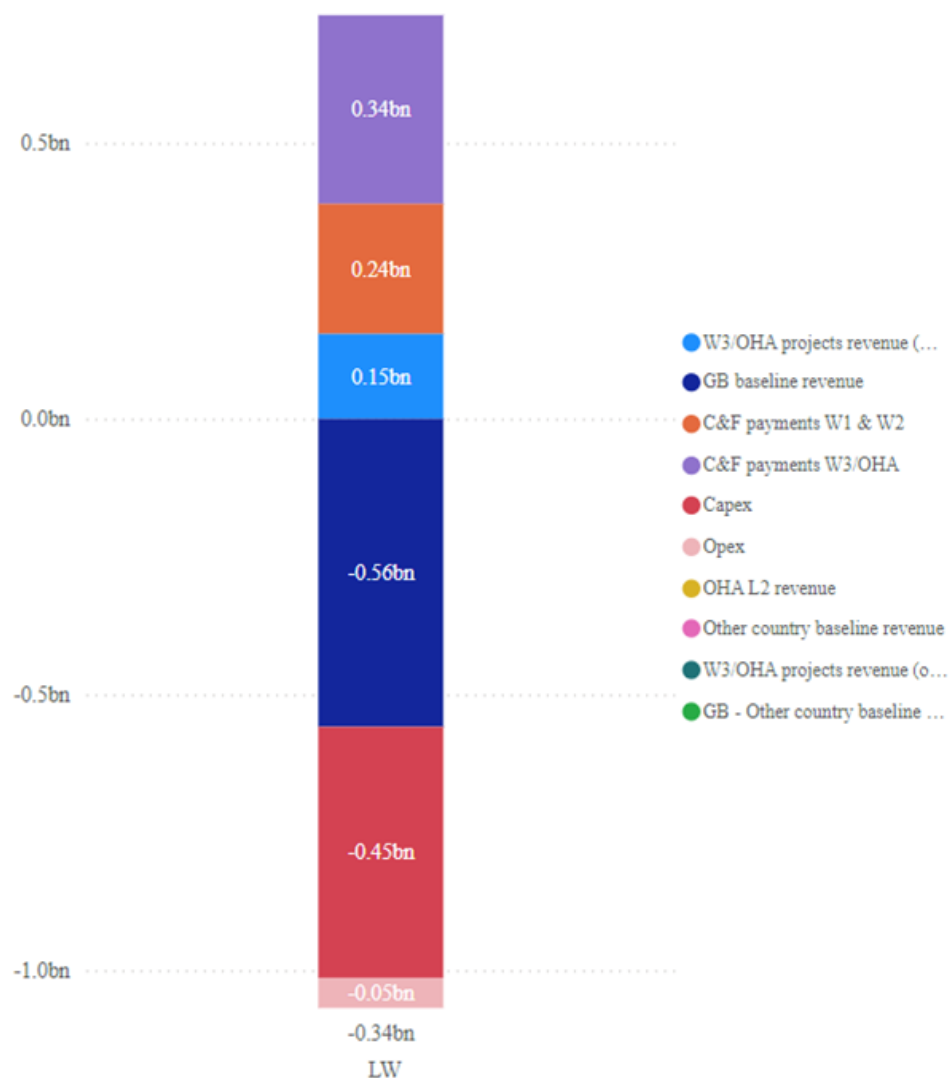


Figure 11: GB Interconnector SEW breakdown for “split node” operation and updated cost and revenue sharing, LW scenario only



System Impacts analysis- Re-run of model with Nautilus’ updated connection location and capacity

4.10 NG ESO has undertaken analysis on the system operability and balancing market (constraint costs) impacts of Nautilus. Further information can be found in NG ESO’s report published alongside the OHA IPA consultation.³

Constraint costs (balancing market impacts)

4.11 In the original analysis the connection of Nautilus is anticipated to result in an increase in constraint costs, with a range between £1.3bn to £3.3bn, comparing

³ [ESO CF W3 Report - Final \(ofgem.gov.uk\)](https://www.ofgem.gov.uk/publications/consultation-papers-and-statements/consultation-papers/consultation-paper/nautilus-offshore-hybrid-asset-ipa-consultation/nautilus-offshore-hybrid-asset-ipa-consultation-report)

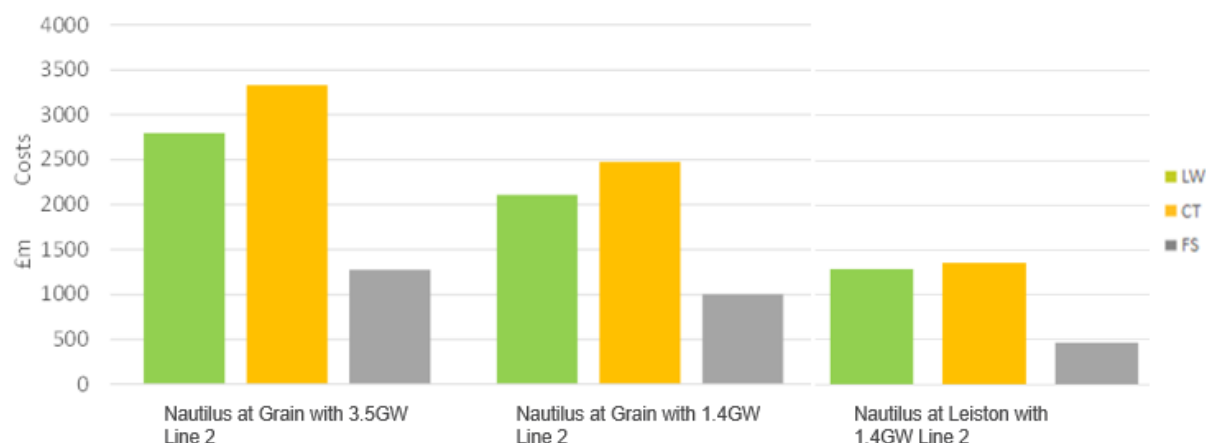
the lowest (FS) and highest (CT) scenarios of the MA case. Nautilus in general was shown at the Grain location to increase constraint costs on several midland and southern boundaries but relieving congestion on other southern boundaries. This was not to a large enough extent to negate the total constraint costs projected over the 25 years of the project.

