

# **Aberdeenshire Council**

## Marc MacFarlane

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**From:** stephanie.mcmillan@aberdeenshire.gov.uk  
**Sent:** 08 February 2024 15:03  
**To:** MD Marine Renewables  
**Subject:** SCOP-0040 - Aberdeenshire Council Ref No ENQ/2024/0123  
**Attachments:** ufm3\_EIA\_Scoping\_Opinion.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Please find attached important correspondence from Aberdeenshire Council, Planning and Economy Service.

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Dh'fhaodadh fiosrachadh sochaire, a tha a-mhàin airson an neach gu bheil am post-dealain air a chur, a bhith an seo. Ma tha thu air am post-dealain fhaighinn mar mhearachd, gabh ar leisgeul agus cuir fios chun an neach a chuir am post-dealain agus dubh às am post-dealain an dèidh sin. 'S e beachdan an neach a chuir am post-dealain a tha ann an gin sam bith a thèid a chur an cèill agus chan eil e a' ciallachadh gu bheil iad a' riochdachadh beachdan Chomhairle Shiorrachd Obar Dheathain.

[www.aberdeenshire.gov.uk](http://www.aberdeenshire.gov.uk)

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Our Ref: ENQ/2024/0123  
Your Ref: SCOP-0040

Ask for: Stephanie McMillan  
Tel: 01467 468676  
Email: [stephanie.mcmillan@aberdeenshire.gov.uk](mailto:stephanie.mcmillan@aberdeenshire.gov.uk)

Marine Directorate - Marine Planning & Policy  
Scottish Government  
Marine Laboratory  
375 Victoria Road  
Aberdeen  
AB11 9DB

8 February 2024

Dear Sir/Madam

**Consultation for Scoping Opinion Section 36 - Marine Licence Applications for 3 Wind Farm Development Areas at Broadshore Offshore Wind Farm Hub, North Of Fraserburgh**  
**Grid Reference: 397493.921179**

Thank you for consulting Aberdeenshire Council on this request for an EIA Scoping Opinion for the proposed Broadshore Offshore Windfarm Hub. Your request sought advice relating to the content of a future environmental assessment and a scoping report has been provided for consideration. It is noted that a grid connection location is yet to be confirmed for the proposed development and is expected in early 2024, as the such the Scoping Report only refers to the Array area. As detailed in section 2.4.1 and 4.1.3 of the Scoping Report, a separate Scoping Report will cover the Broadshore Hub Onshore Transmission Development Area.

The 'Broadshore Hub' relates to three separate and distinct projects namely Broadshore, Scaraben and Sinclair. The Scoping Report highlights that due to their geographic proximity and parallel consenting programme, a combined Scoping Report has been submitted. The Hub is located between 47km and 61km north of Fraserburgh on the Aberdeenshire coast. Given that this is an offshore wind farm development and based on the distance of the proposed Array from the Aberdeenshire Coastline, the Council has a limited interest in the development to those effects or impacts that would occur within the Aberdeenshire Council Area. This primarily relates to seascape, landscape and visual impact as a result of the proposed development from viewpoints within Aberdeenshire. Marine Archaeology has also been considered as part of this response with consultation undertaken with the Council's Archaeology Service.

Seascape, Landscape and Visual Impact

Chapter 15 of the Scoping Report notes the distance between the Broadshore Hub WFDA's are located approximately 47 km north of Fraserburgh. The Council is satisfied with the SLVIA study area of 60km radius around the scoping boundary as set out in

section 15.4 and the recognition that due to the potential for significant effects to occur, impacts on visual receptors within the SLVIA study area will be ‘scoped in’ to the SLVIA. At this stage, the Council are also satisfied with the proposed number and location of viewpoints.

### Archaeology

In response to questions laid out in section 14.8 of the Marine Archaeology & Cultural Heritage Chapter of the Scoping report, Archaeology has provided the following responses.

- Do you agree with the characterisation of the existing environment?  
A: Yes
- Have all the marine archaeology and cultural heritage impacts resulting from the Broadshore Hub WFDA's been identified in the Broadshore Hub WFDA's scoping report?  
A: Yes
- Do you agree with the marine archaeology and cultural heritage impacts that have been scoped in for/out from other consideration within the Broadshore Hub WFDA's WIA report?  
A: Yes
- Have all the relevant data sources been identified in the Broadshore Hub WFDA's Scoping Report?  
A: Yes
- Do you agree with the proposed approach to assessment in the Broadshore Hub WFDA's EIA report?  
A: Yes
- Do you have any matters or information sources that you wish to present?  
A: No

It is noted that an approach will be taken whereby separate applications are lodged for the Array and then the offshore cable corridor route to landfall and onshore infrastructure. It is therefore anticipated that separate EIA Scoping Reports will be prepared, and Aberdeenshire Council would welcome the opportunity to comment on this and contribute to this separate EIA Scoping Opinion. Should you require any clarity on the above points, please contact Aberdeenshire Council. We also look forward to engaging with you through our formal pre-applications process.

I hope the above information is of assistance as a formal scoping opinion in respect of the relevant EIA Report. Obviously during the processing of any associated planning application other issues may become obvious following public consultation and consultations with statutory consultees.

This opinion will be held for public inspection for a two year period, or until a planning application is submitted at which time the opinion will be transferred to the planning register with the application.

Yours faithfully

[Redacted]

Paul Macari  
Head of Planning and Economy

**BT**

## Marc MacFarlane

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**From:** radionetworkprotection@bt.com  
**Sent:** 29 January 2024 11:41  
**To:** MD Marine Renewables  
**Subject:** SCOP-0040 – BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area – Scoping Consultation – Response Required by 24 February 2024 WID13318

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

OUR REF:- WID13318

Good morning Marc

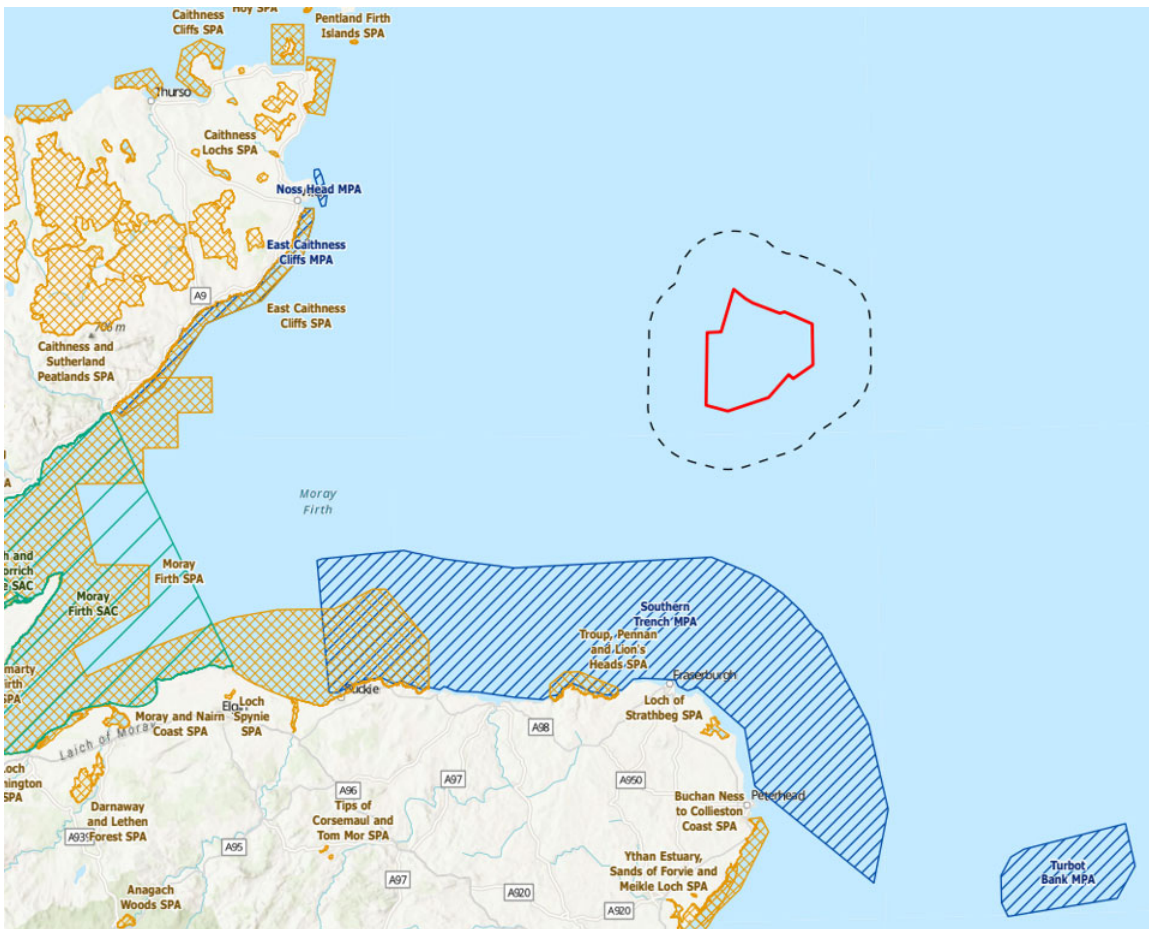
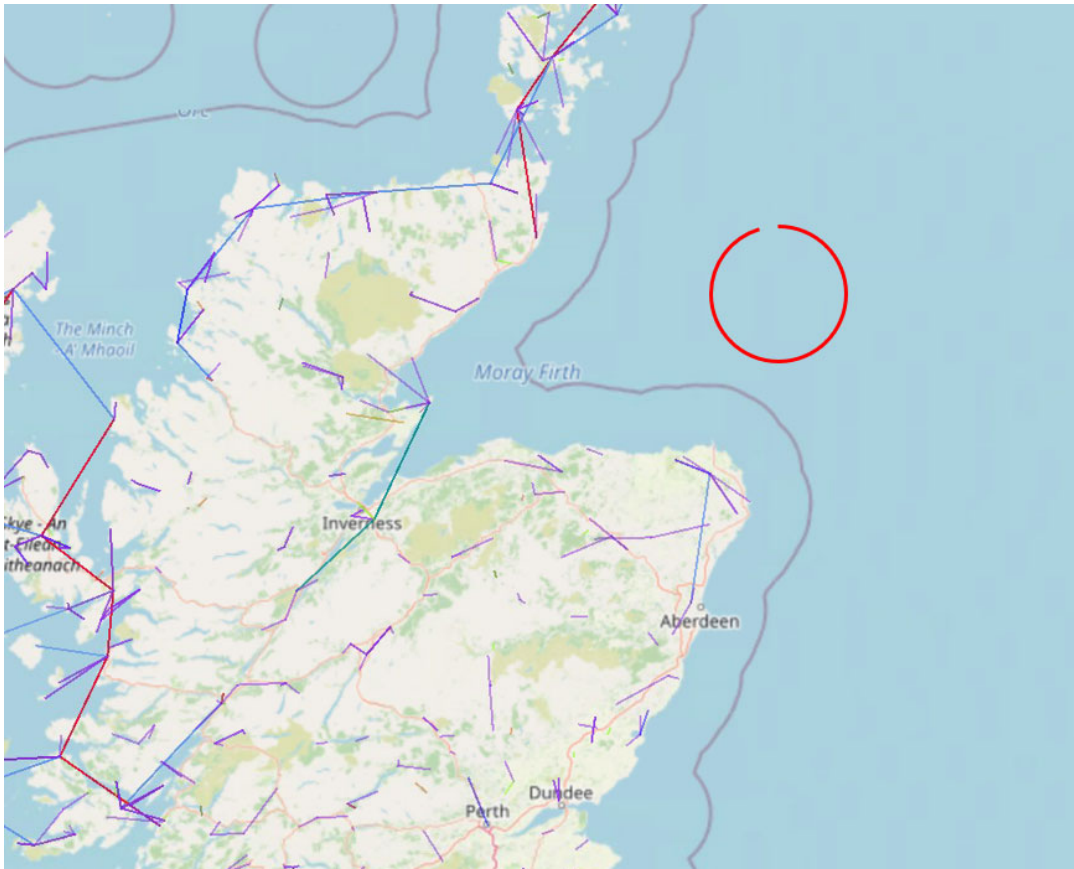
Thank you for your email dated 25/01/2024

We have studied the proposed WFDA's with respect to EMC and related problems to BT point-to-point microwave radio links.

The conclusion is that the Project indicated should not cause interference to BT's current and presently planned radio network.

However, once co-ords are known for each proposed wind turbine, can you please inform us so we can accurately plot them for our records

Kind Regards  
Chris





# **Cruising Association**

**From:** [Rick Ballard](#)  
**To:** [MD Marine Renewables](#)  
**Cc:** [Alan Kohler](#)  
**Subject:** SCOP-0040 – BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area – Scoping Consultation  
**Date:** 11 February 2024 15:29:50

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Thank you for inviting us to offer a response to this Scoping Consultation.

The Cruising Association represents the interests of recreational boaters, many of whom will cruise offshore in UK waters and beyond. Hence we are very interested in any developments which might present a hazard to safe navigation or restrict freedom of navigation.


The location of the Broadshore Hub Wind Farm is such that we expect very few recreational craft to be operating in the area so we do not have significant concerns. However, we would expect to see the data on traffic provided as part of the navigation risk assessment. It is also important that freedom of navigation is not restricted and that transit through the wind farm will be permitted, subject to the normal UK rules for distance off from structures.

Please keep us informed as the project develops and we will be happy to provide further input, as appropriate.

**Rick Ballard**  
Regulatory & Technical Services Group  
Cruising Association  
w: <https://www.theca.org.uk/public/rats>  
m: [Redacted]  
e: [Rick.Ballard@rats.theca.org.uk](mailto:Rick.Ballard@rats.theca.org.uk)

## **District Salmon Fishery Board – Dee**

**From:** [Jamie Urquhart](#)  
**To:** [MD Marine Renewables](#)  
**Cc:** [Edwin Third](#)  
**Subject:** RE: SCOP-0040 – BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area – Scoping Consultation – Response Required by 24 February 2024  
**Date:** 23 February 2024 17:14:58  
**Attachments:** [image001.png](#)



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Dear Marc

Please find attached consultation responses for the Dee and Don District Salmon Fishery Board for the SCOP-0040 – BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area – Scoping Consultation – Response Required by 24 February 2024 and 16<sup>th</sup> of March respectively.

Could you please confirm receipt of this email and attachments.

Best regards Jamie

Jamie Urquhart  
Fisheries Protection Manager  
Dee District Salmon Fishery Board & River Dee Trust

River Office  
Mill of Dinnet  
Dinnet  
Aboyne  
AB34 5 LA

Office: 01339 880411  
Mobile: [Redacted]  
Web: [www.riverdee.org.uk](http://www.riverdee.org.uk)

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<https://riverdee.org.uk/news/>



# Dee District Salmon Fishery Board

Marine Licensing and Consenting Casework Officer  
Licensing Operations Team  
Marine Directorate  
Scottish Government  
Marine Laboratory  
375 Vicotria Road  
Aberdeen  
AB11 9DB

By email to [MD.MarineRenewables@gov.scot](mailto:MD.MarineRenewables@gov.scot)  
23<sup>rd</sup> February 2024

Dear Marc,

REQUEST FOR SCOPING OPINION FOR PROPOSED SECTION 36 AND MARINE LICENCE APPLICATIONS FOR EACH OF THE 3 WIND FARM DEVELOPMENT AREAS (“WFDAs”) (BROADSHORE, SCARABEN & SINCLAIR) COMPRISING THE “BROADSHORE HUB” LOCATED APPROXIMATELY 47KM NORTH OF FRASERBURGH

REGULATION 12 OF THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017

REGULATION 13 AND SCHEDULE 4 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2007 (Collectively Referred to as the “EIA Regulations”)

SCOP-0040 – BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area – Approximately 47km North of Fraserburgh - *Consultation on Request for Scoping Opinion*

On behalf of the Dee District Salmon Fishery Board (Dee DSFB) we welcome the opportunity to respond to the ***BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area - Consultation on Request for Scoping Opinion***

## ***Designations & Conservation Status***

As a statutory body charged with the protection of Atlantic salmon and sea trout stocks within its district, the Dee DSFB has a duty to ensure that there are no significant adverse impacts upon the populations of these species.

The Dee has been designated as a Special Area of Conservation under the EC Habitats Directive 92/43 EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna for Atlantic salmon (the

principal species for which it receives this designation). The Dee District also supports populations of trout, eels and brook, river and sea lampreys.

Sea trout, common to all the rivers within the Dee District, are a priority species under the United Kingdom's Biodiversity Action Plan (UKBAP).

All lamprey species are protected under the EC Habitats Directive whilst river and sea lampreys are additionally protected under the UKBAP priority list.

Eels are a UKBAP priority species, critically endangered under the IUCN red list and protected under CITES.

### ***Wild Salmon Strategy and Conservation regulations***

At the latest International Union for Conservation of Nature (IUCN) species reassessment of the Red List of Threatened Species, released at COP28 in December 2023, Atlantic salmon have been reclassified from 'Least Concern' to 'Endangered' in Great Britain (as a result of a 30-50% decline in British populations since 2006 and 50-80% projected between 2010-2025), and from 'Least Concern' to 'Near Threatened' in terms of global populations (as a result of global populations declines of 23% since 2006).

In January 2022, the Scottish Government released its Wild Salmon Strategy which gave a clear message that there is sadly now unequivocal evidence that populations of Atlantic salmon are at crisis point. The Strategy calls on government agencies, as well as the private sector, to prioritise the protection and recovery of Scotland's wild Atlantic salmon populations.

One of the key pressures identified in the strategy is marine development, with marine renewables highlighted as having the potential to impact salmon through noise, water quality and effects on electromagnetic fields (EMFs) used by salmon for migration.

Furthermore, the Conservation of Salmon (Scotland) Regulations 2016 has led to the production of stock assessments for all Scottish salmon rivers, based on catch data. The assessments estimate whether the number of adults returning to the river in each of the previous five years will produce enough eggs to keep the population size above a critical threshold.

For the Dee, like other north-east rivers, the assessments have shown a declining trend in catches since 2011. Nonetheless, the Dee has been categorised as a Grade 1 river, meaning that the stocks have most likely been above the critical threshold - the Conservation Limit - over the last five years. It is however apparent that specific stock components, such as the Spring salmon stock on the Dee are critically low.

Assessment of the juvenile salmon stocks in the Dee through the National Electrofishing Programme for Scotland (NEPS) has evaluated juvenile stocks in the Dee as Grade 2, suggesting that there are significant issues with recruitment and survival within the catchment (Malcolm *et al* 2020). With greater pressures on marine survival such that only approximately 3% of smolts return to the river as adults, we need to address any pressures within the freshwater and marine environments to protect Dee salmon stocks.

## Position

The Dee DSFB welcomes the opportunity to respond to the scoping opinion and would wish to be consulted further during this process with specific interest in the migratory fish species Atlantic Salmon and sea trout. We echo the comments of our representative body for Scotland's District Salmon Fishery Boards, Fisheries Management Scotland and call for more research upon the impacts of this development on diadromous fish.

Under Scottish Marine Energy Research (ScotMER), the [Diadromous Fish Receptor Group](#) has identified evidence gaps related to the health, distribution, and impacts on Diadromous fish (salmon, sea trout, etc.). Scottish Government has published an 'evidence map' (available for download at the above link) which identifies and scores these evidence gaps according to a specific prioritisation process. It is important that the relevant evidence gaps are considered in full by the applicant, and developers should *contribute* to filling these evidence gaps as a **specific condition of consent**.

To properly assess Environmental Statements for developments, information on the use of the development area by diadromous fish should be provided. If such information is lacking then a suitable monitoring strategy should be devised, either for the area in question or through contributing to strategic projects undertaken through ScotMER. Any monitoring strategies must include pre-construction monitoring in order that baseline information on movement, abundance, swimming depth, feeding behaviour etc. can be collected.

Offshore developments have the potential to directly and indirectly impact diadromous fish. We would therefore expect developers to assess and, where necessary, mitigate the potential impacts of the development. These potential impacts have been highlighted through ScotMER, and include:

- Avoidance (including exclusion from particular rivers and subsequent impacts on local populations);
- Disorientation effects that could potentially affect behaviour, susceptibility to predation or by-catch; and
- Impaired ability to locate normal feeding grounds or river of origin; and delayed migration

The following issues should therefore be considered in full, including consideration of new research where information is lacking:

*i. Subsea noise and vibration effects during construction*

This includes noise associated with horizontal directional drilling and installation of rock armour on cable routes. Avoidance of such activities during key life stages, such as the smolt run, should be considered as a mitigation measure.

*ii. Electromagnetic fields (EMFs) arising from cabling*

Electromagnetic fields from subsea cables have the potential to interact with European eels and possibly salmonids if their migration or movement routes take them over sub-sea cables. The Earth's magnetic field is a cue used for migration, so anything that interferes with this signal is an important consideration. All cables should be buried to at least a depth of 1.5m where possible, or covered with rock armour to an equivalent depth where burial is not possible. We are aware that Marine Scotland Science have undertaken some research to

investigate electro-magnetic force impacts on adult and post smolt salmon and European eels. Whilst for salmon this work did not demonstrate any significant response to the magnetic field in terms of alarm, avoidance, accelerated or decelerated swimming, it did not provide any information on interference with the salmon's ability to detect and utilise the Earth's magnetic field.

*iii. Disturbance or degradation of the benthic environment (including secondary effects on prey species)*

It is important to ensure that such effects are quantified and assessed in the Environmental Statement. Particular consideration should be given to potential effects on important habitats for feeding and shelter for the marine phase of sea trout (a priority marine feature) and any area that might impact early feeding opportunities for all diadromous species.

## **Conclusion**

We have no wish to prevent or delay any proposed development unnecessarily and we remain keen to work constructively with the developers and Marine Scotland to identify appropriate monitoring programmes which will allow us to be able to assess the acknowledged risks of this development, and other proposed developments in a more appropriate manner. There is a clear and urgent need to fund, plan and start strategic research on the movement, abundance, swimming depth, feeding behaviour and impact pathways relevant to diadromous fish. Such research would clearly feed into the potential mitigation measures that might be deemed appropriate, and the conditions under which such mitigation should be enacted. Developers should be required to work together to fund strategic monitoring, in order to allow more certainty for all involved.

Yours sincerely


[Redacted]

Jamie Urquhart  
Fisheries Protection Manager, Dee District Salmon Fishery Board



## **District Salmon Fishery Board – Don**

**From:** [Jamie Urquhart](#)  
**To:** [MD Marine Renewables](#)  
**Cc:** [Edwin Third](#)  
**Subject:** RE: SCOP-0040 – BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area – Scoping Consultation – Response Required by 24 February 2024  
**Date:** 23 February 2024 17:14:58  
**Attachments:** [image001.png](#)



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Dear Marc

Please find attached consultation responses for the Dee and Don District Salmon Fishery Board for the SCOP-0040 – BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area – Scoping Consultation – Response Required by 24 February 2024 and 16<sup>th</sup> of March respectively.

Could you please confirm receipt of this email and attachments.

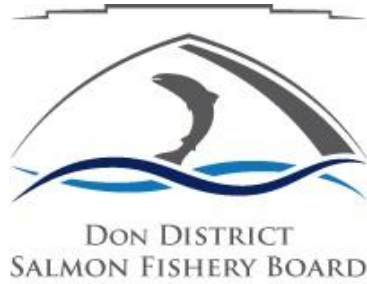
Best regards Jamie

Jamie Urquhart  
Fisheries Protection Manager  
Dee District Salmon Fishery Board & River Dee Trust

River Office  
Mill of Dinnet  
Dinnet  
Aboyne  
AB34 5 LA

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Web: [www.riverdee.org.uk](http://www.riverdee.org.uk)

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<https://riverdee.org.uk/news/>



Marine Licensing and Consenting Casework Officer  
Licensing Operations Team  
Marine Directorate  
Scottish Government  
Marine Laboratory  
375 Victoria Road  
Aberdeen  
AB11 9DB

By email to [MD.MarineRenewables@gov.scot](mailto:MD.MarineRenewables@gov.scot)  
23<sup>rd</sup> February 2024

Dear Marc,

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SCOP-0040 – BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area – Approximately 47km North of Fraserburgh - *Consultation on Request for Scoping Opinion*

On behalf of the Don District Salmon Fishery Board (Don DSFB) we welcome the opportunity to respond to the ***BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area - Consultation on Request for Scoping Opinion***

#### ***Designations & Conservation Status***

As a statutory body charged with the protection of Atlantic salmon and sea trout stocks within its district, the Don DSFB has a duty to ensure that there are no significant adverse impacts upon the populations of these species.

The Don has been designated as a Special Area of Conservation under the EC Habitats Directive 92/43 EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna for Atlantic salmon (the

principal species for which it receives this designation). The Don District also supports populations of trout, eels and brook, river and sea lampreys.

Sea trout, common to all the rivers within the Don District, are a priority species under the United Kingdom's Biodiversity Action Plan (UKBAP).

All lamprey species are protected under the EC Habitats Directive whilst river and sea lampreys are additionally protected under the UKBAP priority list.

Eels are a UKBAP priority species, critically endangered under the IUCN red list and protected under CITES.

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In January 2022, the Scottish Government released its Wild Salmon Strategy which gave a clear message that there is sadly now unequivocal evidence that populations of Atlantic salmon are at crisis point. The Strategy calls on government agencies, as well as the private sector, to prioritise the protection and recovery of Scotland's wild Atlantic salmon populations.

One of the key pressures identified in the strategy is marine development, with marine renewables highlighted as having the potential to impact salmon through noise, water quality and effects on electromagnetic fields (EMFs) used by salmon for migration.

Furthermore, the Conservation of Salmon (Scotland) Regulations 2016 has led to the production of stock assessments for all Scottish salmon rivers, based on catch data. The assessments estimate whether the number of adults returning to the river in each of the previous five years will produce enough eggs to keep the population size above a critical threshold.

For the Don, like other north-east rivers, the assessments have shown a declining trend in catches since 2011. The Don has been categorised as a grade 3 river according to these government regulations since their publication, meaning that the stocks have most likely been below the critical threshold - the Conservation Limit - over the past seven years.

Assessment of the juvenile salmon stocks in the Don through the National Electrofishing Programme for Scotland (NEPS) has evaluated juvenile stocks in the Don as Grade 3, suggesting that there are significant issues with recruitment and survival within the catchment (Malcolm *et al* 2020). With greater pressures on marine survival such that only approximately 3% of smolts return to the river as adults, we need to address any pressures within the freshwater and marine environments to protect Don salmon stocks.

## Position

The Don DSFB welcomes the opportunity to respond to the scoping opinion and would wish to be consulted further during this process with specific interest in the migratory fish species Atlantic Salmon and sea trout. We echo the comments of our representative body for Scotland's District Salmon Fishery Boards, Fisheries Management Scotland and call for more research upon the impacts of this development on diadromous fish.

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possible. We are aware that Marine Scotland Science have undertaken some research to investigate electro-magnetic force impacts on adult and post smolt salmon and European eels. Whilst for salmon this work did not demonstrate any significant response to the magnetic field in terms of alarm, avoidance, accelerated or decelerated swimming, it did not provide any information on interference with the salmon's ability to detect and utilise the Earth's magnetic field.

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## **Conclusion**

We have no wish to prevent or delay any proposed development unnecessarily and we remain keen to work constructively with the developers and Marine Scotland to identify appropriate monitoring programmes which will allow us to be able to assess the acknowledged risks of this development, and other proposed developments in a more appropriate manner. There is a clear and urgent need to fund, plan and start strategic research on the movement, abundance, swimming depth, feeding behaviour and impact pathways relevant to diadromous fish. Such research would clearly feed into the potential mitigation measures that might be deemed appropriate, and the conditions under which such mitigation should be enacted. Developers should be required to work together to fund strategic monitoring, in order to allow more certainty for all involved.

Yours sincerely

[Redacted]

Jamie Urquhart

Dee District Salmon Fishery Board (on behalf of the Don District Salmon Fishery Board).

**Green Volt**

## Marc MacFarlane

---

**From:** Hello (Green Volt Offshore Wind) <hello@greenvoltoffshorewind.com>  
**Sent:** 23 February 2024 09:53  
**To:** MD Marine Renewables  
**Cc:** Victoria Crossland; Mailys Billet  
**Subject:** Green Volt SCOP-0040 – BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area – Scoping Consultation – Response  
**Attachments:** GRE001-FLO-CON-STK-LET-0004 Broadshore Hub Wind Farm Scoping Consultation Response - Green Volt.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Good morning

Please find attached the Green Volt response in respect of the proposed section 36 application and marine licence applications for the Broadshore Hub Wind Farm Development.

Kind regards

On behalf of the Green Volt Offshore Wind Team

Tel: +44 (0) 1224 548 646  
Email: [hello@greenvoltoffshorewind.com](mailto:hello@greenvoltoffshorewind.com)  
Web: [greenvoltoffshorewind.com](http://greenvoltoffshorewind.com)

Green Volt Offshore Wind - The future of renewable energy



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22 February 2024

Marc MacFarlane  
Marine Directorate, Marine Planning & Policy  
Scottish Government,  
Marine Laboratory,  
375 Victoria Road,  
Aberdeen AB11 9DB

Dear Mr. MacFarlane,

**REGULATION 12 OF THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017**

**REGULATION 13 AND SCHEDULE 4 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2007**

**SCOP-0040 – BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area – Approximately 47km North of Fraserburgh**

Thank you for consulting Green Volt Offshore Windfarm Limited on the scoping report submitted in respect of the proposed section 36 application and marine licence applications for the Broadshore Hub Wind Farm Development.

Green Volt Offshore Windfarm Limited has been formed by Flotation Energy Ltd (Flotation Energy) and Vårgrønn AS (Vårgrønn), the developers of the Green Volt Offshore Windfarm ('Green Volt'). Flotation Energy is an offshore wind development company, headquartered in Edinburgh, UK. Founded in 2018, the company is pioneering the deployment of both floating and fixed offshore wind in Scotland, the UK and Internationally. Vårgrønn is a growing agile offshore wind company and established as a joint venture between Italian energy major Eni Plenitude and the Norwegian private equity manager and offshore energy serial entrepreneur HitecVision.

Broadshore Hub Wind Farm Development Area is located approximately 60 km from the proposed Green Volt windfarm site. With both the Broadshore Hub and Green Volt projects planning to connect into the onshore grid in the vicinity of Peterhead, there is potential for interactions between the two projects.

The Green Volt project applied to connect to the GB transmission system in 2020. A contract was subsequently issued by NG-ESO in 2021 and signed by Green Volt to connect to the existing New Deer substation. Green Volt has been assessed as out of scope for the Holistic Network Design (HND) process.

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22 February 2024

The Applicant should be aware that the **section 36 and marine licence applications for the Green Volt Offshore Windfarm were submitted to MD-LOT on 20 January 2023**, with consent decision expected in 2024. The Green Volt offshore applications are available on the [Green Volt website](#) and on the [Marine Scotland's website](#).

Following an initial review of the Broadshore Hub Wind Farm Scoping Report, we note that the proposed project's landfall is expected to be in the vicinity of Peterhead. The Green Volt project has a primary landfall option at St Fergus South, north of Peterhead, therefore there are potential for interactions with Green Volt. We would anticipate that the offshore EIA for the proposed Broadshore Hub Wind Farm project would consider the following:

- Impacts on the offshore elements of the Green Volt Offshore Windfarm project, including:
  - Increased vessel traffic and from the physical presence of Broadshore Hub infrastructure that may lead to disruption or obstruction of the Green Volt activities;
  - Cumulative impacts with other proposed offshore wind farms. We are pleased to see that Green Volt has been mentioned in the Broadshore Hub Wind Farm Scoping report as one of the projects being considered in future cumulative impact assessments.

The applicant may also want to consider Flotation Energy's other INTOG project, Cenoss, in their environmental impact assessment. The Cenoss project submitted a scoping report to MD-LOT for the offshore aspects on 24<sup>th</sup> February 2023, which is available on the Marine Scotland's website.

Yours sincerely,

Maily Billet  
Senior Offshore Consenter, Green Volt Offshore Windfarm Ltd

# **The Highland Council**

**From:** [Mark Harvey \(Planning \(North\)\)](#)  
**To:** [MD Marine Renewables](#); [Lauren Cowan](#)  
**Cc:** [Kirsty Black](#); [Marc MacFarlane](#)  
**Subject:** FW: SCOP-0040 – BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area – Scoping Consultation – Response Required by 15 March 2024  
**Date:** 14 March 2024 11:55:38  
**Attachments:** [image001.png](#)

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Hi Lauren

Many apologies for the delay in our response.

Highland Council's specific interest in this proposal would be visual and seascape impact.

However, with reference to the questions posed at paragraph 1190 (15.8 of the Scoping Report), the Council agrees that receptors in the Highland Council area beyond a 60km range can be scoped out. Consequently, we agree that no other visualisation points on the Caithness coast are necessary.

Kind regards

**Mark Harvey**

**Planning Team Leader**

**Skye, Wester Ross, Strathpeffer and Lochalsh + Highland-wide Aquaculture**

**Planning and Environment - Infrastructure, Environment and Economy Service**

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**From:** [MD.MarineRenewables@gov.scot](mailto:MD.MarineRenewables@gov.scot) <[MD.MarineRenewables@gov.scot](mailto:MD.MarineRenewables@gov.scot)>

**Sent:** Wednesday, March 13, 2024 4:44 PM

**To:** [MD.MarineRenewables@gov.scot](mailto:MD.MarineRenewables@gov.scot)

**Cc:** [Kirsty.Black@gov.scot](mailto:Kirsty.Black@gov.scot); [Marc.MacFarlane@gov.scot](mailto:Marc.MacFarlane@gov.scot); [Lauren.Cowan@gov.scot](mailto:Lauren.Cowan@gov.scot)

**Subject:** RE: SCOP-0040 – BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area – Scoping Consultation – Response Required by 15 March 2024

**CAUTION:** This email was sent from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Good afternoon,

Following on from my colleague Marc's email below, MD-LOT is yet to receive a response from your organisation on this consultation which closed on 24 February 2024. As a statutory consultee, please confirm a nil return or inform MD-LOT of your intention to submit a response by close of play 15 March 2024.

Kind regards,

Lauren

**Lauren Cowan (she/her)**

**Marine Licensing and Consenting Casework Manager, Licensing Operations Team, Marine Directorate**

Scottish Government, 5 Atlantic Quay, 150 Broomielaw, Glasgow, G2 8LU

M: [Redacted]

E: [lauren.cowan@gov.scot](mailto:lauren.cowan@gov.scot)

**The Scottish Government**

To see how we use your personal data, please view our privacy notice:

[Marine licensing and consenting: privacy notice - gov.scot \(www.gov.scot\)](#)

---

**From:** MD Marine Renewables

**Sent:** Monday, February 26, 2024 12:59 PM

**To:** MD Marine Renewables <[MD.MarineRenewables@gov.scot](mailto:MD.MarineRenewables@gov.scot)>

**Cc:** Kirsty Black <[Kirsty.Black@gov.scot](mailto:Kirsty.Black@gov.scot)>; Lauren Cowan <[Lauren.Cowan@gov.scot](mailto:Lauren.Cowan@gov.scot)>; Marc MacFarlane <[Marc.MacFarlane@gov.scot](mailto:Marc.MacFarlane@gov.scot)>

**Subject:** FW: SCOP-0040 – BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind

Farm Development Area – Scoping Consultation – Response Required by 24 February 2024

Good afternoon,

The consultation period for the proposal described below has ended but MD-LOT has not received a response from your organisation. As a statutory consultee, please submit a response or confirmation of nil return at your earliest convenience.

Kind regards,

Marc

**Marine Directorate** - Marine Planning & Policy

Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

General Queries: +44 (0)300 244 5046

General Email: [MD.MarineRenewables@gov.scot](mailto:MD.MarineRenewables@gov.scot)

Website: <http://www.gov.scot/Topics/marine/Licensing/marine>



---

**From:** MD Marine Renewables

**Sent:** Thursday, January 25, 2024 12:05 PM

**To:** MD Marine Renewables <[MD.MarineRenewables@gov.scot](mailto:MD.MarineRenewables@gov.scot)>

**Cc:** Kirsty Black <[Kirsty.Black@gov.scot](mailto:Kirsty.Black@gov.scot)>; Lauren Cowan <[Lauren.Cowan@gov.scot](mailto:Lauren.Cowan@gov.scot)>; Marc MacFarlane <[Marc.MacFarlane@gov.scot](mailto:Marc.MacFarlane@gov.scot)>

**Subject:** SCOP-0040 – BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area – Scoping Consultation – Response Required by 24 February 2024

Good afternoon,

**REQUEST FOR SCOPING OPINION FOR PROPOSED SECTION 36 AND MARINE LICENCE APPLICATIONS FOR EACH OF THE 3 WIND FARM DEVELOPMENT AREAS (“WFDAs”) (BROADSHORE, SCARABEN & SINCLAIR) COMPRISING THE “BROADSHORE HUB” LOCATED APPROXIMATELY 47KM NORTH OF FRASERBURGH**

**REGULATION 12 OF THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017  
REGULATION 13 AND SCHEDULE 4 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2007  
(Collectively Referred to as the “EIA Regulations”)**

SCOP-0040 – BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area – Approximately 47km North of Fraserburgh

In respect of the proposed marine licence (under the Marine and Coastal Access Act 2009) and section 36 consent applications (under the Electricity Act 1989) for the above works, the BlueFloat Energy and Renantis Partnership has requested the Scottish Ministers adopt a scoping opinion in relation to the proposed works under the above EIA Regulations.

The scoping report submitted by the applicant can be found at:

<https://marine.gov.scot/node/24783>

To assist the Scottish Ministers in adopting a comprehensive scoping opinion, which will outline the scope and level of detail of information to be provided in the Environmental Impact Assessment (“EIA”) report to be submitted by the applicant with its proposed marine licence and section 36 consent applications, please review the scoping report and advise on what you consider should be included within, or excluded from, the scope of the EIA report for the proposed works. In doing so you may wish to consider any comments you may have regarding data sources, proposed methodologies or the requirement for specific studies.

## HABITATS REGULATIONS APPRAISAL SCREENING REPORT

In addition, the BlueFloat Energy and Renantis Partnership has submitted a Habitats Regulations Appraisal (“HRA”) screening report. The HRA screening report provides information to enable the screening of the Broadshore Hub with respect to its potential to have a likely significant effect on European sites of nature conservation importance.

The HRA screening report can be found at: <https://marine.gov.scot/node/24782>

The Scottish Ministers would appreciate any comments you may have on the HRA screening report and your opinion as to whether or not you are in agreement with the European sites identified.

Please submit your response electronically to [MD.MarineRenewables@gov.scot](mailto:MD.MarineRenewables@gov.scot) by **24 February 2024**. If you are unable to meet this deadline, please contact the aforementioned email address as soon as you can to discuss the possibility of an extension to the consultation period. If you have no comments to make, please submit a “nil return” response.

**Please be advised that this consultation request relates to the proposed marine licence and section 36 consent applications for the WFDA’s only, not the offshore transmission development areas or onshore transmission development areas of the works (defined as OfTDAs and OnTDAs, respectively, in the scoping report). Additionally, the applicant intends to submit separate applications for marine licences and section 36 consents for each of the three WFDA’s comprising the Broadshore Hub, making a total of three marine licence applications and three section 36 consent applications. It is the applicant’s intention that these application are all supported by a single EIA report.**

Many thanks,

Marc

**Marine Directorate** - Marine Planning & Policy  
Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

General Queries: +44 (0)300 244 5046

General Email: [MD.MarineRenewables@gov.scot](mailto:MD.MarineRenewables@gov.scot)

Website: <http://www.gov.scot/Topics/marine/Licensing/marine>



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unless so stated.

Mura h-eil na beachdan a tha air an cur an cèill sa phost-d seo a' buntainn ri gnothachas Chomhairle na Gàidhealtachd, 's ann leis an neach fhèin a chuir air falbh e a tha iad, is chan eil iad an-còmhnaidh a' riochdachadh beachdan na Comhairle, no buidhnean buntainneach, agus chan eil am post-d seo na phàirt de chunradh sam bith mura h-eil sin air innse.

# **Historic Environment Scotland**





**By email to:**

[MD.MarineRenewables@gov.scot](mailto:MD.MarineRenewables@gov.scot)

Marine Directorate (Marine Renewables)  
Marine Laboratory  
375 Victoria Road  
Aberdeen  
AB11 9DB

Longmore House  
Salisbury Place  
Edinburgh  
EH9 1SH

Enquiry Line: 0131-668-8716  
[HMConsultations@hes.scot](mailto:HMConsultations@hes.scot)

Our case ID: 300070742  
Your ref: SCOP-0040

06 March 2024

Dear Marine Directorate

[The Electricity Works \(Environmental Impact Assessment\) \(Scotland\) Regulations 2017](#)  
[Marine Licence \(under the Marine and Coastal Access Act 2009\) and Section 36 consent](#)  
[Broadshore Hub Wind Farm Development Area](#)  
[Scoping Report](#)

Thank you for your consultation for this scoping report which we received on 25 January 2024. We have reviewed the details in terms of our historic environment interests. This covers world heritage sites, scheduled monuments and their settings, category A-listed buildings and their settings, inventory gardens and designed landscapes, inventory battlefields and historic marine protected areas (HMPAs). In this case our advice also includes matters relating to marine archaeology outwith the scope of the terrestrial planning system.

The relevant local authority archaeological and cultural heritage advisors will also be able to offer advice on the scope of the cultural heritage assessment, including heritage assets not covered by our interests, such as unscheduled archaeology, and category B- and C-listed buildings. In this case, you should contact the relevant advisers in Aberdeenshire Council: phone 01467 534333; email [archaeology@aberdeenshire.gov.uk](mailto:archaeology@aberdeenshire.gov.uk)

**Proposed Development**

We understand that the proposed hub development incorporates three separate wind farm developments;

- Broadshore would comprise 32-60 turbines.
- Sinclair would comprise between 3 and 6 turbines.
- Scaraben would comprise between 3 and 6 turbines.

Because of their physical proximity the three developments will share infrastructure and will be considered through a single EIA process but they will be subject to separate consenting processes. Each wind farm will comprise the following infrastructure



- Wind turbine generators with fixed and/or floating substructures (floating substructures would also require anchors and mooring lines or other “station keeping structures”). The maximum height proposed for the turbines is 400m to blade tip (lowest astronomical tide measurement)
- Cable connections between the individual turbines, the turbine arrays, and the coast, plus subsea cable hubs and cable protection
- Scour protection measures at turbine bases and/or anchor points.

## Scope of assessment

### Potential physical impacts

We can confirm that there are no designated cultural heritage assets within the development boundary. The proposed development has the potential to encounter recorded and unrecorded archaeological remains on the seabed.

### Potential setting impacts

The proposed development has the potential to impact on the settings of designated cultural heritage assets along the northern coast of Aberdeenshire and Moray. Without illustrative material we are not able to provide any advice at this stage as to the potential magnitude of any effect that could result, but we note the extreme distances involved.

### Potential cumulative impacts

We recommend that the potential cumulative impacts of the proposed development in combination with other developments in the vicinity be assessed. This should assess the incremental impact or change when the proposed development is combined with other present and reasonably foreseeable developments.

### Scoping Report

We are generally content with the approach to cultural heritage assessment laid out in the Scoping Report. We welcome the following aspects of the assessment highlighted in the Report –

- All potential impacts on cultural heritage assets will be scoped in to the assessment (Table 14.4)
- Embedded mitigation will focus on avoidance of impacts using Archaeological Exclusion Zones (AEZs) (14.5.1)
- All geophysical and geotechnical data will be made available to an archaeological specialist for review (14.7)

There is a lack of detail for some aspects of the assessment process particularly the exact specifications for survey and analysis relating to cultural heritage interests. The Scoping Report proposes adequate measures to address this in the form of a Written Scheme of Investigation (14.5.1), but it is not possible to advise on whether the final scheme proposed will be appropriate until we have sight of that document.



HISTORIC  
ENVIRONMENT  
SCOTLAND

ÀRAINNEACHD  
EACHDRAIDHEIL  
ALBA

We have some concerns relating to technical issues and to the lack of a clear description of the assessment methodology. These are provided in the Annex to this letter in the format of answers to the questions raised in section 14.8 of the Report.

### **Further information**

Guidance about national policy relating to cultural heritage can be found on our website at <https://www.historicenvironment.scot/advice-and-support/planning-and-guidance/historic-environment-policy-for-scotland-heps/> .