- 4.12 In the updated analysis the connection of Nautilus in Leiston with Line 2 reduction is anticipated to incur constraint costs of a range between £0.5bn to £1.4bn, comparing the lowest (FS) and highest (CT) scenarios of the MA case. However, this is a reduction of more than 50% in comparison to the original analysis.

Table 3: Constraint cost analysis (MA) (NPV, real 2022, £bn)

Nautilus	LW	CT	FS
Original Analysis	2.80	3.33	1.27
Updated Analysis	1.28	1.36	0.47
Change	-1.52	-1.97	-0.8

Figure 12: Nautilus Constraint Cost Analysis (MA) - Positive indicates additional costs, negative indicates savings



- 4.13 Nautilus's constraint costs remain moderate in two out of three scenarios, with an upper boundary of £1.4bn in CT. We can anticipate that substantial costs could trigger network reinforcements. NG ESO and consumers would have to bear these costs until the works are complete, which is a timing yet undefined.
- 4.14 To minimise the impact on the electricity system, we deem it appropriate to only consider projects for a cap and floor regime with low constraint costs or

constraint savings, specifically considering the upper boundary of the range of costs which could be incurred.

Analysis of impacts on other OHAs and Window 3 applicants

4.15 The modification of the GB connection location and Line 2 capacity will also lead to a modification in the constraint costs of the other pilot NSI and the proposed Window 3 interconnectors.

Table 4: Summary of constraint cost changes (NPV real 2022, £bn)

Project	LW	CT	FS
Aminth	+0.16	+0.17	+0.07
AQUIND	+0.77	+0.65	+0.54
Cronos	-0.56	-0.58	-0.33
Lion Link	+0.48	+0.63	+0.61
LirIC	+0.05	+0.08	-0.01
MaresConnect	+0.06	+0.04	-0.02
NU Link	+0.26	+0.19	+0.10
Tarchon	+0.40	+0.57	+0.32

4.16 Aminth, AQUIND, Lion Link, NU Link and Tarchon would all see various increases in their constraint costs as a result of the changes to the Nautilus project.

4.17 LirIC and MaresConnect would see an increase in constraint costs under the LW and CT scenarios but a minor reduction in the FS scenario.

4.18 Cronos would see a reduction in constraint costs in all scenarios.

Table 5: Original constraint cost results (NVP real 2022, £bn)

Project	LW	CT	FS
Aminth	0.5	0.89	0.07
AQUIND	3.54	3.41	0.40
Cronos	3.52	4.59	1.30
Lion Link	1.16	1.13	0.04
LirIC	-0.01	-0.23	0.30
MaresConnect	0.27	0.52	0.35
NU Link	0.79	1.25	0.01
Tarchon	1.30	0.19	-0.18

Table 6: Updated results with Nautilus at Leiston and 1.4GW capacity on Line 2 (NVP real 2022, £bn)

Project	LW	CT	FS
Aminth	0.66	1.06	0.14
AQUIND	4.31	4.06	0.99
Cronos	2.96	4.01	0.97
Lion Link	1.64	1.77	0.65
LirIC	0.04	-0.15	0.29
MaresConnect	0.33	0.56	0.33
NU Link	1.05	1.44	0.11
Tarchon	1.70	0.76	0.14

5. Next steps

- 5.1 We will take into account the impacts of the changes to the project, responses to this consultation, and any other relevant evidence in our final decision to either grant or not grant the Nautilus project an OHA regulatory regime. Any other considerations that were part of the original OHA assessment and consultation will remain as they were within the original consultation, for the determination of the project's success in gaining regulatory approval. We note that at this stage, we cannot comment on a change in the minded-to position on the Nautilus project or any other applicant project to either the OHA Pilot or Window 3. We expect that a final decision will follow in autumn 2024.

Appendix 1 – Privacy notice on consultations

Personal data

The following explains your rights and gives you the information you are entitled to under the General Data Protection Regulation (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 Gas and Electricity Markets 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 GDPR makes provision for Ofgem to process personal data as necessary for the effective performance of a task carried out in the public interest. i.e. a consultation.

4. With whom we will be sharing your personal data

Personal data will not be shared with organisations outside of Ofgem

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 between 3 – 5 years.

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.

7. Your personal data will not be sent overseas

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

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

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