We hope this is helpful and we would be happy to provide further information and advice to the applicants as they work through the EIA process. Please contact us if you have any questions about this response or require further information on any matter raised. The officer managing this case is Deirdre Cameron who can be contacted by phone on 0131 668 8896 or by email on [Deirdre.cameron@hes.scot](mailto:Deirdre.cameron@hes.scot)

Yours faithfully

**Historic Environment Scotland**



## **Annex: Scoping questions to Consultees**

### Do you agree with the characterisation of the existing environment?

We are content with the characterisation of the seabed environment within the development area. We have one concern about the characterisation of the cultural/built environment. Section 1090 addresses the issue of UK Hydrographic Office “dead” records for wrecks and seabed obstructions noting that they are “presumed not to exist”. The function of UKHO records is to note navigational risk, not to assess archaeological potential. Archaeological remains may therefore be present at the location of “dead” wrecks and this should be borne in mind when targeting and analysing surveys. We are content that the mitigation measures outlined in section 14.5.1 (1100) should be sufficient to identify any such surviving archaeological remains on the seabed.

### Have all the marine archaeology and cultural heritage impacts resulting from the Broadshore Hub WFDA been identified in the Broadshore Hub WFDA Scoping Report?

We are content that section 14.6 demonstrates a comprehensive understanding of the potential impacts that could result from the development.

### Do you agree with the marine archaeology and cultural heritage impacts that have been scoped in for/out from further consideration within the Broadshore Hub WFDA EIA Report?

Yes.

### Have all the relevant data sources been identified in the Broadshore Hub WFDA Scoping Report?

Yes.

### Do you agree with the proposed approach to assessment in the Broadshore Hub WFDA EIA Report?

We recommend that the baseline study area for marine archaeology records should be extended 2km outward from the current scoping boundary. This would compensate for the imprecise nature of many of the existing records for cultural heritage interests.

The current baseline assessment also appears to incorporate a minor misunderstanding of the nature of the existing records. Paragraph 1092 notes that “the location of the four recorded wrecks in the Canmore Maritime data are recorded as a centre point of a National Grid Reference given to the nearest 1km”. Where a Canmore record has an approximate location given as a 1km grid square, the position given falls at the south-west corner of that grid square, not the centre point. This raises the possibility that records on the edges of the current study area may have been missed during the initial selection process.

### Do you have any other matters or information sources that you wish to present?

- Written Scheme of Investigation: as noted above, the Scoping Report proposes excellent provision for archaeological assessment but provides little detail for how this provision will be secured and undertaken. We recommend that the proposed



Written Scheme of Investigation should be created and implemented as a priority to ensure that the commitments offered in the Scoping Report can be realised.

- Assessment of physical effects: the Scoping Report contains statements relating to the importance of archaeological remains and/or the degree of impact they may sustain. It does not describe the process that will inform the assessment of importance and impact. This matter should be addressed in the proposed Written Scheme of Investigation.
- Assessment of setting effects: the Scoping Report notes the potential for setting impacts on cultural heritage assets (1109; Table 14.4). It does not outline the methodology that will be used to assess the effect of those impacts on the cultural significance of the assets affected. We strongly recommend that our Managing Change Guidance Note on [Setting](#) is used to inform setting assessments. Further information on good practice in cultural heritage assessment, including guidance on assessment methodology, can be found in Appendix 1 of the [EIA Handbook](#).

## Historic Environment Scotland

06 March 2024

## **5. Cumulative and in-combination effects**

A full consideration of the implications of the whole scheme should be included in the ES. All supporting infrastructure should be included within the assessment.

The ES should include an impact assessment to identify, describe and evaluate the effects that are likely to result from the project in combination with other projects and activities that are being, have been or will be carried out. The following types of projects should be included in such an assessment, (subject to available information):

- a. existing completed projects
- b. approved but uncompleted projects
- c. ongoing activities
- d. plans or projects for which an application has been made and which are under consideration by the consenting authorities
- e. plans and projects which are reasonably foreseeable, i.e. projects for which an application has not yet been submitted, but which are likely to progress before completion of the development and for which sufficient information is available to assess the likelihood of cumulative and in-combination effects.

## **6. Wind Turbines**

[Specific guidance for wind developments](#) has been developed by Natural England and should be used to inform the EIA.

A full consideration of the implications of the whole scheme should be included in the ES. This should include the consideration of the electrical connection within the site and between the proposed substation and the wider grid. All supporting infrastructure such as supply and maintenance ports should be included within the assessment.

**Ithaca Energy**

## Marc MacFarlane

---

**From:** Sarah Mason <smason@ithacaenergy.com>  
**Sent:** 23 February 2024 12:10  
**To:** MD Marine Renewables  
**Cc:** Tara Breedon Turner; Mike Nunn; Caroline Sodersten  
**Subject:** Broadshore Hub Scoping report consultation

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

**Categories:** Saved in eRDM  
**Objective:** -1

To whom it may concern

**REQUEST FOR SCOPING OPINION FOR PROPOSED SECTION 36 AND MARINE LICENCE APPLICATIONS FOR EACH OF THE 3 WIND FARM DEVELOPMENT AREAS (“WFDAs”) (BROADSHORE, SCARABEN & SINCLAIR) COMPRISING THE “BROADSHORE HUB” LOCATED APPROXIMATELY 47KM NORTH OF FRASERBURGH**

We refer to your email dated 25 January 2024 requesting comments on the Broadshore Hub WFDAs Scoping Report submitted by BlueFloat Energy and Renantis Partnership (the “**applicant**”). Ithaca Energy SP E&P Limited (“**Ithaca Energy**”), Operator of the Captain Field in the Outer Moray Firth, requests the applicant considers the following issues in the EIA report, as they are not adequately addressed in the Broadshore Hub WFDAs Scoping Report *BFR\_HUB\_CST\_REP\_0002, Rev 1*:

1. Section 4.3 – Consultation and stakeholder engagement. Ithaca Energy has made a number of attempts to engage with the applicant regarding the proposed development. However, the applicant has not responded, despite the intersecting boundaries of the licence area P.324 Block 13/22a and the proposed windfarm development area, and the resulting proximity to Ithaca Energy operations.
2. Section 11.8 - consideration should be given to the approach of the Captain FPSO offload tankers which, due to their size, are restricted in their ability to manoeuvre and normally require long, straight line run-ins (currently 10 nautical miles) to the FPSO. The current Broadshore Hub configuration proposal would exclude tanker approach options in a large sector with a 10 nautical mile radius from the FPSO, between (approximately) South West and South East radials.
3. Section 12.4.7 – It should be noted that no helideck is present on Captain BLPA. Ithaca note that the 9 nautical mile aviation area is considered, but Ithaca have concerns due to the proximity of the WTGs and currently unspecified tip and hub height, and regular helicopter air traffic to both the Captain WPP and FPSO.
4. Section 13.4.3 – It is noted that the Broadshore Hub intersects the licence block 13/22a which is operated by Ithaca Energy. There is no assessment as to how the project could impact potential access to Ithaca assets or disruption to future activities (para 1066). Consideration should also be given to the cumulative impacts and SIMOPs during construction, operation and decommissioning activities.
5. Appendix 3: Mitigation Register makes no mention of potential effects on nearby Oil and Gas field operations (including supply operations) during wind farm construction, operation and decommissioning, and how these are to be managed.

Ithaca Energy welcome responses from the applicant and look forward to future engagement.



Regards,

Sarah Mason



**Sarah Mason** | Environmental Advisor  
T: +44 1224 334423 | [www.ithacaenergy.com](http://www.ithacaenergy.com)

Ithaca Energy (UK) Limited | Hill of Rubislaw, Aberdeen, AB15 6XL

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**Marine Directorate – Science, Evidence, Data  
and Digital (1 of 2)**

## Marc MacFarlane

---

**From:** Abby Gray on behalf of MD-SEDD-RE Advice  
**Sent:** 23 February 2024 10:49  
**To:** Marc MacFarlane  
**Subject:** RE: SCOP-0040 – Broadshore Hub Wind Farm Development Areas – Scoping Consultation – Request for MD-SEDD Advice – Response Required by 24 February 2024

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

**Categories:** Saved in eRDM  
**Objective:** -1

Good Morning,

Please find MD-SEDD comments attached.

*2024-01-26- SCOP-0040 - Broadshore Hub Wind Farm Development Areas - Scoping Consultation - Response Letter*  
<https://erdm.scotland.gov.uk/documents/A47119670/details>

Best Wishes,  
Abby

**Abby Gray** (she/her)  
**Renewables Advice Support Officer, Marine Directorate**  
Scottish Government | Marine Laboratory | Aberdeen | AB11 9DB  
E: [Abby.Gray2@gov.scot](mailto:Abby.Gray2@gov.scot)





E: [MD-SEDD-RE\\_Advice@gov.scot](mailto:MD-SEDD-RE_Advice@gov.scot)

Marc MacFarlane  
Marine Planning and Policy  
Marine Laboratory  
375 Victoria Road  
Aberdeen  
AB11 9DB

**23 February 2024**

## **SCOP-0040 – Broadshore Hub Wind Farm Development Areas – Scoping Consultation**

Marine Directorate advisers have reviewed the request from MD-LOT and provide the following advice.

### **Commercial fisheries**

#### Data

MD-SEDD note that Marine Directorate NMPi spatial data are included in the list of commercial fisheries related data and advise that the <12 m vessel heat maps (2017-2021) are used in preference to the older Scotmap outputs as these provide more recent spatial data for smaller vessels. MD-SEDD advise that the Scotmap dataset should be used only to validate information gathered through consultation with fisheries stakeholders and industry. The <12m spatial data have not been visually presented in the appendices and MD-SEDD advise they are included in the EIA and used to inform the commercial fisheries baseline of the <12m fleet for the regional study area. This may be of particular relevance when assessing displacement of fishing from the local area of the development to surrounding regional areas.

MD-SEDD advises that in addition to the AIS provided by European Maritime Safety Agency they also include the AIS data provided by EMODNet which gives the amount of time spent



by fishing vessels in a location. These can be found via [emodnet.ec.europa.eu](https://emodnet.ec.europa.eu) under “vessel density”, and present averaged data from 2017-2022.

### General

MD-SEDD note that fishers have raised concerns over the interaction of Sinclair and Scaraben with *Nephrops* fishing grounds and that there is a proposed revised Sinclair boundary. The developer has stated that the proposed revised Sinclair boundary would minimise interaction with the *Nephrops* fishing grounds and have invited comments from all interested parties on the alternative Sinclair boundary. MD-SEDD advise that the proposed revised Sinclair boundary would be the preferred option to minimise impacts to the *Nephrops* habitat and associated fishery.

With regards to potential impacts that have been scoped, ‘additional steaming to alternative fishing grounds’ has been scoped out for the construction and operational phase. MD-SEDD advise that it is scoped in for all phases of development as vessels may have to transit around the windfarm and there is potential for permanent fisheries displacement from the area if floating technology is used.

MD-SEDD advise that a commercial fisheries displacement assessment is carried out in the EIA. The developer can refer to the fisheries displacement good practice guidance published by the Marine Directorate here: [Assessing fisheries displacement by other licensed marine activities: good practice guidance - gov.scot \(www.gov.scot\)](https://www.gov.scot/resources/documents/2022/05/Assessing-fisheries-displacement-by-other-licensed-marine-activities-good-practice-guidance-gov-scot-2022-05.pdf)

### **Physical environment / coastal processes**

The Marine Directorate for Science, Evidence, Data and Digital (MD-SEDD) has reviewed chapter 5 of the scoping report (marine geology, oceanography and physical processes) mainly focusing on changes in tidal and water column processes.

There are no suggested data sources in Table 5.3 covering water column structure including stratification. MD-SEDD suggests the use of existing 3D model output to describe the physical water column in the study area. Daily mean (or hourly) output of temperature and salinity could be used to describe stratification (magnitude, extent, timing) and hourly current speed data could be used to describe flow conditions. The northwest European shelf



reanalysis model runs available on Copernicus Marine (e.g. <https://doi.org/10.48670/moi-00059> and <https://doi.org/10.48670/moi-00054>), or Scottish Shelf Model (<https://marine.gov.scot/themes/scottish-shelf-model>) would be sensible model choices. Note there is climatology available from the Scottish Shelf Model (widely used by the aquaculture industry) which could be used, but there is also a 27 year reanalysis available from the Scottish Shelf Waters Reanalysis Service (<https://tinyurl.com/SSW-Reanalysis>) that can be used to study inter-annual variability (and how this might compare with potential impacts).

MD-SEDD agree on the potential impacts that are being scoped in to the EIA, and the proposed assessment methodologies. However, MD-SEDD advise that the potential impact on water column stratification be scoped in to the EIA. Recent papers (e.g. Dorrell et al. 2022) suggest that offshore wind farms could impact stratification and the proposed site is potentially in waters that are seasonally stratified (e.g. van Leeuwen et al. 2015). The scoping report argues that the waters in the region are well mixed and that any enhanced mixing is likely to rapidly disperse, and cites a recent SAMS (2023) report. MD-SEDD request access to the SAMS (2023) report on “Understanding the impacts of floating turbine structures on shelf sea stratification, nutrient fluxes and primary production” in order to fully understand the applicants reasoning behind scoping this potential impact out of the EIA.

## References

Dorrell, R. M., Lloyd, C. J., Lincoln, B. J., Rippeth, T. P., Taylor, J. R., Caulfield, C. P., Sharples, J., Polton, J. A., Scannell, B. D., Greaves, D. M., Hall, R. A., & Simpson, J. H. (2022). Anthropogenic Mixing in Seasonally Stratified Shelf Seas by Offshore Wind Farm Infrastructure. *Frontiers in Marine Science*, 9. <https://doi.org/10.3389/fmars.2022.830927>

van Leeuwen, S., P. Tett, D. Mills, and J. van der Molen (2015), Stratified and non stratified areas in the North Sea: Long-term variability and biological and policy implications, *J. Geophys. Res. Oceans*, 120, 4670–4686, <https://doi.org/10.1002/2014JC010485>

Yours sincerely,

## Renewables and Ecology Team

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**Marine Directorate – Science, Evidence, Data  
and Digital (2 of 2)**

## Marc MacFarlane

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**From:** William Ellison  
**Sent:** 23 February 2024 15:34  
**To:** MD Marine Renewables  
**Cc:** Kirsty Black; Lauren Cowan; Marc MacFarlane; Inga Freimane; Yousaf Kanan; Amy McQueen  
**Subject:** RE: SCOP-0040 – BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area – Scoping Consultation – Response Required by 24 February 2024

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

**Objective:** -1

Hi Marc, team,

Please find a link below to MAU scoping response.

Broadshore wind development - Scoping Report - MAU response - February 2024  
<https://erdm.scotland.gov.uk:8443/documents/A47427775/details>

Regards,

Will



## Broadshore Hub – Scoping Report

### **Marine Analytical Unit (“MAU”) Response** **Marine Directorate**

The Broadshore Wind Farm Development scoping report includes descriptions of a range of potential impacts. This response focuses only on the assessment of social and economic impacts.

We recommend that a full Socio-Economic Impact Assessment be carried out. We provide general advice on how to deliver this in Annex 1.

#### **1. Overview**

##### *1.1. Study areas*

The study areas relevant to the assessment were identified in section 16.4.1. of the scoping report. Although at this stage port location and supply chain hubs have not been defined, the assessment of socio-economic impacts would benefit from the inclusions of a short list of potential epicentres of impact. This can help to define the affected communities, and aid stakeholder engagement and research with local communities. This advice was also mentioned during the scoping workshop, as noted in Table 16.2.

We note that to overcome the difficulty of identifying potential local study areas, it is suggested to discuss hypothetical areas of impact and undertake scenario planning for impact at potential locations for the construction base and O&M base. We welcome this suggestion, as it might provide information on the nature and scale of impacts that might affect communities. Scenario mapping, however, should not be viewed as a replacement of primary research with stakeholders, including local communities.

##### *1.2. Consultation, stakeholder engagement, and primary data collection*

We noted the consultation activities that have been conducted to date (Table 4.1) and planned future engagement, that includes one pre-application consultation event in the form of a public exhibition.

The scoping report also states on in section 16.7.2., para 442 that *“consultation will be limited to statutory stakeholders (such as local authorities). The methodology aims to minimise disruption to communities through over-consultation, and ultimately seeks to avoid reputational damage to the Broadshore Hub WFDA, its Applicants, the offshore sector in general, and the Scottish Government’s consenting processes”*.

Furthermore, section 16.6.2., para 1237 states that *“it is not considered proportionate to conduct primary social research in all areas that may have the potential to host activities associated with the Broadshore Hub WFDA’s”*.

Academic research (e.g. Aitken et al 2016; Devine-Wright 2011; Firestone et al 2012; Howell 2018; Jijelava and Vanclay 2028; Langbroek and Vanclay 2012; Vanclay 2020) shows that it is important to involve local communities in social impact assessments and address any concerns communities might have. This decreases the delivery risks for projects. Following this research, we believe that the engagement of stakeholders (including local communities) is very important for the assessment of socio-economic impacts, as these communities might be directly impacted by the development. As described in the Annex 1, we recommend conducting a stakeholder mapping exercise to identify all potential stakeholders who might be affected by the development. These stakeholders need to be engaged for identification and assessment of potential impacts (e.g. creation of a working group with local community councils where magnitude and sensitivity of socio-economic impacts is discussed).

It is important not only to inform members of the general public about the development but also gather their views of how they might be affected (primary data collection). Please note that this approach is important not only for the assessment of socio-cultural impacts, but also other social and economic impacts (e.g. communities’ views on potential impacts on employment, housing, local services). We recommend that potential socio-economic impacts are discussed with members of the general public and their assessment is fed into the report.

We believe that engagement and research with communities is proportionate to large infrastructure projects, such as offshore wind farms. Moreover, there are examples<sup>1</sup> of how social research has been implemented in practice by some OWFs.

We encourage the developer to engage trained social scientists with experience in qualitative methods to conduct research and primary data collection with communities to ensure that the social science research methods are designed and executed correctly so that the engagement is delivered in as ethical and meaningful way as possible.

### 1.3. Data sources

Please provide a list of data sources used to assess potential socio-economic impacts (see Annex 1 for examples). Please use the most up-to-date data sources.

With regards to Diffley Partnership research mentioned in section 16.6.2., we would like to discourage the use of external literature instead of primary social research, as this might result in poorer quality assessment. Robust evidence produced specifically for the SEIA is required to deliver a good quality assessment.

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<sup>1</sup> [Environmental Impact Assessment Report - Volume 1 - West of Orkney Windfarm - West of Hoy, Orkney | Marine Scotland Information](#)

## **2. Scoping of impacts**

### *2.1. Social impacts*

We disagree with the scoping out of socio-cultural impacts. Although we note the concern around survey fatigue and support the desire to reduce burden on research participants, there are different means of conducting primary social research (e.g. citizens' juries might be used instead of large-scale surveys). Please refer to the [Methods Toolkit](#) mentioned in Annex 1 we recommend to use.

With regards to the SOWEC collaborative approach (mentioned in section 16.6.2., para 1238) that will consider socio-cultural impacts, we are open to developers working together to mitigate the issue of stakeholder fatigue. To provide an example, if different projects are anticipated to create cumulative socio-economic impacts within certain areas and epicentres of impact, the stakeholder engagement and social research regarding these cumulative impacts as well as the socio-economic impact assessment could be shared between the developers.

With regards to tourism and potential changes to visitor behaviour as a result of increased activity at ports and harbours, it was mentioned in para 1207, page 428 that these impacts are going to be scoped out of the assessment, because the location of ports is not yet known. Please consider scoping in all potential impacts on tourism and recreation.

### *2.2. Economic impacts*

We broadly agree with the scoping report's proposed approach for assessing economic impacts, in particular that the assessment will include direct, indirect and induced impacts for all phases of the project. It's also pleasing that the assessment will take into account deadweight, leakage, displacement and substitution, and that sensitivity analysis will be performed to account for risk, uncertainty and optimism bias. Please refer to our guidance shown in Annex 1 for further information.

The scoping report outlines that employment impacts will be assessed at each phase of the project in terms of years of employment and jobs. If it is possible to supply additional information about the types of jobs that are expected to be created (e.g. part-time, full-time, skilled, unskilled etc) and how these compare to the existing jobs in the study area, this will add further depth to the analysis.

We expect to see a detailed description of the methodology used to assess economic impacts in the assessment, including specific details about the methodological approach taken and any key assumptions that underpin any estimates. This may be supplied in a technical annex if necessary.

### 3. Conclusions

We broadly agree with the scoping report's proposed approach for assessing economic and social impacts. However, we disagree with the scoping out of socio-cultural impacts. We would like to encourage the developer to conduct more engagement and social research with local communities. We recommend that you employ a social researcher with qualitative research expertise to collect primary data from communities to understand their responses to potential socio-economic changes resulting from the development.

### References

- Aitken, M., Haggett, C. and Rudolph, D. (2016) Practices and rationales of community engagement with wind farms: awareness raising, consultation, empowerment. *Planning Theory & Practice*, 17(4): 557-576.  
<https://doi.org/10.1080/14649357.2016.1218919>
- Devine-Wright, P. (2011) Enhancing local distinctiveness fosters public acceptance of tidal energy: A UK case study. *Energy Policy*, 39(1): 83-93.  
<https://doi.org/10.1016/j.enpol.2010.09.012>
- Firestone, J., Kempton, W., Blaydes Lilley, M. and Samoteskul, K. (2012) Public acceptance of offshore wind power: does perceived fairness of process matter?, *Journal of Environmental Planning and Management*, 55(10): 1387-1402.  
<https://doi.org/10.1080/09640568.2012.688658>
- Howell, R. (2018) PhD Thesis "In sight and in mind: Social implications of marine renewable energy". University of Edinburgh. Available at [In sight and in mind: social implications of marine renewable energy \(ed.ac.uk\)](https://www.ed.ac.uk/in-sight-and-in-mind-social-implications-of-marine-renewable-energy) (accessed 10/03/2023).
- Jijelava, D. and Vanclay, F. (2018) How a large project was halted by the lack of a social Licence to operate: Testing the applicability of the Thomson and Boutilier model, in *Environmental Impact Assessment Review* 73: 31-40.  
<https://doi.org/10.1016/j.eiar.2018.07.001>
- Langbroek, M. and Vanclay, F. (2012) Learning from the social impacts associated with initiating a windfarm near the former island of Urk, The Netherlands, *Impact Assessment and Project Appraisal* 30(3): 167-178.  
<https://doi.org/10.1080/14615517.2012.706943>
- Vanclay, F. (2020) Reflections on Social Impact Assessment in the 21<sup>st</sup> century, *Impact Assessment and Project Appraisal* 38(2): 126-131.  
<https://doi.org/10.1080/14615517.2019.1685807>

# **Annex 1: General Advice for Socio-Economic Impact Assessment**

## **Marine Analytical Unit (MAU)**

### **Marine Directorate**

#### **December 2023**

This document sets out some suggestions for delivering socio-economic impact assessment drawing on the professional expertise of the Marine Analytical Unit (MAU), Marine Directorate.

### **Section 1. Some general best practice tips**

- Take a proportionate approach to SEIA in line with the size and generating capacity of the development
- Consider offshore and onshore components of the development in the same assessment.
- Employ experts to design and carry out the assessment. The relevant expertise would include:
  - Social research and economist training, qualifications and experience
  - Familiarity and experience with appropriate methods for each discipline (including economic appraisal, social research methods such as surveys, sampling, interviews, focus groups and participatory methods)
- Consider potential secondary socio-economic impacts of any changes that affect the other relevant receptor groups covered in the wider EIA e.g. commercial fisheries, cultural heritage and archaeology and visual impacts.
- Include consideration of the cumulative impact of multiple offshore developments.
- Outline the rationale for scoping out impacts that are deemed to be minimal, including any evidence or analysis that has been used. If this is not provided it can be difficult for MAU to understand why impacts have been scoped out and we may suggest scoping them back in.

### **Section 2. Key components of a Socio-economic Impact Assessment**

We set out below what we consider to be the key steps to an assessment. We recommend a combined approach so that social and economic impacts are covered together in the assessment, whilst acknowledging that different methodologies for social and economic impacts assessment are needed at certain stages, and that the two disciplines are distinct.

We wish to highlight the importance of stakeholder engagement throughout the assessment, and the use of social research methods (see Methods Toolkit referenced at the end of this Annex) to gather primary data and first hand perspectives from particular groups and communities that are affected. These are helpful in order to better understand the nature and degree of impacts that might be caused by changes that are expected occur. A change in itself may or may not bring about tangible impact, impacts may vary for different people or be perceived in different ways, are affected by individual values and attitudes, and conditioned by the context.

Stakeholder engagement and data collection can occur at a number of stages in the SEIA process and may involve similar methodologies but there are important differences to note. The primary aims of stakeholder engagement are to inform, consult or involve key stakeholders, and to communicate information and gather feedback. Data collection, in contrast is a more rigorous analytical process involving:

- Setting out a planned methodology in advance with clear objectives of what you wish to achieve through data collection
- Sampling strategies that take account of the demographic variations in the population and the need to include difficult to reach groups
- Robust methods to collect information from people in a neutral and unbiased way
- Awareness of how data will be analysed and reported on to obtain and disseminate robust conclusions
- Taking account of research ethics including informed consent, and data protection requirements under GDPR

The stages below are divided into the activities that we suggest are **before** the developer submits a request for a scoping opinion and those that are done **after** the scoping phase. We recommend an iterative approach which means that steps inform each other, information is built up over time, and some steps may be repeated or done in a different order.

The key steps should include:

### **Pre-scoping activities**

- 1) Getting started:** Employ economist and social research experts and work with them to develop a plan for the SEIA that sets out data requirements, and the proposed social and economic data collection and impact assessment methodologies, timescales, any data protection considerations, risk assessment and ethical issues that might arise from the work.
- 2) Develop a detailed description** of the planned development and consider the project phases where socio-economic impacts might be experienced (covering development, construction, operation and maintenance and decommissioning phases). Start to map out potential socio-economic impacts and initial consideration of areas of impact on land that will need to be covered.
- 3) Initial scoping of impacts:** develop a broad list of potential impacts informed by experts (including social researcher, economist, local representatives from key groups, community stakeholders and others).
- 4) Define potential impact areas on land** taking into account locations and connections between activities. Different types of impacts may be experienced at different geographic levels, some in the area nearest the landfall or the nearest coastline to the development at sea, and others much further away (at Scotland level, UK level and internationally). The geographical scale at which social impacts are experienced may be different for social impacts compared with economic impacts. There may be multiple epicentres from which impacts radiate

including the site of the development, land-based areas such as landfall and grid connections, construction bases and places from which the development is visible. Activities that take place in the sea are also relevant for defining the impact area on land, for example the location of fishing activity and ports where fish are landed. The definition of the impact area will inform which communities and which sectors are included in the assessment and vice versa, so this exercise needs to be done iteratively with step 3, the initial scoping of impacts.

- 5) **Stakeholder mapping** is required to identify all the people, groups and stakeholders who may be affected by the development and is a first step in order to conduct effective stakeholder engagement. This exercise is informed by the definition of the impact area. A broad approach is recommended. Stakeholders are likely to include local communities, businesses, workers, other users of the sea, interest groups, community councils and so on.

**Steps 4 and 5 may lead to a change in the list of potential impacts so this will need refined/checked.**

- 6) **Stakeholder engagement (with those affected by the development, sea users, communities etc)** is a key requirement of SEIA that is done at different stages of the process. We recommend doing some initial stakeholder engagement before submitting the scoping report. Stakeholder engagement will fulfil a number of requirements:

- **Provide information about the development** so that those who might be affected are able to make an informed judgement about potential impacts
- **Present and refine list of potential impacts based on feedback** - identify impacts that are most relevant and add any additional ones that are identified
- **Collect initial data/ insights from stakeholders** on what potential socio-economic impacts (to be developed later)
- **Build relationships** with the community and key groups affected for later stages of the SEIA process so that they can understand the decisions making process and how they can influence it.

There are many **participatory methodologies** that can be used for effective stakeholder engagement that provide a deliberative space for community discussions.

This stage may also require the setting up of governance structures and a community liaison officer. **Early engagement** with those who might be affected is very important, as is meaningful and inclusive engagement where people feel that they are being listened to and that their feedback will be acted upon. It is important to set out clearly how stakeholder engagement is being done for the SEIA specifically.

- 7) **Gather contextual information** to develop a social and economic profile of the area prior to the development that will help with setting the baseline and impact

prediction, identifying potential industries and communities that might be affected and sources of data that can be used in the assessment. This might include primary data collection using social research methods (such as surveys, interviews, focus groups) as well as desk based analysis (of existing data sets such as fishing data, population data).

Primary data collection may occur alongside participatory activities (e.g. engagement events) but must be done in a rigorous and systematic fashion and the findings should be robustly analysed and incorporated into the SEIA. Impacts that are identified for the other receptors in the wider EIA may also have socio-economic consequences and so it may be important to include these in the SEIA.

#### **8) Produce list of anticipated impacts to be covered in the scoping report**

setting out the range of potential impacts that could occur, building on what has already been done using data and insights that have been collected from various activities described above. Details of the methods that have been used should be included to enable Marine Directorate to determine if the analysis is based on a robust and appropriate approach. Justification should be provided for any impacts that are scoped in or out. This could be based on suggestions made by stakeholders and the public during stakeholder engagement or an assessment based on the analysis of primary and secondary data.

It is helpful if the scoping report includes details on the approach to be used for the SEIA including methods for data collection, planned stakeholder engagement activities and data-sets to be used.

#### **Post scoping activities for the SEIA**

The scoping opinion will advise on the final list of socio-economic impacts to be assessed in the SEIA. This may require additional data collection/ social research to enable a more rigorous assessment of a narrower set of anticipated impacts. It may also require further stakeholder engagement in order to check the significance of impacts with different groups, and the acceptability of mitigation options.

The data and information that has been collected throughout the scoping phase will be used to conduct steps 9, 10 and 11 below.

#### **9) Conduct baseline analysis** to assess the situation in the absence of the development, to provide a point of comparison against which to predict and monitor change. Appropriate social and economic measures should be used for the baseline and cover relevant issues (see section 4 for suggested data sources). Key stakeholders and other interested parties including affected communities and sectors may be aware of baseline data to be included, and this can be explored in the participatory approaches described above. The findings from social research can also be included in the baseline. Note that baseline data can be presented in the scoping report but is also the first stage of the SEIA and so should be included in the SEIA report.



**10) Predict impacts and assess their significance (otherwise known as impact appraisal or options appraisal):** Through analysis, estimate the social and economic changes and their expected impacts, considering any alternative development options and how significant the impacts might be. This is the core part of the assessment and forms the main part of the assessment report. Different methodologies and both primary and secondary data inform this part of the exercise.

Different phases of the development should be covered (development, construction, operation and maintenance) and also transitions between phases (if relevant).

The knock on socio-economic consequences of impacts in other parts of the EIA assessment should be assessed here, such as the impact on commercial fisheries, and impacts on related industries such as tourism could also be included.

It is important to consider distribution of impacts among different social groups (covering protected quality characteristics, socio-economic groups and geographic area where relevant to do so).

Economic impact appraisal should include consideration of:

- Direct, indirect and induced impacts
- Leakage, displacement and substitution effects
- Deadweight
- Cumulative impacts
- Sensitivity analysis to account for risk, uncertainty and optimism bias

There are a range of methodologies for calculating direct, indirect and induced impacts. These include the appropriate use of multipliers, a local content methodology, stakeholder involvement and expert opinion.

Modelling approaches should be realistic, based on robust data, and avoid over promising the economic impacts.

All prices should be presented in real terms (excluding inflation) and should state which year the prices represent.

## **11) Development enhancement, mitigation strategy and complete SEIA report.**

There may be an opportunity for adaptation or other approaches to mitigate potentially adverse impacts and to maximise positive opportunities. This may include engagement with the community to develop a strategy for enhancing benefits and mitigating against impacts; or development of a Community Benefit Agreement (CBA). Again these activities should be done collaboratively with stakeholders where relevant and appropriate.

The SEIA report should clearly set out the methods used in the assessment, justification for decision made such as scoping certain impacts in or out of the

assessment, and the approach to analysis. The report should cover the baseline analysis and results of the impact prediction or appraisal, and distributional impacts. Social and economic impacts can be set out separately (where this makes sense) and together where they overlap.

It is good practice for the report to be reviewed by the people (i.e. the wider group of stakeholders and communities) who were involved in providing data for its production.

### **Section 3. Examples of different types of socio-economic impacts**

In the literature social and economic impacts are defined in many different ways. Sometimes social and economic impacts are covered separately, whilst other sources refer to socio-economic impacts.

The following table sets out some commonly identified socio-economic impacts.

#### **Examples of Socio-economic Impacts from Glasson 2017<sup>2</sup>**

##### **1. Direct economic:**

- GVA
- employment, including employment generation and safeguarding of existing employment;
- characteristics of employment (e.g. skill group);
- labour supply and training; and
- other labour market effects, including wage levels and commuting patterns.

##### **2. Indirect/induced/wider economic/expenditure:**

- employees' retail expenditure (induced);
- linked supply chain to main development (indirect);
- labour market pressures;
- wider multiplier effects;
- effects on existing commercial activities (eg tourism; fisheries);
- effects on development potential of area; and

##### **3. Demographic:**

- changes in population size; temporary and permanent;
- changes in other population characteristics (e.g. family size, income levels, socio-economic groups); and
- settlement patterns

##### **4. Housing:**

- various housing tenure types;

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<sup>2</sup> Glasson J (2017a) "Socio-economic impacts 2: Overview and economic impacts" in Therivel R and Wood G (eds.), *Methods of Environmental and Social Impact Assessment*, Abingdon: Routledge

- public and private;
- house prices and rent / accommodation costs;
- homelessness and other housing problems; and
- personal and property rights, displacement and resettlement

#### 5. Other local services:

- public and private sector;
- educational services;
- health services; social support;
- others (e.g. police, fire, recreation, transport); and
- local authority finances

#### 6. Socio-cultural:

- lifestyles/quality of life;
- gender issues; family structure;
- social problems (e.g. crime, ill-health, deprivation);
- human rights;
- community stress and conflict; integration, cohesion and alienation; and
- community character or image

#### 7. Distributional effects:

Distributional analysis is a term used to describe the assessment of the impact of interventions on different groups in society. Interventions may have different effects on individuals according to their characteristics such as income level or geographical location

- effects on specific groups in society (eg: by virtue of gender, age, religion, language, ethnicity and location); environmental justice

### Section 4: Useful Data Sources for Socio-Economic Impact Assessments

| Name                             | Summary  | Link to Source  |
|----------------------------------|--|---|
| Statistics.gov.scot              | Contains a wide range of data by local authority and other geographic breakdowns. Has a search by subject and area option. | <a href="https://statistics.gov.scot">statistics.gov.scot</a>   |
| Marine Economic Statistics, 2019 | Annual economic statistics publication including GVA and employment data for marine economy sectors.                       | <a href="https://www.gov.scot/Topics/economy/marine-statistics/2019">Scotland's Marine Economic Statistics 2019 - gov.scot (www.gov.scot)</a> |

|   |   |   |
|---|---|---|
| <p>Scottish Sea Fisheries Statistics, 2021</p>        | <p>Provides data on the tonnage and value of all landings of sea fish and shellfish by Scottish vessels, all landings into Scotland, the rest of the UK and abroad, and the size and structure of the Scottish fishing fleet and employment on Scottish vessels.</p>                                  | <p><a href="http://www.gov.scot">Summary - Scottish Sea Fisheries Statistics 2021 - gov.scot (www.gov.scot)</a></p> |
| <p>Scottish Shellfish Farm Production Survey 2021</p> | <p>Statistics on employment, production and value of shellfish from Scottish shellfish farms.</p>   | <p><a href="http://www.gov.scot">Scottish Shellfish Farm Production Survey 2021 - gov.scot (www.gov.scot)</a></p>   |
| <p>Scottish Annual Business Statistics 2020</p>       | <p>Scottish Annual Business Statistics (SABS) presents estimates of employment, turnover, purchases, Gross Value Added and labour costs. Data are provided for businesses that operate in Scotland. Data are classified according to the industry sector, location and ownership of the business.</p> | <p><a href="http://www.gov.scot">Scottish Annual Business Statistics 2020 - gov.scot (www.gov.scot)</a></p>         |
| <p>Sub-Scotland Economic Statistics Database</p>      | <p>The Sub-Scotland Economic Statistics Database provides economic, business, labour market and population data for Scotland, and areas within Scotland.</p>  | <p><a href="http://www.gov.scot">Sub-Scotland Economic Statistics Database - gov.scot (www.gov.scot)</a></p>        |
| <p>Nomis Official Labour Market Statistics</p>        | <p>Labour market statistics including data on employment, unemployment, qualifications, earnings etc.</p>   | <p><a href="http://nomisweb.co.uk">Nomis - Official Labour Market Statistics (nomisweb.co.uk)</a></p>               |
| <p>Economics of the UK Fishing Fleet 2020</p>         | <p>Economic estimates at UK, home nation and fleet segment level for the UK fishing fleet. The estimates are calculated based on samples of fishing costs and earnings gathered by Seafish as part of the 2020 Annual Fleet Economic Survey.</p>  | <p><a href="#">Economics of the UK Fishing Fleet 2020 — Seafish</a></p>   |

|   |  |   |
|---|--|---|
| Scotland's Census, National Records of Scotland | Census data that provides information about the characteristics of people and households in the country.   | <a href="https://www.nrscotland.gov.uk">Scotland's Census   National Records of Scotland (nrscotland.gov.uk)</a>  |
| Scottish Index of Multiple Deprivation          | Collection of documents relating to the Scottish Index of Multiple Deprivation - a tool for identifying areas with relatively high levels of deprivation.          | <a href="https://www.gov.scot/Scottish-Index-of-Multiple-Deprivation-2020">Scottish Index of Multiple Deprivation 2020 - gov.scot (www.gov.scot)</a>          |
| The Green Book                                  | HM Treasury guidance on how to appraise and evaluation policies, projects and programmes.  | <a href="https://www.gov.uk/government/publications/the-green-book">The Green Book: appraisal and evaluation in central government - GOV.UK (www.gov.uk)</a>  |
| The Magenta Book                                | HM Treasury guidance on evaluation. Chapter 4 provides specific guidance on data collection, data access and data linking.   | <a href="https://www.gov.uk/government/publications/the-magenta-book">The Magenta Book - GOV.UK (www.gov.uk)</a>  |
| Enabling a Natural Capital Approach (ENCA)      | Supplementary guidance to The Green Book. ENCA resources include data, guidance and tools to help understand natural capital and know how to take it into account. | <a href="https://www.gov.uk/government/publications/enabling-a-natural-capital-approach">Enabling a Natural Capital Approach (ENCA) - GOV.UK (www.gov.uk)</a> |

## Section 5: Further sources of guidance:

HM Treasury guidance on how to appraise and evaluate policies, projects and programmes: [The Green Book: appraisal and evaluation in central government](https://www.gov.uk/government/publications/the-green-book)

Best practice in Social Impact Assessment according to the International Association for Impact Assessment: [Social Impact Assessment: Guidance for Assessing and Managing the Social Impacts of Projects](https://www.iaia.org/publications/guidance-for-assessing-and-managing-the-social-impacts-of-projects)

The project A two way Conversation with the People of Scotland on the Social Impacts of Offshore Renewables (CORR/5536) has developed elements of a conceptual framework on social values that can be used to support and inform existing processes for assessing the potential social impacts of offshore renewables plans: [Offshore renewables - social impact: two way conversation with the people of Scotland](https://www.gov.uk/government/publications/offshore-renewables-social-impact-two-way-conversation-with-the-people-of-scotland)

Best practice guidance for assessing the socio-economic impacts of OWF developments: [Guidance on assessing the socio-economic impacts of offshore wind farms \(OWFs\)](https://www.gov.uk/government/publications/guidance-on-assessing-the-socio-economic-impacts-of-offshore-wind-farms)

[A toolkit of methods available to assist developers, consultants, and researchers carrying out socio-economic impact assessments: Methods Toolkit for Participatory Engagement and Social Research - gov.scot \(www.gov.scot\)](https://www.gov.scot/Methods-Toolkit-for-Participatory-Engagement-and-Social-Research)

**Maritime & Coastguard Agency**

## Marc MacFarlane

---

**From:** navigation safety <navigationsafety@mcga.gov.uk>  
**Sent:** 21 February 2024 11:03  
**To:** MD Marine Renewables  
**Cc:** Kirsty Black; Lauren Cowan; Marc MacFarlane; Nick Salter; Vaughan Jackson  
**Subject:** RE: SCOP-0040 – BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area – Scoping Consultation – Response Required by 24 February 2024  
**Attachments:** Scoping Response- BSS Hub.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Good morning Marc,

Please see the attached scoping response for BSS Hub- comprising Broadshore, Scaraben and Sinclair Offshore windfarms.

Please feel free to contact us if you have any questions about the response.

Best regards

*Vinu*

**Vinu John**  
Navigation Policy Advisor  
Marine Licensing and Consenting  
UK Technical Services Navigation

[Redacted]  
[vinu.john@mcga.gov.uk](mailto:vinu.john@mcga.gov.uk)



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Maritime &  
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Agency

Vinu John  
**Maritime and Coastguard Agency**  
UK Technical Services Navigation

[www.gov.uk/mca](http://www.gov.uk/mca)  
21 February 2024

Marc MacFarlane  
Marine Directorate - Marine Planning & Policy  
Scottish Government, Marine Laboratory  
375 Victoria Road,  
Aberdeen, AB11 9DB

Our ref: SCOP0040

Dear Mr. MacFarlane,

**REGULATION 12 OF THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017  
REGULATION 13 AND SCHEDULE 4 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2007  
(Collectively Referred to as the “EIA Regulations”)**

**Scoping Opinion Consultation Response: BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area.**

Thank you for the opportunity to comment on the Scoping Report for the Broadshore offshore wind farm submitted by BlueFloat Energy and Renantis Partnership. The MCA has reviewed the report, as detailed in your email dated 25<sup>th</sup> January 2024. We understand the scoping report is for the BSS Hub- which includes Broadshore, Sinclair and Scaraben windfarms. The MCA’s remit for offshore renewable energy development is to ensure that safety of navigation is preserved whilst progress is made towards government targets for renewable energy.

The EIA Report should supply detail on the possible impact on navigational issues for both commercial and recreational craft, specifically:

- Collision Risk
- Navigational Safety
- Visual intrusion and noise
- Risk Management and Emergency response
- Marking and lighting of site and information to mariners
- Effect on small craft navigational and communication equipment
- The risk to drifting recreational craft in adverse weather or tidal conditions.
- The likely squeeze of small craft into the routes of larger commercial vessels.

A Navigational Risk Assessment (NRA) will need to be submitted in accordance with MGN and the MCA’s Methodology for Assessing the Marine Navigation Safety & Emergency Response Risks of Offshore Renewable Energy Installations (OREI). This NRA should be accompanied by a detailed MGN 654 Checklist which can be downloaded from the MCA website at

<https://www.gov.uk/guidance/offshore-renewable-energy-installations-impact-on-shipping>



We note, from paragraph 928 (Section 11.4.2) of the scoping report that the project intends to carry out a vessel traffic survey to the standard of MGN 654 i.e. at least 28 days which is to include seasonal data (two x 14-day surveys). We understand that a summer survey has already been undertaken and a winter survey is planned for early 2024.

The turbine layout design will require MCA approval prior to construction to minimise the risks to surface vessels, including rescue boats, and Search and Rescue aircraft operating within the site. Any additional navigation safety and/or Search and Rescue requirements, as per MGN 654 Annex 5, will be agreed at the approval stage.

Attention should be paid to cabling routes and where appropriate burial depth for which a Burial Protection Index study should be completed and subject to the traffic volumes, an anchor penetration study may be necessary. If cable protection measures are required e.g. rock bags or concrete mattresses, the MCA would be willing to accept a 5% reduction in surrounding depths referenced to Chart Datum. This will be particularly relevant where depths are decreasing towards shore and potential impacts on navigable water increase, such as at the HDD location.

It is to be noted that regulatory mooring expectations should be identified as a potential mitigation and MCA can confirm this guidance should be followed and that a Third-Party Verification of the mooring arrangements will be required.

Particular consideration will need to be given to the implications of the site size and location on SAR resources and Emergency Response Co-operation Plans (ERCoP). Attention should be paid to the level of radar surveillance, AIS and shore-based VHF radio coverage and give due consideration for appropriate mitigation such as radar, AIS receivers and in-field, Marine Band VHF radio communications aerial(s) (VHF voice with Digital Selective Calling (DSC)) that can cover the entire wind farm sites and their surrounding areas. A SAR checklist will also need to be completed in consultation with MCA.

It is noted that HVDC or HVAC transmission infrastructure maybe installed, If HVDC is being used consideration must be given to electromagnetic deviation on ships' compasses. The MCA would be willing to accept a three-degree deviation for 95% of the cable route. For the remaining 5% of the cable route no more than five degrees will be attained. The MCA would however expect a deviation survey post the cable being laid; this will confirm conformity with the consent condition.

MGN 654 Annex 4 requires that hydrographic surveys should fulfil the requirements of the International Hydrographic Organisation (IHO) Order 1a standard, with the final data supplied as a digital full density data set, and survey report to the MCA Hydrography Manager. Failure to report the survey or conduct it to Order 1a might invalidate the Navigational Risk Assessment if it was deemed not fit for purpose.

Considering all the potential developments in the area, MCA is concerned regarding the general loss of navigable sea room, and we would request the applicant to factor in cumulative impacts into their NRA and for this assessment the applicant should consider all the projects in the vicinity specially the likes of Buchan, Stromar and Caledonia.

On the understanding that the Shipping and Navigation aspects are undertaken in accordance with MGN 654 and its annexes, along with a completed MGN checklist, MCA is likely to be content with the approach. As this project progress, we would welcome engagement with the developers, and early discussion on the points raised above.

Section 11.8 Scoping Questions to consultees asks some scoping questions to which our responses are as follows:

- Is the legislation, policy and guidance proposed for consideration as part of the Broadshore Hub WFDA's EIA Report (including the NRA) suitable and sufficient?

Yes.

- Is the study area defined, data sources considered, and proposed data sources to inform the NRA suitable and sufficient?

Yes.

- Is the methodology outlined for undertaking the risk assessment suitable, including on a cumulative level

Yes, we have included additional information regarding specific projects to be considered within the response above.

- Have all potential hazards (impacts) due to the presence of the Broadshore Hub WFDA's been identified for shipping and navigation users?

Yes.

- Are the mitigation measures described suitable and sufficient for managing and mitigating risk associated with the potential hazards?

Yes, Additional mitigation measures if required can be agreed upon during the formal process through stakeholder consultation.

- Do you have any other matters or information sources that you wish to present?

No.

Yours faithfully,

[Redacted]

Vinu John  
Navigation Policy Advisor

**Ministry of Defence**  
**(1 of 2)**

## Marc MacFarlane

---

**From:** Kaye.Noble106@mod.gov.uk  
**Sent:** 27 February 2024 08:56  
**To:** MD Marine Renewables  
**Cc:** Kirsty Black; Lauren Cowan; Marc MacFarlane  
**Subject:** 20240227\_MOD\_Response\_SCOP\_0040  
**Attachments:** 20240227\_MOD\_Response\_Letter.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

**Categories:** Saved in eRDM  
**Objective:** -1

Good Morning

Please see attached the MOD response to the recent consultation.

Many apologies for the delay.

Kind Regards,

**Kaye Noble**

Assistant Safeguarding Manager

DIO Safeguarding

**St George's House | Defence Infrastructure Organisation Head Office |  
DMS Whittington | Lichfield | Staffordshire | WS14 9PY**

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Read DIO's blog <http://insidedio.blog.gov.uk/>



Defence  
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[www.mod.uk/DIO](http://www.mod.uk/DIO)

27 February 2024

Your Reference: SCOP-0040

Our Reference: DIO 10060978

Dear Marc,

**REQUEST FOR SCOPING OPINION FOR PROPOSED SECTION 36 AND MARINE LICENCE APPLICATIONS FOR EACH OF THE 3 WIND FARM DEVELOPMENT AREAS (“WFDAs”) (BROADSHORE, SCARABEN & SINCLAIR) COMPRISING THE “BROADSHORE HUB” LOCATED APPROXIMATELY 47KM NORTH OF FRASERBURGH**

**REGULATION 12 OF THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017**

**REGULATION 13 AND SCHEDULE 4 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2007**  
**(Collectively Referred to as the “EIA Regulations”)**

Thank you for consulting the Ministry of Defence (MOD) on the above Scoping Opinion request in respect of the Broadshore Hub Offshore Windfarm proposal received by this office on 25 January 2024. I write to confirm the safeguarding position of the MOD on the information that should be provided in the “Broadshore Hub WFDA Scoping Report” to support any application.

The Defence Infrastructure Organisation (DIO) Safeguarding Team represents the Ministry of Defence (MOD) as a consultee in UK planning and energy consenting systems to ensure that development does not compromise or degrade the operation of defence sites such as aerodromes, explosives storage sites, air weapon ranges, and technical sites or training resources such as the Military Low Flying System.

It is acknowledged that, at this time, details of the precise location, dimensions, and configuration of the turbines and associated infrastructure is not available and that a project design envelope (PDE) approach has been adopted for this array project. The components of the array project will include the following:

- 3 projects within the same Boundary Array, Broadshore Hub, Sinclair Offshore Wind farm and Scaraben Offshore Wind farm;

- up to 80 wind turbines and associated support structures and foundations;
- Inter-array cables and Inter-connector cables; and
- Associated support structures and foundations.

The maximum blade tip height of the wind turbines (metres (m) above Lowest Astronomical Tide (Lat)) is expected to be no greater than 400, with a maximum rotor diameter of 330m.

I write to confirm the safeguarding position of the MOD on information that should be provided in the Environmental Statement to support any application, this response is based on the Broadshore Hub WFDA's Scoping Report dated January 2024 (Document Reference. BFR\_HUB\_CST\_REP\_0002, Rev 1) which recognises some of the principal defence issues that will be of relevance to the progression of the proposed development.

### **Air Defence Radar**

Chapter 12.4.4 Aviation (*Military and Civil*) covers Military Aviation. Paragraph 1006 references the MOD's Air Defence (AD) Radars.

Wind turbines have been shown to have detrimental effects on the operation of AD radar. These include the desensitisation of the radar in the vicinity of wind turbines, and the creation of "false" aircraft returns. The probability of the radar detecting aircraft flying over or in the locality of the turbines would be reduced, hence turbine proliferation within a specific locality can result in unacceptable degradation of the radar's operational integrity. This would reduce the RAF's ability to detect and manage aircraft in United Kingdom sovereign airspace, thereby preventing it from effectively performing its primary function of Air Defence of the United Kingdom.

Within paragraph 1006 of Chapter 12.4.4 it is stated that the nearest military air defence radar is located at Remote Radio Head (RRH) Buchan which is approximately 72.90km from the closest point of the scoping array

The MOD has undertaken an assessment based on 80 wind turbines at 400m to tip height using the Rochdale Envelope boundary co-ordinates. Turbines within the array area will be detectable to the AD Radar at RRH Buchan. The impact of the turbines on the AD radar at RRH Buchan will therefore need to be addressed through a suitable technical mitigation solution. It is the applicant's responsibility to provide a suitable technical mitigation solution to the MOD.

### **Air Traffic Control**

Chapter 12.4.4 Aviation (Military and Civil) covers Military Aviation. Paragraphs 1003 and 1005 references the MOD's Air Traffic Control (ATC) Radars.

This paragraph acknowledges the Primary Surveillance Radar (PSR) at RAF Lossiemouth (96.90km). It acknowledges the potential for this PSR to detect operational wind turbines within the scoping array. The report identifies the RAF Lossiemouth Area of Responsibility (AoR) and correctly scopes this out of the EIA, the MOD agrees with this conclusion.

### **Military Low Flying**

The scoping array is located within LFA 14, an area within which fixed wing aircraft may operate as low as 250 feet or 76.2 metres above ground level to conduct low level flight training. The addition of turbines in this location has the potential to introduce a physical obstruction to low flying aircraft operating in the area.

To mitigate any potential impact, it is common practice that the MOD will request that a Requirement is added to any Development Consent Order that might be issued requiring the submission of information such as commencement dates, maximum turbine heights and the longitude and latitude of each wind turbine. This information is required to allow accurate charting of the development.

In chapter 19.5.1 Embedded Mitigation Measures Paragraph 1387 the developer identifies a requirement for a Lighting and Marking Plan (LMP). The LMP will be installed in accordance with Article 223 of the UK ANO 2016 which sets out the mandatory requirements to be followed for lighting of offshore wind turbine generators (WTGs). The MOD should be consulted and will request that the aviation warning lighting requirements is added as a Requirement to any Development Consent Order that might be issued.

### **Danger Areas**

In Chapter 12.4.4 Military Aviation paragraph 999, 1000 and 1001, the developer has identified that the north-west corner of the Broadshore Hub array infringes the Moray Firth Danger Area, EGD809S, Northern Managed Danger Area (MDA), EGD712D and the Tain Danger Area, EGD703.

The MOD has assessed that the development will have no impact on the Danger Areas EGD809S, EGD712D and EGD703 identified.

### **Practice and Exercise Areas (PEXA)**

Practice and Exercise Areas also known as PEXA, are designated areas of the sea where military exercises can be undertaken. Chapter 12.4.1.3 Aviation (Military and Civil). Paragraph 1004 states that the scoping array project is not contained within the vertical limits of any military PEXA and, therefore military PEXA is scoped out of the EIA. The MOD agrees with this statement in relation to PEXA.

### **Unexploded Ordnance (UXO)**

The potential for unexploded ordnance (UXO) to be present within the development area and the necessity for clearance should be considered. The potential presence of UXO and disposal sites should be a consideration during the installation and decommissioning of turbines, cables, and any other infrastructure, or where other intrusive works are necessary.

### **Highly Surveyed Routes**

The MOD has highly surveyed routes within the locality of the development area which may be relevant to the installation of wind turbines, export cables & associated infrastructure. These routes are retained by the MOD to support national defence requirements and are not defined in the public domain. Highly surveyed routes must not be obstructed or impeded by offshore developments such as wind turbines. At this time, we are unable to advise if the development will impede any highly surveyed routes in the area. An assessment to determine any impact has been requested and we will share the results with you as soon as we are able to.

MOD Safeguarding wishes to be consulted and notified about the progression of this proposal and any subsequent application(s) that may be submitted relating to it to verify that it will not adversely affect defence interests.

I trust this is clear however should you have any questions please do not hesitate to contact me.

Yours faithfully

[Redacted]

Kaye Noble  
Assistant Safeguarding Manager  
DIO Safeguarding



**Ministry of Defence**  
**(2 of 2)**

**From:** [DIO-Safeguarding-Wind \(MULTIUSER\)](#)  
**To:** [MD Marine Renewables](#); [Kaye.Noble106@mod.gov.uk](mailto:Kaye.Noble106@mod.gov.uk)  
**Cc:** [Kirsty Black](#); [Lauren Cowan](#); [Marc MacFarlane](#); [DIO-Safeguarding-Wind \(MULTIUSER\)](#)  
**Subject:** RE: 20240227\_MOD\_Response\_SCOP\_0040  
**Date:** 25 March 2024 09:00:18  
**Attachments:** [image001.png](#)

---

Good Morning Lauren,  
Kaye has no moved away from her role in safeguarding, however I can respond on her behalf, Broadshore Offshore Wind Farm is Radar Line of Site (RLOS) for the PSR at RAF Lossiemouth, the impact should therefore be scoped in.

Hope this clarifies our position.

Kindest regards

Teena

Teena Oulaghan | Safeguarding Manager

Defence Infrastructure Organisation

Estates | Safeguarding

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---

**From:** MD.MarineRenewables@gov.scot <MD.MarineRenewables@gov.scot>

**Sent:** 22 March 2024 15:33

**To:** Noble, Kaye D (DIO Estates-AsstSafegdMgr6) <Kaye.Noble106@mod.gov.uk>

**Cc:** [Kirsty.Black@gov.scot](mailto:Kirsty.Black@gov.scot); [Lauren.Cowan@gov.scot](mailto:Lauren.Cowan@gov.scot); [Marc.MacFarlane@gov.scot](mailto:Marc.MacFarlane@gov.scot); DIO-Safeguarding-Wind (MULTIUSER) <DIO-Safeguarding-Wind@mod.gov.uk>

**Subject:** RE: 20240227\_MOD\_Response\_SCOP\_0040

Good afternoon Kaye,

Apologies for chasing you, but please could you provide a response from the MOD to our follow-up enquiries regarding the Broadshore Hub WFDA's scoping by close of play Thursday 28 March?

If this date is not suitable, please let MD-LOT know.

Many thanks,

Lauren

**Lauren Cowan (she/her)**

**Marine Licensing and Consenting Casework Manager, Licensing Operations Team, Marine Directorate**

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---

**From:** MD Marine Renewables

**Sent:** Tuesday, March 12, 2024 11:59 AM

**To:** [Kaye.Noble106@mod.gov.uk](mailto:Kaye.Noble106@mod.gov.uk)

**Cc:** [Kirsty Black <Kirsty.Black@gov.scot>](mailto:Kirsty.Black@gov.scot); [Lauren Cowan <Lauren.Cowan@gov.scot>](mailto:Lauren.Cowan@gov.scot); [Marc MacFarlane <Marc.MacFarlane@gov.scot>](mailto:Marc.MacFarlane@gov.scot)

**Subject:** RE: 20240227\_MOD\_Response\_SCOP\_0040

Hello Kaye,

Thank you for providing the MOD's response to the Broadshore Hub scoping

consultation. MD-LOT wishes to clarify one point of the MOD's response with you please.

The 'Air Traffic Control' section of the MOD's response states:

"The report identifies the RAF Lossiemouth Area of Responsibility (AoR) and correctly scopes this out of the EIA, the MOD agrees with this conclusion."

However, Table 12.4 of the Scoping Report states that 'creation of an aviation obstacle environment' and 'effects on civil and military PSR systems' are *scoped in* for RAF Lossiemouth during the construction and operation and maintenance phases.

Please could you therefore clarify the MOD's position on RAF Lossiemouth and confirm whether, in your view, these impacts should be scoped in or out of assessment in the EIA Report?

Many thanks,

Lauren

**Lauren Cowan (she/her)**

**Marine Licensing and Consenting Casework Manager, Licensing Operations Team, Marine Directorate**

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---

**From:** [Kaye.Noble106@mod.gov.uk](mailto:Kaye.Noble106@mod.gov.uk) <[Kaye.Noble106@mod.gov.uk](mailto:Kaye.Noble106@mod.gov.uk)>

**Sent:** Tuesday, February 27, 2024 8:56 AM

**To:** MD Marine Renewables <[MD.MarineRenewables@gov.scot](mailto:MD.MarineRenewables@gov.scot)>

**Cc:** Kirsty Black <[Kirsty.Black@gov.scot](mailto:Kirsty.Black@gov.scot)>; Lauren Cowan <[Lauren.Cowan@gov.scot](mailto:Lauren.Cowan@gov.scot)>; Marc MacFarlane <[Marc.MacFarlane@gov.scot](mailto:Marc.MacFarlane@gov.scot)>

**Subject:** 20240227\_MOD\_Response\_SCOP\_0040

Good Morning

Please see attached the MOD response to the recent consultation.

Many apologies for the delay.

Kind Regards,

**Kaye Noble**

Assistant Safeguarding Manager

DIO Safeguarding

**St George's House | Defence Infrastructure Organisation Head Office |**

**DMS Whittington | Lichfield | Staffordshire | WS14 9PY**

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Twitter: @mod\_dio

Read DIO's blog <http://insidedio.blog.gov.uk/>

---

# **Moray Council**

**From:** [Neal MacPherson](#)  
**To:** [MD Marine Renewables](#)  
**Subject:** SCOP-0040 –BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area –  
**Date:** 04 April 2024 11:13:35  
**Attachments:** [Picture \(Device Independent Bitmap\) 1.jpg](#)  
[Picture \(Device Independent Bitmap\) 2.jpg](#)

---

Good morning,  
Marine Directorate ref SCOP – 0400  
Moray Council Ref. 24/00128/S36CON  
Apologies for the delay in replying to the above scoping opinion, but just to confirm that Moray Council have no comments to make.  
Regards,

**Neal MacPherson** | Principal Planning Officer | Development Management Planning

[neal.macpherson@moray.gov.uk](mailto:neal.macpherson@moray.gov.uk) | 01343 563266/[Redacted] | [website](#) | [facebook](#) | [twitter](#) | [newsdesk](#)

Working pattern - Mon to Friday (except Thurs PM)



**NATS**

## Marc MacFarlane

---

**From:** NATS Safeguarding <NATSSafeguarding@nats.co.uk>  
**Sent:** 22 February 2024 12:39  
**To:** MD Marine Renewables  
**Cc:** Kirsty Black; Lauren Cowan; Marc MacFarlane  
**Subject:** RE: SCOP-0040 – BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area – Scoping Consultation – Response Required by 24 February 2024 [SG36860]  
**Attachments:** SG36860 BlueFloat Energy - TOPA Issue 1.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

**Objective:** -1

Our Ref: SG36860

Dear Sir/Madam

We refer to the application above. The proposed development has been examined by our technical safeguarding teams and conflicts with our safeguarding criteria.

Accordingly, NATS (En Route) plc [objects to the proposal](#). The reasons for NATS's objection are outlined in the attached report TOPA SG36860.

We would like to take this opportunity to draw your attention to the legal obligation of local authorities to consult NATS before granting planning permission. The obligation to consult arises in respect of certain applications that would affect a technical site operated by or on behalf of NATS (such sites being identified by safeguarding plans that are issued to local planning authorities).

In the event that any recommendations made by NATS are not accepted, local authorities are obliged to follow the relevant directions within Planning Circular 2 2003 - Scottish Planning Series: Town and Country Planning (Safeguarded Aerodromes, Technical Sites and Military Explosives Storage Areas) (Scotland) Direction 2003 or Annex 1 - The Town And Country Planning (Safeguarded Aerodromes, Technical Sites And Military Explosives Storage Areas) Direction 2002.

These directions require that the planning authority notify both NATS and the Civil Aviation Authority ("CAA") of their intention. As this further notification is intended to allow the CAA to consider whether further scrutiny is required, the notification should be provided [prior to any granting of permission](#).

It should also be noted that the failure to consult NATS, or to take into account NATS's comments when determining a planning application, could cause serious safety risks for air traffic.

Should you have any queries, please contact us using the details below.

Yours faithfully

**NATS**

NATS Safeguarding  
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# Technical and Operational Assessment (TOPA)

For BlueFloat Energy - Broadshore Hub  
Wind Farm Development Area

NATS ref: SG36860

Scottish Government ref: SCOP-0040

Issue 1



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## Publication History

| Issue | Month/Year    | Change Requests and summary |
|-------|---------------|-----------------------------|
| 1     | February 2024 | Scoping Request             |

## Document Use

External use: Yes

## Referenced Documents

# 1. Background

## 1.1. En-route Consultation

NATS en-route plc is responsible for the safe and expeditious movement in the en-route phase of flight for aircraft operating in controlled airspace in the UK. To undertake this responsibility it has a comprehensive infrastructure of RADAR's, communication systems and navigational aids throughout the UK, all of which could be compromised by the establishment of a wind farm.

In this respect NATS is responsible for safeguarding this infrastructure to ensure its integrity to provide the required services to Air Traffic Control (ATC).

In order to discharge this responsibility NATS is a statutory consultee for all wind farm applications, and as such assesses the potential impact of every proposed development in the UK.

The technical assessment sections of this document define the assessments carried out against the development proposed in section 3.

## 2. Scope

This report provides NATS En-Route plc's view on the proposed application in respect of the impact upon its own operations and in respect of the application details contained within this report.

Where an impact is also anticipated on users of a shared asset (e.g. a NATS RADAR used by airports or other customers), additional relevant information may be included for information only. While an endeavour is made to give an insight in respect of any impact on other aviation stakeholders, it should be noted that this is outside of NATS' statutory obligations and that any engagement in respect of planning objections or mitigation should be had with the relevant stakeholder, although NATS as the asset owner may assist where possible.

### 3. Application Details

Scottish Government submitted a request for a NATS technical and operational assessment (TOPA) for the development at BlueFloat Energy - Broadshore Hub Wind Farm Development Area. It will comprise a large number of turbines located within the area as detailed in Table 1 and shown in the diagrams contained in Appendix B.

| Boundary Point | Lat     | Long    | East   | North  | Tip Height (m) |
|----------------|---------|---------|--------|--------|----------------|
| A              | 58.3001 | -1.8115 | 411146 | 934630 | 400            |
| B              | 58.2627 | -1.6761 | 419104 | 930492 | 400            |
| C              | 58.2659 | -1.6651 | 419747 | 930849 | 400            |
| D              | 58.2445 | -1.5883 | 424268 | 928498 | 400            |
| E              | 58.1822 | -1.5861 | 424439 | 921555 | 400            |
| F              | 58.1614 | -1.6412 | 421214 | 919228 | 400            |
| G              | 58.1690 | -1.6548 | 420407 | 920062 | 400            |
| H              | 58.1335 | -1.7165 | 416795 | 916096 | 400            |
| I              | 58.1141 | -1.8347 | 409837 | 913917 | 400            |
| J              | 58.1245 | -1.8963 | 406208 | 915066 | 400            |
| K              | 58.2344 | -1.8913 | 406482 | 927300 | 400            |
| L              | 58.2357 | -1.8478 | 409035 | 927446 | 400            |

**Table 1 – Turbine Details**

### 4. Assessments Required

The proposed development falls within the assessment area of the following systems:

| En-route Surv   | Lat     | Long    | nm   | km    | Az (deg) | Type |
|-----------------|---------|---------|------|-------|----------|------|
| Alanshill Radar | 57.6431 | -2.1655 | 30.2 | 55.9  | 22.1     | CMB  |
| Perwinnes Radar | 57.2123 | -2.1309 | 55.1 | 102.0 | 11.9     | CMB  |
| En-route Nav    | Lat     | Long    | nm   | km    | Az (deg) | Type |
| None            |         |         |      |       |          |      |
| En-route AGA    | Lat     | Long    | nm   | km    | Az (deg) | Type |
| None            |         |         |      |       |          |      |

**Table 2 – Impacted Infrastructure**

## 4.1. En-route RADAR Technical Assessment

### 4.1.1. Predicted Impact on Allanshill RADAR

Using the theory as described in Appendix A and development specific propagation profile it has been determined that the terrain screening available will not adequately attenuate the signal, and therefore this development is likely to cause false primary plots to be generated. A reduction in the RADAR's probability of detection, for real aircraft, is also anticipated.

### 4.1.2. En-route operational assessment of RADAR impact

Where an assessment reveals a technical impact on a specific NATS' RADAR, the users of that RADAR are consulted to ascertain whether the anticipated impact is acceptable to their operations or not.

| Unit or role         | Comment      |
|----------------------|--------------|
| Prestwick Centre ATC | Unacceptable |
| Aberdeen ATC         | Unacceptable |
| Military ATC         | Acceptable   |

*Note: The technical impact, as detailed above, has also been passed to non-NATS users of the affected RADAR, this may have included other planning consultees such as the MOD or other airports. Should these users consider the impact to be unacceptable it is expected that they will contact the planning authority directly to raise their concerns.*

## 4.2. En-route Navigational Aid Assessment

### 4.2.1. Predicted Impact on Navigation Aids

No impact is anticipated on NATS' navigation aids.

## 4.3. En-route Radio Communication Assessment

### 4.3.1. Predicted Impact on the Radio Communications Infrastructure

No impact is anticipated on NATS' radio communications infrastructure.

## 5. Conclusions

### 5.1. En-route Consultation

The proposed development has been examined by technical and operational safeguarding teams. A technical impact is anticipated, this has been deemed to be unacceptable.

## Appendix A – Background RADAR Theory

### Primary RADAR False Plots

When RADAR transmits a pulse of energy with a power of  $P_t$  the power density,  $P$ , at a range of  $r$  is given by the equation:

$$P = \frac{G_t P_t}{4\pi r^2}$$

Where  $G_t$  is the gain of the RADAR's antenna in the direction in question.

If an object at this point in space has a RADAR cross section of  $\sigma$ , this can be treated as if the object re-radiates the pulse with a gain of  $\sigma$  and therefore the power density of the reflected signal at the RADAR is given by the equation:

$$P_a = \frac{\sigma P}{4\pi r^2} = \frac{\sigma G_t P_t}{(4\pi)^2 r^4}$$

The RADAR's ability to collect this power and feed it to its receiver is a function of its antenna's effective area,  $A_e$ , and is given by the equation:

$$P_r = P_a A_e = \frac{P_a G_r \lambda^2}{4\pi} = \frac{\sigma G_t G_r \lambda^2 P_t}{(4\pi)^3 r^4}$$

Where  $G_r$  is the RADAR antenna's receive gain in the direction of the object and  $\lambda$  is the RADAR's wavelength.

In a real world environment this equation must be augmented to include losses due to a variety of factors both internal to the RADAR system as well as external losses due to terrain and atmospheric absorption.

For simplicity these losses are generally combined in a single variable  $L$

$$P_r = \frac{\sigma G_t G_r \lambda^2 P_t}{(4\pi)^3 r^4 L}$$

## Secondary RADAR Reflections

When modelling the impact on SSR the probability that an indirect signal reflected from a wind turbine has the signal strength to be confused for a real interrogation or reply can be determined from a similar equation:

$$P_r = \frac{\sigma G_t G_r \lambda^2 P_t}{(4\pi)^3 r_t^2 r_r^2 L}$$

Where  $r_t$  and  $r_r$  are the range from RADAR-to-turbine and turbine-to-aircraft respectively. This equation can be rearranged to give the radius from the turbine within which an aircraft must be for reflections to become a problem.

$$r_r = \sqrt{\frac{\lambda^2}{(4\pi)^3}} \sqrt{\frac{\sigma G_t G_r P_t}{r_t^2 P_r L}}$$

## Shadowing

When turbines lie directly between a RADAR and an aircraft not only do they have the potential to absorb or deflect, enough power such that the signal is of insufficient level to be detected on arrival.

It is also possible that azimuth determination, whether this done via sliding window or monopulse, can be distorted giving rise to inaccurate position reporting.

## Terrain and Propagation Modelling

All terrain and propagation modelling is carried out by a software tool called ICS Telecom (version 11.1.7). All calculations of propagation losses are carried out with ICS Telecom configured to use the ITU-R 526 propagation model.

Appendix B – Diagrams

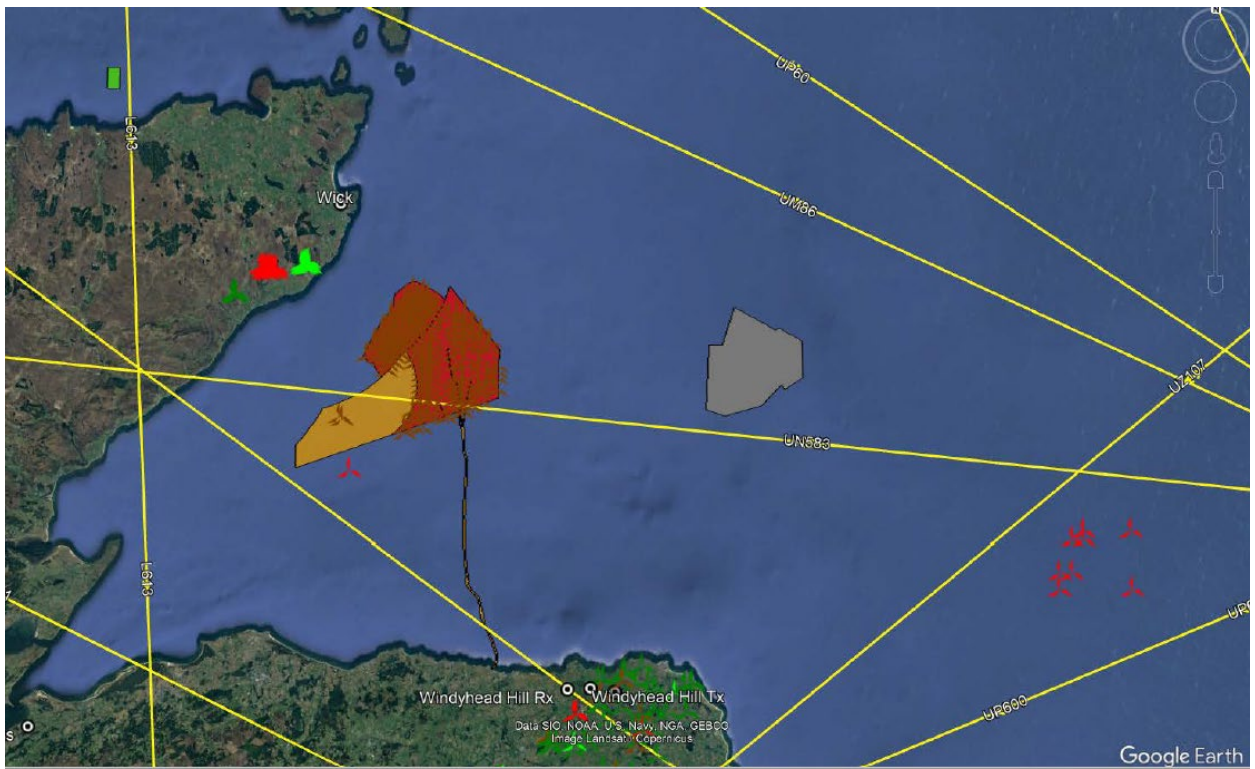


Figure 1: Proposed development location shown on an airways chart



# Natural England

Date: 18 March 2024  
Our ref: 466988  
Your ref: SCOP-0040



Marine Directorate – Marine Planning and Policy  
Scottish Government  
Marine Laboratory  
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Aberdeen  
AB11 9DB

Natural England  
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[Consultations@naturalengland.org.uk](mailto:Consultations@naturalengland.org.uk)

BY EMAIL ONLY

Dear Marc

**Consultation details** – SCOP-0040 EIA Scoping Opinion for BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area. Approximately 47km North of Fraserburgh, Scotland.

**Location** – Broadshore Hub Wind Farm

Thank you for seeking our advice on the Environmental Impact Assessment scoping and Habitats Regulation Appraisal screening in your consultation dated 15 February 2024.

Regulation 12 Of The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017

Regulation 13 And Schedule 4 Of The Marine Works (Environmental Impact Assessment) Regulations 2007

The Conservation (Natural Habitats, &C,) Regulations 1994

The Conservation Of Offshore Marine Habitats And Species Regulations 2017

The Conservation Of Habitats And Species Regulations 2017

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development. The following constitutes Natural England's formal statutory response.

The advice contained within this letter is provided by Natural England, which is the statutory nature conservation body within English territorial waters (0-12 nautical miles). We have delegated

responsibility from JNCC to also advise on offshore wind farms in all English waters out to 200 nautical miles or the median line.

Case law<sup>1</sup> and guidance<sup>2</sup> has stressed the need for a full set of environmental information to be available for consideration prior to a decision being taken on whether or not to grant planning permission. Annex 1 to this letter provides Natural England's advice on the scope of the Environmental Impact Assessment (EIA) for this development.

Should the proposal be amended in a way which significantly affects its impact on the natural environment then, in accordance with Section 4 of the Natural Environment and Rural Communities Act 2006, Natural England should be consulted again.

### **Natural England Discretionary Advice Service (DAS)**

We would like to draw the applicant's attention to the opportunity to obtain further advice from Natural England under our Discretionary Advice Service (DAS). The DAS service provides additional non-statutory advice related to development proposals, in order to support sustainable development and achieve better environmental outcomes through the planning system.

Further information including charges and how to proceed with an application can be found at <https://www.gov.uk/guidance/developers-get-environmental-advice-on-your-planning-proposals>

### **The following documents have been reviewed for this response**

- Screening Report – Broadshore Hub Wind Farm Development Areas – Habitats Regulations Appraisal
- Scoping Report – Broadshore Hub Wind Farm Development Areas – January 2024
- Scoping Report Appendices – Broadshore Hub Wind Farm Development Areas – January 2024
- Cover Letter – Broadshore Hub Wind Farm Development Areas – January 2024

Due to our remit, we have limited our advice to the sections regarding Fish and Shellfish, Marine Mammals and Offshore Ornithology of the EAI scoping report, and the HRA screening report. Within these bounds we have restricted our advice to species from English Marine Protected Areas and designated species in English waters. We defer to NatureScot and JNCC for advice on Scottish matters.

We would like to direct the applicant to our advice on the environmental considerations and use of data and evidence to support offshore wind and cable projects in English waters. We recognise this will not all be applicable for all aspects of the project but will provide a guide for assessments concerning England and any modelling / methodology for English sites. Our advice

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<sup>1</sup> Harrison, J in R. v. Cornwall County Council ex parte Hardy (2001)

<sup>2</sup> Note on Environmental Impact Assessment Directive for Local Planning Authorities Office of the Deputy Prime Minister (April 2004) available from

<https://webarchive.nationalarchives.gov.uk/ukgwa/+http://www.communities.gov.uk/planningandbuilding/planning/sustainability/environmental/environmentalimpactassessment/noteenvironmental/>

is available here: [Environmental considerations for offshore wind and cable projects - Home \(sharepoint.com\)](#)

We are content that no English designated sites or features have been scoped or screened out which would make a material difference in the application.

With reference to paragraph 798 (EIA scoping report), we advise that adequate precaution should be used when assessing the two years of ornithology data relevant to the development area. Highly Pathogenic Avian Influenza has impacted seabird colonies and therefore counts of birds in the development area may be lower than would otherwise be the case.

Natural England's generic advice can be found in Annex 1 of this response.

For any queries relating to the content of this letter please contact me using the details provided below. For any new consultations, or further consultations on this development, please send your correspondence to [consultations@naturalengland.org.uk](mailto:consultations@naturalengland.org.uk).

Yours sincerely

Jack Longsdon

Role: Lead Adviser

E-mail: [jack.longsdon@naturalengland.org.uk](mailto:jack.longsdon@naturalengland.org.uk)

Telephone: [Redacted]

## **Annex 1 Generic advice related to EIA Scoping Requirements**

### **1. General Principles**

Part 3 of the Marine Works (Environmental Impact Assessment) Regulations sets out the necessary information to assess impacts on the natural environment to be included in an Environmental Statement (ES), specifically:

- (i) a description of the project and the regulated activity, comprising information on the site, design, size and other relevant features of the project and the regulated activity
- (ii) a description of the likely significant effects of the project and the regulated activity on the environment
- (iii) a description of the features of the project and the regulated activity or the measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment
- (iv) a description of the reasonable alternatives studied by the applicant which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment
- (v) a non-technical summary of the information
- (vi) any additional information specified in Schedule 3 relevant to the specific characteristics of a particular project or type of project and to the environmental features likely to be affected

It will be important for any assessment to consider the potential cumulative effects of this proposal, including all supporting infrastructure, with other similar proposals and a thorough assessment of the 'in combination' effects of the proposed development with any existing developments and current applications. A full consideration of the implications of the whole scheme should be included in the ES. All supporting infrastructure should be included within the assessment.

### **2. Biodiversity and Geology**

#### **2.1 Ecological Aspects of an Environmental Statement**

Natural England advises that the potential impact of the proposal upon features of nature conservation interest and opportunities for habitat creation / enhancement should be included within this assessment in accordance with appropriate guidance on such matters. Guidelines for Ecological Impact Assessment (EclA) have been developed by the Chartered Institute of Ecology and Environmental Management (CIEEM) and are available on their website.

EclA is the process of identifying, quantifying and evaluating the potential impacts of defined actions on ecosystems or their components. EclA may be carried out as part of the EIA process or to support other forms of environmental assessment or appraisal.

#### **2.2 Internationally Designated Sites**

The ES should thoroughly assess the potential for the proposal to affect designated sites. Internationally designated sites (e.g. designated Special Areas of Conservation (SAC) and Special Protection Areas (SPA)) fall within the scope of the Conservation of Habitats and

Species Regulations 2017 (as amended). In addition, paragraph 176 of the National Planning Policy Framework requires that potential Special Protection Areas, possible Special Areas of Conservation, listed or proposed Ramsar sites, and any site identified as being necessary to compensate for adverse impacts on classified, potential or possible SPAs, SACs and Ramsar sites be treated in the same way as classified sites.

Under Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended) an appropriate assessment needs to be undertaken in respect of any plan or project which is (a) likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and (b) not directly connected with or necessary to the management of the site.

Further information on the special interest features, their conservation objectives, and any relevant conservation advice packages for designated sites is available on our website <https://designatedsites.naturalengland.org.uk/>

The ES should include a full assessment of the direct and indirect effects of the development on the features of special interest within these sites, and should identify such mitigation measures as may be required in order to avoid, minimise or reduce any adverse significant effects.

### **2.3 Habitats Regulations Assessment**

If the proposal outlined within the scoping document has the potential to significantly affect features of the internationally designated sites and the activity is not directly connected to the management of any designated site it should be assessed under regulation 63 the Conservation of Species and Habitats Regulations (2017). Should a Likely Significant Effect on an Internationally designated site be identified or be uncertain, the competent authority (e.g. the Marine Directorate) may need to prepare an Appropriate Assessment, in addition to consideration of impacts through the EIA process.

If during the EIA process the potential for a Likely Significant Effect on the conservation objectives of the sites cannot be ruled out the competent authority for the marine licence (MMO / Government Department) should undertake an Appropriate Assessment of the implications for the site in view of its conservation objectives. Noting recent case law (People Over Wind<sup>3</sup>) measures intended to avoid and/or reduce the likely harmful effects on a European Site cannot be taken into account when determining whether or not a plan or project is likely to have a significant effect on a site, therefore consideration is required at Appropriate Assessment. Natural England wishes to be consulted on the scope of the Habitats Regulations Assessment and the information that will be produced to support it and should be formally consulted on any Appropriate Assessment provided for the proposal (Regulation 63).

### **2.4 Nationally Designated Sites Marine Conservation Zones (MCZ's)**

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<sup>3</sup> People Over Wind and Sweetman vs Coillte Teoranta (ref: C 323/17).

Marine Conservation Zones are areas that protect a range of nationally important, rare or threatened habitats and species. You can see where MCZs are located and their special interest features on [www.magic.gov.uk](http://www.magic.gov.uk). Factsheets that establish the purpose of designation and conservation objectives for each of the MCZ's are available at <https://www.gov.uk/government/collections/marine-conservation-zone-designations-in-england>.

The ES should consider including information on the impacts of this development on MCZ interest features, to inform the assessment of impacts on habitats and species of principle importance for this location. Further information on MCZs is available via the following link: <http://publications.naturalengland.org.uk/category/1723382>.

Further information on the special interest features, the conservation objectives, and relevant conservation advice packages for designated sites is available on our website <https://designatedsites.naturalengland.org.uk/>.

## **2.5 Regionally and Locally Important Sites**

The EIA will need to consider any impacts upon local wildlife and geological sites. Local Sites are identified by the local wildlife trust, geoconservation group or a local forum established for the purposes of identifying and selecting local sites. They are of county importance for wildlife or geodiversity. The ES should therefore include an assessment of the likely impacts on the wildlife and geodiversity interests of such sites. The assessment should include proposals for mitigation of any impacts and if appropriate, compensation measures.

## **2.6 Protected Species - Species protected by the Wildlife and Countryside Act 1981 (as amended) and by the Conservation of Habitats and Species Regulations 2017 (as amended)**

The ES should assess the impact of all phases of the proposal on protected species (including, for example, pinnipeds (seals), cetaceans (including dolphins, porpoises whales), fish (including seahorses, sharks and skates), marine turtles, birds, marine invertebrates, bats, etc.).

Information on the relevant legislation protecting these species can be reviewed on the following link <https://www.gov.uk/government/publications/protected-marine-species>. Natural England does not hold comprehensive information regarding the locations of species protected by law, but advises on the procedures and legislation relevant to such species. Records of protected species should be sought from appropriate local biological record centres, nature conservation organisations, [NBN Atlas](#), groups and individuals; and consideration should be given to the wider context of the site for example in terms of habitat linkages and protected species populations in the wider area, to assist in the impact assessment.

The conservation of species protected by law is explained in Part IV and Annex A of Government Circular 06/2005 [Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System](#). The area likely to be affected by the proposal should be thoroughly surveyed by competent ecologists at appropriate times of year for relevant species and the survey results, impact assessments and appropriate accompanying mitigation strategies included as part of the ES.

In order to provide this information there may be a requirement for a survey at a particular time of year. Surveys should always be carried out in optimal survey time periods and to current guidance by suitably qualified and where necessary, licensed, consultants.

## **2.7 Habitats and Species of Principal Importance**

The ES should thoroughly assess the impact of the proposals on habitats and/or species listed as 'Habitats and Species of Principal Importance' within the England Biodiversity List, published under the requirements of S41 of the Natural Environment and Rural Communities (NERC) Act 2006. Section 40 of the NERC Act 2006 places a general duty on all public authorities, including local planning authorities, to conserve and enhance biodiversity. Further information on this duty is available here <https://www.gov.uk/guidance/biodiversity-duty-public-authority-duty-to-have-regard-to-conserving-biodiversity>.

[Government Circular 06/2005](#) states that Biodiversity Action Plan (BAP) species and habitats, 'are capable of being a material consideration...in the making of planning decisions'. Natural England therefore advises that survey, impact assessment and mitigation proposals for Habitats and Species of Principal Importance should be included in the ES. Consideration should also be given to those species and habitats included in the relevant Local BAP.

## **3. Water Quality**

Increases in suspended sediment concentrations (SSC) during construction and operation (e.g. future dredging works) have the potential to smother sensitive habitats. The ES should include information on the sediment quality and potential for any effects on water quality through suspension of contaminated sediments. The EIA should also consider whether increased suspended sediment concentrations resulting are likely to impact upon the interest features and supporting habitats of the designated sites as listed above.

The ES should consider whether there will be an increase in the pollution risk as a result of the construction or operation of the development.

For activities in the marine environment up to 1 nautical mile out at sea, a Water Framework Directive (WFD) assessment is required as part of any application. The ES should draw upon and report on the WFD assessment considering the impact the proposed activity may have on the immediate water body and any linked water bodies. Further guidance on WFD assessments is available here: <https://www.gov.uk/guidance/water-framework-directive-assessment-estuarine-and-coastal-waters>.

## **4. Climate Change Adaptation**

The [England Biodiversity Strategy](#) published by Defra establishes principles for the consideration of biodiversity and the effects of climate change. The ES should reflect these principles and identify how the development's effects on the natural environment will be influenced by climate change, and how ecological networks will be maintained. The NPPF requires that the planning system should contribute to the enhancement of the natural environment 'by establishing coherent ecological networks that are more resilient to current and future pressures' ([NPPF](#) Para 174), which should be demonstrated through the ES.



**NatureScot**

Marc MacFarlane  
Marine Licensing & Consenting Casework Officer  
Marine Directorate - Licensing Operations Team  
Scottish Government - Marine Laboratory  
Aberdeen  
AB11 9DB

11 March 2024

Our ref: CNS / REN / OSWF / NE6 –  
Broadshore – Pre-application

By email only: [md.marinerenewables@gov.scot](mailto:md.marinerenewables@gov.scot)

Dear Marc,

**Broadshore Hub – Broadshore, Scaraben and Sinclair Offshore Wind Farms**

**NatureScot advice on the Environmental Impact Assessment (EIA) Scoping Report and Habitats Regulations Appraisal (HRA) Screening Report**

Thank you for consulting NatureScot on the EIA Scoping Report and HRA Screening Report for the “Broadshore Hub”, which includes the array areas for which includes the array areas for:

- Broadshore Offshore Wind Farm (ScotWind),
- Scaraben Offshore Wind farm (INTOG) and
- Sinclair Offshore Wind Farm (INTOG).

The Broadshore Hub is located approximately 47km north of Fraserburgh. The EIA Scoping Reports and HRA Screening Reports for the offshore transmission assets and onshore transmission assets will be consulted on separately, which will include the offshore substation(s), interconnector cables, offshore export cable(s) and landfall area. Whilst the grid connection location is yet to be confirmed, the applicant’s working assumption is that all projects (Broadshore, Scaraben and Sinclair) will connect in the vicinity of Peterhead with confirmation expected in 2024.

Our advice on the natural heritage interests to be addressed within the Environmental Impact Assessment Report (EIA Report) and the Report to Inform Appropriate Assessment (RIAA) is outlined below.

## Policy context

We are currently facing two crises, that of climate change and biodiversity loss and as the Scottish Government's adviser on nature, our work seeks to inspire, enthuse and influence others to manage our natural resources sustainably. We recognise that this proposal contains an array area awarded through the ScotWind leasing process in an area identified through the Sectoral Marine Plan process for Offshore Wind, as well as two array areas identified as part of the initial consideration of a Plan to include sites to enable Innovation and Targeted Offshore decarbonisation of oil and gas platforms. Both the Scaraben and Sinclair proposals are being considered for innovation purposes.

## Proposal

The combined hub proposal uses a project design envelope approach<sup>1</sup> and comprises of:

- Up to 72 wind turbine generators (WTGs) with a generating capacity of up to 28 MW.
- Floating foundation types being considered include semi-spar, tension-leg platform, semi-submersible, barge or buoy.
- Fixed bottom foundations are also being considered, which include suction caisson, piled or cable supported monopiles.
- For floating foundations, the mooring systems being considered include taut, catenary, semi-taut or tension.
- For floating foundations, the anchoring systems being considered include driven pile, suction pile, drilled and grouted pile, drag embedment anchor, vertical load anchor or suction embedded anchor.
- A maximum blade tip height of 400m (Lowest Astronomical Tide, LAT) and a minimum blade tip clearance of at least 22m (LAT).
- Inter-array cabling total length is not yet determined. Dynamic inter-array cabling will be used if floating foundations are selected, with possible configurations including free hanging, lazy "S" wave or steep wave.
- Ancillary elements such as buoyancy modules, bend stiffeners, bend restrictors, abrasion protection, connectors, tethering systems, scour and cable protection.

## Content of the EIA Scoping Report and HRA Screening Report

We are generally content with the format of the EIA Scoping Report and HRA Screening Report, which are well laid out, easy to navigate and read. However, we are disappointed that the proposed design envelope remains very broad, with little refinement of project components, resulting in a substantial EIA Scoping Report, but more importantly could result in an extremely large EIA Report to ensure that the worst-case and realistic worst-case scenarios within and across receptors is assessed.

## Assessment approach

The EIA Report should consider the impact of all phases of the proposed development on the receiving environment, including effects from pre-construction activities as well as the

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<sup>1</sup> <https://www.gov.scot/publications/guidance-applicants-using-design-envelope-applications-under-section-36-electricity-act-1989/>

construction, operation/maintenance and decommissioning phases. We recommend that the following aspects are considered further and included in the EIA Report.

#### *Ecosystem assessment*

Increasingly, there is a need to understand potential impacts holistically at a wider ecosystem scale in addition to the standard set of discrete individual receptor assessments. This assessment should focus on potential impacts across predator prey interactions both on and offshore. This will enable a better understanding of the consequences (positive or negative) of any potential changes in prey distribution and abundance from the development of the wind farm on bird and mammal (and other top predator) interests and what influence this may have on population level impacts.

#### *Climate change and carbon costs*

The impact of climate change effects should be considered, both in futureproofing the project design and how certain climate stressors may work in combination with potential effects from the proposed wind farm. The EIA Report should also consider the carbon cost of the wind farm (including supply chain) and to what extent this is offset through the production of green energy. We recognise that some aspects of this are addressed in section 17 (Climate Change).

#### *Blue carbon*

In addition to the climate change assessments outlined in section 17 of the EIA Scoping Report, we recommend that consideration is given to impacts on blue carbon and whether or not an assessment can be undertaken. This should expand on the information and assessment conducted for benthic ecology to focus on the potential impacts of the proposed development on marine sediments and coastal habitats. We recognise that some aspects of this are addressed in section 17 (Climate Change).

#### *Cumulative impact assessment*

We are concerned with the likelihood of multiple offshore export cables making landfall in the area around Peterhead and the potential for cumulative impacts arising from construction and associated geophysical, geotechnical and environmental survey programmes. Therefore, we recommend that this is considered further. We have also raised the need for strategic consideration by both Scottish Government (Offshore Wind and Marine Directorates) and the Electricity System Operator (ESO).

#### *“Wet storage”*

Section 4.6.1 refers to the potential for “wet storage” of floating substructures and/or floating offshore units. Specific requirements and potential locations for the construction, assembly, shorter term and longer term storage areas are not detailed within the Scoping Report.

These aspects could pose a significant impact. Consideration of the potential impacts on all receptors needs to be addressed, however we are aware that Marine Directorate are currently considering consenting routes and processes. We would welcome further discussion on this as and when further details are available.

### **Environmental Impact Assessment Report (EIA Report)**

The EIA Report provides the assessment to support the application and should be suitability structured, with appropriate formatting and proportionality to ensure it can be reviewed efficiently and effectively. Consideration should therefore be given to the following aspects:

- It should clearly follow the direction provided in the Scoping Opinion, or where specific agreement was later reached during the pre-application process. Any divergence from this needs to be laid out separately and must be fully justified.
- Consideration should be given to the volume and flow of information within and across each receptor chapter and associated technical appendices. The flow of information relating to impact pathway, assessment and conclusions should be concise, but not omit key information on steps taken. Repeated duplication of text should be avoided through appropriate structuring.
- In electronic versions the EIA Report, navigational aids including use of hyperlinks etc. are required, particularly where there are supporting technical appendices to any chapters.
- Each stage of the assessment process should be sufficiently transparent to allow the assessments to be repeated. Where specific tools have been used, details of which version and when the assessment was carried out is required.

### **Habitats Regulations Appraisal (HRA)**

We welcome the submission of the EIA Scoping Report and HRA Stage 1 LSE Screening Report in a single package, and the opportunity to combine our advice under each assessment process into a single response. We provide HRA advice for marine ornithology, marine mammals, benthic subtidal ecology, fish and shellfish ecology in each of the relevant appendices below.

### **Positive Effects for Biodiversity / Biodiversity Net Gain**

We recommend early consideration of potential Positive Effects for Biodiversity as well as nature inclusive design aspects at an early stage and following through into the EIA Report. We acknowledge that, whilst not policy in the marine environment, these aspects form part of our ability to address both the climate and biodiversity crises and as such we encourage developers to consider this as part of their application.

### **Mitigation**

We welcome the identification of “embedded mitigation measures” described in each of the relevant sections of the EIA Scoping Report (for example section 6.5.4) and summarised in Appendix 3 (Mitigation Register).

However, much of the embedded mitigation detailed throughout includes the development and adherence to post-consent plans/programmes. Plans do not strictly constitute mitigation – it is the measures contained within the plan that will mitigate impacts. The EIA Report must clearly articulate those mitigation measures that are informed by the EIA (or HRA) and are necessary to avoid or reduce predicted significant adverse environmental effects of the proposed development. We advise that the full range of mitigation and monitoring measures, and published guidance, are considered and discussed in the EIA Report.

### **Natural Heritage interests to be considered**

We provide advice as detailed below within receptor-specific technical appendices for key natural heritage interests to be considered in the EIA Report:

- Advice on benthic ecology is provided in **Appendix A**.
- Advice on fish and shellfish ecology is provided in **Appendix B**. (Noting that for diadromous fish we have limited our advice to the requirements for these to be considered as part of the EIA Report only – further advice is contained within the appendix).

- Advice on marine mammals is provided in **Appendix C**
- Advice on marine ornithology is provided in **Appendix D**.

For the following receptors, we advise:

- Physical Processes – we are generally content with what is outlined in section 5 of the EIA Report and reiterate our previous advice (issued 12<sup>th</sup> October 2023) from the Scoping Workshop that addresses the direct questions in section 5.8. MD SEDD may have additional comments to make.
- Seascape, Landscape Character and Visual Impact assessment (SLVIA) – we advise that this topic can be scoped out. This is due to the distance of the array area from shore. The information presented in section 15 of the EIA Report was useful and helped inform our advice at this stage.

### **Further information and advice**

We hope this advice is of assistance to help inform the Scoping Opinion, noting that there may be aspects where some further engagement is required to assist in preparing the EIA Report and RIAA, including further consideration of the export cable corridor.

Please contact me in the first instance for any further advice, using the contact details below, copying to our marine energy mailbox – [marineenergy@nature.scot](mailto:marineenergy@nature.scot).

Yours sincerely,

**Caitlin Cunningham**

Marine Sustainability Adviser – Sustainable Coasts and Seas

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## **NatureScot advice on EIA Scoping Report for the Broadshore Hub**

### **Appendix A – Benthic Ecology**

Benthic ecology interests are considered in section 6 of the EIA Scoping Report and section 4 of the HRA Screening Report.

Section 6.8 of the Scoping Report includes some direct requests for consultee feedback, we have responded to these within our advice below. In addition, our advice with respect to the HRA Stage 1 Screening Report is also provided below.

#### **Study area**

The proposed study area includes a 10km buffer around the array areas. However, we note that this will be refined based on the distance of one tidal ellipse. We are content with this approach.

#### **Baseline characterisation**

We are content with the existing environment as presented in section 6.4. Relevant data sources have been identified in table 6.3 and the site-specific surveys are appropriate.

#### **Scoping of impacts**

We are content with all impacts scoped in/out as per section 6.6, with one exception. Invasive Non-Native Species (INNS) should be scoped in. Although there are mitigation measures (i.e. management plans) which can help reduce the risks, there is still a lot of uncertainty around their effectiveness to reduce the spread of INNS. The Scoping Report states that the turbines will only be towed from UK ports and not internationally. However, there are INNS present in certain ports around the UK which could pose a risk if transferred elsewhere in UK waters. Moreover, the potential for offshore wind farms to act as stepping stones for INNS should be considered.

#### **Cumulative impacts**

It is unclear why noise impacts will be included in the cumulative assessment (paragraph 504) especially as this was scoped out for the project alone assessment due to negligible impacts.

With the proposed number of offshore wind developments in Scottish waters, we are noting the tendency for developers to indicate no LSE from electromagnetic field (EMF) impacts from a cumulative basis. However, we are concerned that the spatial and temporal scale is not being considered cumulatively across the network of cables, including those outwith of the proposed development. Thus, we advise that EMF impacts are considered in the cumulative assessment.

#### **Transboundary impacts**

We agree that transboundary impacts can be scoped out for benthic ecology interests.

#### **Mitigation and monitoring**

We welcome the identification of “embedded mitigation measures” described in section 6.5.4 and summarised in Appendix 3 (Mitigation Register). The examples provided are appropriate, but as noted elsewhere in this advice, the list of embedded mitigation measures in this EIA Scoping Report is minimal.

#### **Approach to assessment**

We are content with the proposed approach to assessment, as per section 6.7.

## **Habitats Regulations Appraisal (HRA) Stage 1 LSE Screening Report**

We agree with the conclusion in the HRA Stage 1 LSE Screening Report that no sites with Annex 1 habitat features need to be taken forward to assessment.



## NatureScot advice on EIA Scoping Report for the Broadshore Hub

### Appendix B – Fish and Shellfish Ecology

Fish and shellfish interests are considered in section 7 of the EIA Scoping Report and section 5 of the HRA Screening Report.

Section 7.8 of the Scoping Report includes some direct requests for consultee feedback, we have responded to these within our advice below. In addition, our advice with respect to the HRA Stage 1 Screening Report is also provided below.

#### Study area

Two study areas have been defined for fish and shellfish ecology – the International Council for the Exploration of the Sea (ICES) rectangle 45E9 that directly overlaps with the array areas and the Northern North Sea study area defined by the boundary of the northern North biogeographic region (CP2). The latter provides a wider context for the fish species and populations, used to inform impact assessments over long distances (e.g. underwater noise). We are content with this approach.

#### Baseline characterisation

We are content with the proposed data sources and guidance documents, as per table 7.3, and suggest the following additional publications/data layers:

- Langton R., Boulcott P., Wright P.J. (2021) A verified distribution model for the lesser sandeel *Ammodytes marinus*. Mar. Ecol. Prog. Ser. 667: 145-159.
- González-Irusta J.M. and Wright P.J., 2016. Spawning grounds of Atlantic cod (*Gadus morhua*) in the North Sea. ICES Journal of Marine Science, 73(2), pp.304-315<sup>2</sup>.
- González-Irusta J.M. and Wright P.J., 2017. Spawning grounds of whiting (*Merlangius merlangus*). Fisheries Research, 195, pp.141-151<sup>3</sup>.
- González-Irusta J.M. and Wright P.J., 2016. Spawning grounds of haddock (*Melanogrammus aeglefinus*) in the North Sea and West of Scotland. Fisheries Research, 183, pp.180-191<sup>4</sup>.

The additional sources above should also be included in table 7.7.

Table 7.4 provides an overview of the site-specific surveys and we note that no specific fish surveys have been conducted. Instead, benthic data will be used to inform the baseline (including Particle Size Analysis to identify herring spawning and sandeel habitat suitability), along with a desk-based study. Furthermore, eDNA samples have been collected which will provide context to the baseline but will not be used to inform the EIA Report directly. The reasoning for this is unclear. However, we are content that the desk-based study (noting our additions above) in conjunction with the benthic sediment analysis will be sufficient to inform the baseline.

Basking sharks are discussed in paragraph 530 and the commentary is focused on the lack of sightings around the Broadshore Hub area. This contradicts the discussion in later sections (e.g.

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<sup>2</sup> González-Irusta J.M. and Wright P.J., 2016. Cod – spawning grounds – North Sea <https://marine.gov.scot/maps/1912>

<sup>3</sup> González-Irusta J.M. and Wright P.J., 2017. Whiting – spawning grounds – North Sea <https://marine.gov.scot/maps/1914>

<sup>4</sup> González-Irusta J.M. and Wright P.J., 2016. Haddock – spawning grounds – North Sea <https://marine.gov.scot/maps/1911>

paragraph 560), which states that high numbers of basking sharks have been sighted on the north-east coast of Scotland in 2023. For avoidance of doubt, basking shark should be considered within the EIA Report and we provide further advice for this receptor in the relevant sections below.

### **Designated sites**

Table 7.6 summarises the designated sites for fish and shellfish species scoped in for further assessment. There are no Special Areas of Conservation (SACs) that overlap with the Broadshore Hub array areas. We advise that all SACs designated for fish and shellfish species can be scoped out due to the distance from the proposed development.

Although the Southern Trench Nature Conservation Marine Protected Area (ncMPA) is not designated for fish or shellfish, these receptors are prey for the designated minke whale feature. Under this reasoning, the ncMPA has been scoped in for further assessment. However, this is contradicted in Appendix 2 (Nature Conservation Marine Protected Area Screening), where it states that changes to prey availability are not expected for the Southern Trench ncMPA due to the distance from the Broadshore Hub array areas. We advise that the Southern Trench ncMPA does not need to be considered further in terms of changes in prey availability on the minke whale qualifying feature, due to the distance from the site. Further advice on the Southern Trench ncMPA is provided in Appendix C to our advice.

### **Potential impact pathways**

Section 7.5.2 discusses the potential impacts arising during operation and maintenance. This should include fish aggregation around the Wind Turbine Generators (WTGs) and other hard structures and would need to be considered with other receptors in mind, e.g. marine mammals and ornithology. We note that fish aggregation is briefly covered in paragraph 571 under “Introduction of Hard Substrate”, but we flag that if floating WTGs are used, the platforms may still attract fish without necessarily being considered a “hard substrate”.

For the potential impacts during decommissioning in section 7.5.3, we agree that these would be similar to construction impacts. However, until we better understand the extent to which the structure will be decommissioned, it cannot be assumed that the impact will likely be lower.

### **Scoping of impacts**

We are content with the impacts scoped in/out as per section 7.6.

### **Cumulative impacts**

Potential cumulative effects are discussed in section 7.6.3. It is stated that the cumulative assessment will be considered in two stages – the whole Broadshore Hub (including the array areas, offshore transmission assets and onshore transmission assets) and also alongside other plans or projects. We also note that the impact from underwater noise is likely to have the largest Zone of Influence and this will be used to determine whether other plans or projects have the potential to contribute to cumulative impacts - we are content with this approach.

With the proposed number of offshore wind developments in Scottish waters, we are noting the tendency for developers to indicate no LSE from EMF impacts from a cumulative basis. However, we are concerned that the spatial and temporal scale is not being considered cumulatively across the network of cables, including those outwith of the proposed development. Thus, we advise that EMF impacts are considered in the cumulative assessment.

## **Transboundary impacts**

We agree that transboundary impacts can be scoped out for fish and shellfish interests.

## **Mitigation and monitoring**

We welcome the identification of “embedded mitigation measures” described in section 7.5.4 and summarised in Appendix 3 (Mitigation Register). The examples provided are appropriate, but the majority of the measures do not relate to fish and shellfish directly, instead including the development and adherence to post-consent plans/programmes.

Additionally, basking shark licenses may be required for disturbance if uncrewed survey vessels are to be used at any point, particularly for geophysical surveys. Otherwise, best practise, including adherence to the Scottish Marine Wildlife Watching Code, and mitigation used for cetaceans should be applied to basking shark.

For migratory fish – we advise the need for ongoing consideration of mitigation as the proposal develops. This should include but not be limited to:

- Consideration of underwater noise effects during construction, operation and decommissioning.

## **Approach to assessment**

We are generally content with the approach to assessment for fish and shellfish ecology, with further comments below.

### *Sensitivity*

For determining sensitivity of species, please note that all Priority Marine Features (PMFs) and some prey fish species are now available on the Feature Activity Sensitivity Tool (FeAST)<sup>5</sup>.

### *Underwater noise modelling*

Paragraph 599 briefly describes the approach to underwater noise modelling. At this stage, we would have expected to see further detail on the type of response – e.g. which species would be classed as stationary or fleeing. We would recommend that a fleeing response be used for most fish species except where mating or egg laying may override the instinct to flee e.g. for cod or herring. This is also the case for sandeel that have a very distinct habitat preference and unable to find suitable grounds further afield. Additionally, we would expect larvae (sandeel) to also be considered.

### *Vessel collision risk*

A qualitative vessel collision risk assessment will be conducted for basking shark using the available sightings data for the east coast of Scotland and the worst-case number of vessel trips expected for the proposed development – we are content with this approach.

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<sup>5</sup> <https://feature-activity-sensitivity-tool.scot/>

## Habitats Regulations Appraisal (HRA) Stage 1 LSE Screening Report

### *Migratory Fish*

We note that for diadromous fish species there is limited knowledge of distribution and behaviour of these species in the marine environment. For example, the precise migration routes of adult or juvenile Atlantic salmon or direction taken by migrating adult European eels is not fully known. Published information indicates that European smelt and River lamprey are primarily, though probably not exclusively, associated with estuarine environments. Shad might also prefer estuarine environments.

The recently updated ScotMER evidence map<sup>6</sup> process for diadromous fish confirms these evidence gaps, particularly with respect to spatial and temporal distribution as well as uncertainty around migration routes and connectivity to protected sites. The ScotMER process is an important vehicle for helping to address these evidence gaps and uncertainties. We specifically welcome the ScotMER project *Diadromous Fish in the Context of Offshore Wind – Review of Current Knowledge & Future Research*, due to be published soon.

This research may change conclusions on how diadromous fish are treated in both EIA and HRA going forward. However, we advise, based on evidence currently available to us, it is not possible for us to carry out an assessment of diadromous fish to the level required under HRA. We therefore advise that diadromous fish species should be assessed through EIA only and not through HRA.

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<sup>6</sup> <https://www.gov.scot/publications/diadromous-fish-specialist-receptor-group/> – published 26 January 2023

## NatureScot advice on EIA Scoping Report for the Broadshore Hub

### Appendix C – Marine Mammals

Marine mammals are considered in section 8 of the EIA Scoping Report and section 6 of the HRA Screening Report.

Section 8.9 of the Scoping Report includes some direct requests for consultee feedback, we have responded to these within our advice below. In addition, our advice our advice regarding the Southern Trench Nature Conservation Marine Protected Area (ncMPA) and the HRA Stage 1 Screening Report is also provided below.

#### Study area

The study area is discussed in section 1.1. of Appendix 4 (Marine Mammals Existing Environment). We agree with the Management Units (MUs) listed for each species and advise that the UK portion of the MU should be used in the EIA Report.

#### Baseline characterisation

##### *Digital Aerial Surveys (DAS)*

Site-specific Digital Aerial Surveys (DAS) have been conducted using a buffer of 4km around the array areas.

We agree that should any other species appear in the second year of DAS, then these should be included in the assessment, either quantitatively (using SCANS or DAS) or qualitatively in the absence of density estimates.

In Appendix 4 (Marine Mammals Existing Environment), we note that apportioning will be used to account for unidentified species of marine mammals by assigning them to the most often sighted marine mammal. We do not agree with this approach and advise that unidentified marine mammals are recorded as unidentified with the highest understanding of animal grouping possible, i.e. “unidentified seal species”. We acknowledge that this would be unlikely to materially change the EIA, given the most precautionary number would be used – which will most often come from SCANS rather than DAS. However, as a principle, apportioning is skewing the DAS results and our understanding of the baseline, by inflating the numbers of some species and not acknowledging that there could be other species missed.

##### *Data sources*

We are content with the proposed data sources and guidance documents, as per section 1.3 of Appendix 4 (Marine Mammals Existing Environment).

We advise the following additional data sources should be included:

- National Marine Fisheries Service. 2018. 2018 Revisions to: Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing<sup>7</sup>

We agree with the density estimates proposed though acknowledge that the applicant will use DAS if this provides higher numbers.

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<sup>7</sup> <https://www.fisheries.noaa.gov/resource/document/technical-guidance-assessing-effects-anthropogenic-sound-marine-mammal-hearing>

### *Receptors*

As well as the species scoped in for assessment, Risso's dolphin should also be assessed quantitatively. This is due to Risso's being recorded in the relevant SCANS IV survey blocks, as well as increased sightings around the east coast of Scotland. Furthermore, humpback whale and long finned pilot whale should be included qualitatively.

We note that basking sharks are being covered in the fish and shellfish chapter and we are content with this approach. Further comments are provided in Appendix B to our advice.

### **Scoping of impacts**

The scoping of impacts is discussed in section 8.6 and we are broadly content with what is proposed, with further comments below.

#### *Secondary entanglement*

It is proposed that entanglement is scoped in for the operation and maintenance phase. However, we advise that entanglement is distinguished as secondary entanglement, which is ghost fishing gear being caught on the cables themselves.

#### *EMF effects*

It is proposed that impacts from EMF are also scoped in for the operation and maintenance phase. However, we advise that direct effects from EMF can be scoped out for marine mammals. Additionally, we are content that EMF effects would be considered indirectly through effects on marine mammal prey species.

### **Cumulative impacts**

Potential cumulative impacts are briefly discussed in section 8.6.3. We recommend the use of the Cumulative Effects Framework if available within the project timeframe, or the most up-to-date version of iPCoD if not.

### **Transboundary impacts**

Potential transboundary impacts are briefly discussed in section 8.6.4 and we note that the applicant has acknowledged that impacts from the proposed development could have the potential to affect the transboundary integrity of European sites. At this stage we do not consider it a necessity to consider transboundary effects for marine mammals, provided the assessment is made against the UK marine mammal management units.

### **Mitigation and monitoring**

We welcome the identification of "embedded mitigation measures" described in section 8.5.1 and summarised in Appendix 3 (Mitigation Register). In particular, we welcome the inclusion of soft start and ramp up techniques for piling as well as adherence to the Scottish Marine Wildlife Watching Code. However, as noted elsewhere in this advice, the list of embedded mitigation measures in this EIA Scoping Report is minimal. Further advice is provided below.

We highlight that mitigation should include adherence to the JNCC guidelines for piling, UXO clearance and geophysical surveys.

Furthermore, it is stated that "additional mitigation may be implemented as appropriate to reduce the potential for effects from underwater noise during geophysical surveys". We are aware that

geophysical surveys have been conducted for baseline characterisation, however, further surveys are likely to be required pre-construction and also during operation and maintenance. Thus, we would expect geophysical surveys (and appropriate mitigation) to be included in the EIA Report.

No specific monitoring for marine mammals is mentioned in the Scoping Report. Further information on proposed marine mammal monitoring should be discussed in the EIA Report.

### **Approach to assessment**

The proposed approach to assessment is discussed in section 8.7 and Appendix 5 (Approach to Marine Mammals Underwater Noise Modelling).

#### *Underwater noise modelling*

It is proposed that thresholds and criteria from Southall *et al.* (2019) will be used for marine mammal species (PTS and TTS) and those from Popper *et al.* (2014) for fish species – we are content with this approach.

#### *Disturbance*

The dose-response curve for harbour porpoise Graham *et al.* (2017) will be applied to all cetacean species and we agree with this approach. For seals, we agree that the dose-response curve from Whyte *et al.* (2020) should be used. We are anticipating that further research on dose-response curves in respect of harbour porpoise and the current construction of Moray West may become available and this should be used once published and accepted, if within the project timeframe.

#### *Cumulative assessment*

In section 3.2 of Appendix 5 (Approach to Marine Mammals Underwater Noise Modelling), it is stated that iPCoD will be used to assess population level effects “where a potential for a significant disturbance impact is identified”. However, we advise that iPCoD should be used to help determine whether there is significant, long-term disturbance – not the other way around. If piling is needed, it is likely that we would require use of iPCoD. The applicant has presented a broad project design envelope and the worst-case scenario should be assessed, which in this case would be fixed turbines using piled foundations, and thus iPCoD would be required in this instance.

Furthermore, in section 3.2.1 of Appendix 5 (Approach to Marine Mammals Underwater Noise Modelling), it is proposed that NRW guidance will be used to determine the potential for significant population effects. We have not yet adopted this NRW guidance. If a decline is predicted by the population modelling, then the significance of this decline should be considered on a case-by-case, species-by-species basis.

In paragraph 754 of the Scoping Report, it is stated that “generalised disturbance ranges (such as the reported 25km potential disturbance range for seals (Russell *et al.*, 2016)) will be used to determine the number of individuals at risk of disturbance”. Generally, we do not agree with the use of generalised disturbance ranges, especially for assessment of project alone impacts. However, given there is currently no other method for estimating impact ranges for other developments, we are content for this approach to be used in the cumulative assessment.



## Nature Conservation Marine Protected Area Screening

Appendix 2 (Nature Conservation Marine Protected Area Screening) provides an initial screening of ncMPA sites to be taken through to assessment, which will be presented as a standalone report alongside the Broadshore Hub EIA Report.

### *Southern Trench ncMPA*

The minke whale qualifying feature of the Southern Trench ncMPA is the only feature/site screened in for further assessment. We are content with this as there may be overlap from noise contours from piling and/or UXO clearance, as well as disturbance/collision risk from vessel movements depending on which ports are used and whether vessels will pass through the ncMPA. However, we consider that all other potential impacts listed in table 2.1 can be screened out from the Broadshore Hub array area assessment. For ncMPAs, connectivity is determined if the proposed development has the potential to impact the qualifying feature within the site boundary only.

## Habitats Regulations Appraisal (HRA) Stage 1 LSE Screening Report

We agree that the Southern North Sea SAC can be screened out for harbour porpoise.

We agree that the Moray Firth SAC should be screened in for further assessment, as there may be overlap from noise contours from piling and/or UXO clearance and thus potential connectivity of the coastal bottlenose dolphin population of the Moray Firth SAC.

For grey seals, we advise screening in sites for assessment if the project site/impact radius is within 20km of the SAC. Although grey seals can and do forage considerable distances, the Conservation Objectives for grey seal SACs are related to the protection of the breeding colony. During this sensitive time, grey seals do not travel further than 20km from the breeding colony, thus, we use this distance as a connectivity buffer. Outside the breeding season the number of grey seals present at a protected site can dramatically decrease. There is evidence to show that grey seals do not forage close to the SAC outside the breeding season and instead can travel to different management units when foraging (Carter *et al.*, 2022). We appreciate the use of telemetry data and while this could provide evidence of grey seal travelling through the proposed array site, we are content for grey seal SACs to be scoped out if there is no evidence of hotspots or regular foraging areas within the project boundary.

For harbour seals, we advise screening sites in for assessment if the project site/impact radius is within 50km of the SAC. Harbour seals show greater site fidelity throughout the year and, unlike grey seals, there is no seasonal difference. We would consider ranges further than this if there is tagging information to suggest seals from the SAC(s) were regularly using the project site area. We welcome the use of telemetry data and while this could provide evidence of harbour seal travelling through the proposed array site, we are content for harbour seal SACs to be scoped out if there is no evidence of hotspots or regular foraging areas within the project boundary.



## NatureScot advice on EIA Scoping Report for the Broadshore Hub

### Appendix D – Marine Ornithology

Ornithology interests are considered in section 9 of the EIA Scoping Report and section 7 of the HRA Screening Report.

Section 9.8 of the Scoping Report includes some direct requests for consultee feedback, we have responded to these within our advice below. In addition, our advice with respect to the HRA Stage 1 Screening Report is also provided below.

#### Study area

The study area is proposed as a 4km buffer, with two survey areas defined – Broadshore array area plus 4km buffer and Scaraben and Sinclair array areas plus 4km buffer. The buffers of the two areas overlap. However, both areas have been surveyed together as a single unit in the first year, thus avoiding some areas being counted twice. We are content with this approach.

#### Baseline characterisation

##### *Digital Aerial Surveys (DAS)*

We advise and support the undertaking of two full years of survey and consider this to be sufficient for baseline characterisation. We note that in Section 9.4.5, based upon data from the first year of baseline offshore aerial surveys, the six most frequently recorded species in the offshore aerial survey area were guillemot, kittiwake, puffin, fulmar, gannet and razorbill. The applicant states that these species are the most likely to be taken forward for assessment but acknowledges that this is subject to the findings of the second year of survey. **We advise that selection of species for detailed assessment should be based on the two full years of survey data.**

The scope of the surveys and survey design are acceptable. Monthly surveys across two years are planned as per our guidance and the first 12 months have been reported on in the HiDef Annual Report March 2022 to February 2023. A survey was undertaken each month, with transects 2km apart and 12.5% coverage analysed. Flying height was 550m and GSD was 2cm. Identification rates averaged 95%, with unidentified birds apportioned to species level and availability bias was applied for auks. We are content with this approach.

#### Scoping of impacts

The list of impact pathways presented is generally appropriate. However, we consider that the following additional pathways should be considered:

- Disturbance and displacement pathways should include vessel movements between the array areas and the ports being used in all phases of the project. Vessel movements have the potential to impact on various species, including those sensitive to disturbance such as divers and sea ducks. This will depend on the ports used, routes taken and timing.
- With respect to nocturnal species, potential impacts of lighting should be considered. Species such as European storm petrel, Leach's storm-petrel and Manx shearwater may be attracted to and/or disorientated by artificial light sources. As well as turbine lighting, these include lighting on servicing or construction vessels, especially if construction will be a 24/7 operation. Such effects could impact assessment of collision and/or displacement.

We recommend considering findings from the Marine Directorate commissioned review<sup>8</sup> to inform the assessment of the risk of collision and displacement in petrels and shearwaters from offshore wind developments in Scotland.

- “Wet storage” could also be a significant impact pathway for ornithological receptors depending on the nature and location of activities associated with the construction assembly and maintenance of floating turbines. Information should be provided about what “wet storage” would entail and any potential locations. However, we are aware that Marine Directorate are currently considering consenting routes and processes around “wet storage”. We would welcome further discussion on this as and when further details are available.

In table 9.6 under indirect impacts, it states the use of site-specific survey data is not proposed. However, we consider that results from site-specific benthic and fish surveys may help inform impacts on birds in relation to prey availability and distribution. Chapters in the EIA Report assessing impacts on benthic interests and fish/shellfish will provide detail on potential impacts to prey habitat and distribution, but a summary of this within the ornithology chapter and clear links between the receptor chapters would be helpful.

### **Cumulative impacts**

Section 9.6.3 discusses potential cumulative effects. It is stated that the cumulative assessment will be considered in two stages – the whole Broadshore Hub (including the array areas, offshore transmission assets and onshore transmission assets) and also alongside other plans or projects. We are content with this approach.

We agree that if the Cumulative Effects Framework (CEF) is published within project timeframe then it should be used to undertake the cumulative assessment. If it is not published, NatureScot are currently preparing guidance on aspects to be considered and presented in the EIA and RIAA.

In addition, we have advised Marine Directorate that the Berwick Bank application will have adverse effects on site integrity (AEoSI) on multiple seabird species within The UK European Site Network, some of which overlap with the species and sites assessed in other applications. Consequently, as the outcome of the Berwick Bank application is unknown at present, PVA models should be run using two scenarios: Berwick Bank consented and unconsented.

### **Transboundary impacts**

Potential transboundary impacts are briefly described in EIA Scoping Report section 9.6.4. We are content with what is proposed but given the limited information presented, we cannot provide further advice at this stage.

### **Mitigation and monitoring**

We welcome the identification of “embedded mitigation measures” described in section 9.5.1 and summarised in Appendix 3 (Mitigation Register). The examples provided are appropriate, but as noted elsewhere in this advice, the list of embedded mitigation measures in this EIA Scoping Report is minimal.

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<sup>8</sup> <https://www.gov.scot/publications/review-inform-assessment-risk-collision-displacement-petrels-shearwaters-offshore-wind-developments-scotland/documents/>

No specific monitoring for offshore ornithology is mentioned in the Scoping Report. Further information on proposed ornithological monitoring should be discussed in the EIA Report.

## **Approach to assessment**

### *Seasonality*

Seasonal definitions are in accordance with our Guidance Note 9<sup>9</sup>.

### *Estimating populations*

Estimates of breeding seabird population sizes will be obtained from the Seabird Monitoring Programme (SMP) database and should use Seabirds Count data<sup>10</sup>. Non-breeding seabird population sizes will be taken from Furness (2015), which follows our guidance.

For guillemot and razorbill, the population size estimates in the SMP are presented as the number of individuals counted at the colony, and therefore correction factors do need to be applied to the counts. The correction factors have recently been updated and can be found in the new Seabirds Count book<sup>11</sup>. For guillemot the correction factor is now 1.49 and for razorbill it is 1.34.

### *Foraging ranges*

Foraging ranges are as per our Guidance Note 3<sup>12</sup>. It would be helpful to include the site-specific maximum values to be used for gannet in relation to Forth Islands SPA and St Kilda SPA, as has been done for guillemot and razorbill where there are site-specific values.

### *Apportioning*

With respect to apportioning, this will be done through the Cumulative Effects Framework (CEF) in the future. This will incorporate both the 2018 Butler / Marine Directorate commissioned apportioning tool and NatureScot's theoretical approach as appropriate. The intention is that the CEF will use Seabirds Count data. The developers of the framework, UKCEH, are working with Marine Directorate regarding publication of the CEF, but we have no details on timescale at present.

We have also reviewed Apportioning Breeding Season Impacts to SPA Seabird Populations (Appendix 6). The breeding season apportionment detailed in Appendix 6 has been based on the six most abundant species in the first year of survey. This list of species should be reviewed when the results from the full two years of survey have been analysed.

### *Density estimates*

With respect to density estimates, we recommend using MRSea density modelling approaches unless the number of data points for a species is less than ten, or the species are present in a uniform distribution, when it may not be possible to run the spatial element of MRSea. The applicant is proposing to use model-based approaches for the most abundant species only, but also generating design-based density estimates for these species and for other less abundant

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<sup>9</sup> <https://www.nature.scot/doc/guidance-note-9-guidance-support-offshore-wind-applications-seasonal-periods-birds-scottish-marine>

<sup>10</sup> [Seabirds Count | JNCC - Adviser to Government on Nature Conservation](#)

<sup>11</sup> [Seabirds Count - Lynx Nature Books \(lynxeds.com\)](#)

<sup>12</sup> <https://www.nature.scot/doc/guidance-note-3-guidance-support-offshore-wind-applications-marine-birds-identifying-theoretical>

species. This approach is acceptable, but it would be helpful if information is provided in the EIA Report to explain when and why design-based estimates were required.

#### *Displacement and barrier effects*

The displacement rates presented in our Guidance Note 8<sup>13</sup> for matrix-based assessments are also appropriate for SeabORD.

While we would normally recommend the use of SeabORD for puffin, guillemot, razorbill and kittiwake during the chick-rearing period, we are aware that Marine Directorate are currently reviewing this topic, and we will update our position once their review is complete.

#### *Collision Risk Modelling (CRM)*

We are currently updating our CRM Guidance Note and this should be available within the next month. We recommend using the updated guidance to determine your approach to CRM and it should answer the questions posed in the Scoping Report on this topic.

There is ongoing work around migratory species including the recently published ScotMER *Strategic review of birds on migration in Scottish waters*<sup>14</sup> and this should be used alongside the mCRM if available within the timelines of this project.

#### *Population Viability Assessment (PVA)*

We agree that the most up to date population data from the SMP database should be used to provide baseline colony population sizes in the PVA – this will primarily be Seabirds Count data. Species demographic data should be obtained from Horswill and Robinson (2015). However, if site-specific data is available and deemed more appropriate, justification should be provided for using this.

In paragraph 854, the applicant has suggested that the use of the 0.02 percentage point change in adult mortality threshold may not be appropriate for some species. At present, our advice is that this threshold is used for all species, as laid out in our Guidance Note 11<sup>15</sup>.

Please be aware that we currently advise that collision impacts and distributional response impacts should be additive for kittiwake and gannet. This reflects the best publicly available evidence for considering these species which are susceptible to both impacts. We are aware of work undertaken by Natural England on this topic, and NatureScot will review its position on this following publication.

#### **Highly Pathogenic Avian Influenza (HPAI)**

We agree that there is a requirement for ongoing engagement in relation to the impacts of HPAI and how to incorporate these impacts within the assessments.

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<sup>13</sup> <https://www.nature.scot/doc/guidance-note-8-guidance-support-offshore-wind-applications-marine-ornithology-advice-assessing>

<sup>14</sup> [Strategic study of collision risk for birds on migration and further development of the stochastic collision risk modelling tool. Work Package 1: Strategic review of birds on migration in Scottish waters.](#)

<sup>15</sup> <https://www.nature.scot/doc/guidance-note-11-guidance-support-offshore-wind-applications-marine-ornithology-recommendations>

As the survey work straddles the HPAI outbreak years, it will be important for assessment purposes to consider the current status of seabird populations at SPA colonies. Surveys were undertaken in 2023 at various key seabird colonies affected by HPAI, coordinated by RSPB, and some will be repeated in 2024. Recent data for key species at some sites can already be found on the SMP database. RSPB will be publishing a report shortly on HPAI effects.

## **Habitats Regulations Appraisal (HRA) Stage 1 LSE Screening Report**

### **Summary**

In general, the information provided in the HRA Screening Report is appropriate and clearly laid out. However, we have some specific comments outlined below.

### **Connectivity in the breeding season**

We do not recommend the screening out of any sites/features before the data from the full two years of survey work is available, so that a full picture of how birds are interacting with the array footprint is understood.

We note the detailed information provided and conclusions drawn in paragraph 305 in relation to six species and connectivity. We support the statement in paragraph 306 that these conclusions will be subject to review following the completion of the second year of the offshore aerial survey programme.

Table 7.2 lists the relevant qualifying features for each SPA. In various cases, features are only included as components of seabird assemblages when they should be listed as individual features in their own right, e.g. at Buchan Ness to Collieston Coast SPA. This also applies to Table 7.5.

### **Likely Significant Effect (LSE)**

#### *Construction and decommissioning*

The potential effects of lighting on ornithological receptors should be considered as an impact pathway. Species such as European storm petrel, Leach's storm-petrel and Manx shearwater may be attracted to and/or disorientated by artificial light sources. Potential for LSE should be re-considered for these species in relation to this impact pathway.

Paragraph 328 acknowledges that the presence of vessels and construction works may disturb seabirds from offshore foraging or roosting areas, in the vicinity where construction (and decommissioning) activities will occur. However, it does not consider vessel movement between the array sites and ports being used in the construction (and decommissioning) phase, which could disturb species other than seabirds. Depending on the ports used, vessel movements could impact on SPAs designated for species such as divers and sea ducks which are vulnerable to disturbance and displacement e.g. Moray Firth SPA. Therefore, vessel movements including proposed routes, timing and frequency should be included in assessment of LSE.

#### *Operations and maintenance*

As above, the potential effects of lighting on ornithological receptors should be considered as an impact pathway. Lighting on arrays and maintenance vessels should be considered.

Similarly, our comments above on disturbance from vessel movements also apply to the operation and maintenance phase.

## Summary of Screening

We reiterate here that no sites or features should be screened out before the data from the full two years of survey work has been analysed and the additional impacted pathways we recommend above have been assessed.

### *Table 8.1*

It would be helpful if table 8.1 identified breeding seabird qualifying features, notably arctic skua, which are included based on potential connectivity during the non-breeding season only, as is done in table 7.2. This would add clarity where it is apparent that the SPA is beyond breeding season foraging range for a particular species.

For kittiwake at East Caithness Cliffs, collision should be included in the list of impacts.

# **Northern Lighthouse Board**

## Marc MacFarlane

---

**From:** Adam Lewis <Adam.Lewis@nlb.org.uk> on behalf of navigation <navigation@nlb.org.uk>  
**Sent:** 29 January 2024 11:27  
**To:** MD Marine Renewables  
**Cc:** Kirsty Black; Lauren Cowan; Marc MacFarlane  
**Subject:** RE: [EXT] SCOP-0040 – BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area – Scoping Consultation – Response Required by 24 February 2024  
**Attachments:** WIND\_011\_24 - NLB Response.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

**Categories:** Saved in eRDM

Good morning,

Please find attached the NLB response to the above consultation.

Regards

Adam

Adam Lewis  
Coastal Inspector  
NLB Navigation Department  
0131 4733197 / [Redacted]





# Northern Lighthouse Board

84 George Street  
Edinburgh EH2 3DA

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Fax: 0131 220 2093

Website: [www.nlb.org.uk](http://www.nlb.org.uk)  
Email: [enquiries@nlb.org.uk](mailto:enquiries@nlb.org.uk)

Your Ref: SCOP-0040 – Broadshore Hub Scoping Report  
Our Ref: AL/OPS/ML/WIND\_011\_24

Licensing Operations Team – Marine Directorate  
Scottish Government  
Marine Laboratory  
375 Victoria Road  
Aberdeen  
AB11 9DB

29 January 2024

**REGULATION 14 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017, REGULATION 12 OF THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 & REGULATION 13 AND SCHEDULE 4 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2007**

**Request for Scoping Opinion for Proposed Section 36 Application and Marine Licences for Each of the 3 Wind Farm Development Areas (“WFDA”) (Broadshore, Scaraben & Sinclair) Comprising the “Broadshore Hub” Located Approximately 47km North of Fraserburgh**

Thank you for your e-mail correspondence dated 25<sup>th</sup> January 2024 relating to the Scoping Report submitted by **BlueFloat Energy & Renantis Partnership** in relation to the proposed Broadshore Hub Wind Farm Development Area located approximately 47 kilometres north of Fraserburgh.

Northern Lighthouse Board note the inclusion of all three projects (Broadshore, Scaraben and Sinclair) into the single “Broadshore Hub” project. NLB will look to work with the developer to provide a lighting and marking solution that reflects this single project approach.

However, NLB also recognise that construction timeframes and schedules for the three projects may diverge, and that lighting and marking solutions may be required to be sufficiently flexible so as to incorporate one project into another as construction is completed.

NLB note the inclusion of Chapter 11 – Shipping and Navigation within the report, with particular reference to Section 11.5.1 (Embedded Mitigation Measures), Section 11.6.1 (Potential Cumulative Effects), and Table 11.4 (Summary of Potential Impacts Scoped In or Scoped Out for Shipping and Navigation).

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Northern Lighthouse Board welcome the commitment to develop Post-Consent documentation including a Lighting and Marking Plan (LMP), Development Specification and Layout Plan (DSLPL) and a Navigational Safety Plan (NSP) as embedded mitigations across all three phases of the project. NLB will continue to engage with the developer with regard to these documents.

NLB have no objection to the content of the Scoping Report, and no suggestions for additional content.

Yours sincerely  
[Redacted]

Peter Douglas  
Navigation Manager

# **Royal Yachting Association**

**From:** [Pauline McGrow](#)  
**To:** [MD Marine Renewables](#)  
**Subject:** RE: SCOP-0040 - Bluefloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area – Scoping Consultation – Response Required by 24 February 2024  
**Date:** 07 February 2024 16:30:01  
**Attachments:** [image003.png](#)  
[image005.png](#)  
[image007.png](#)  
[SCOP-0040\\_7.2.24.pdf](#)

---

Dear Marc,

Please find attached RYA Scotland's response to the above noted Scoping Consultation.

Kind Regards

Pauline

Pauline McGrow  
Senior Administrator  
Mob: [Redacted]

Royal Yachting Association Scotland  
T: 0131 317 7388  
E: [pauline.mcgrow@ryascotland.org.uk](mailto:pauline.mcgrow@ryascotland.org.uk)



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**7 February 2024**

Marc MacFarlane  
Marine Directorate – Marine Planning & Policy  
Scottish Government  
Marine Laboratory,  
375 Victoria Road,  
Aberdeen,  
AB11 9DB  
[MD.MarineRenewables@gov.scot](mailto:MD.MarineRenewables@gov.scot)

Dear Marc,

**SCOP-0040 – BlueFloat Energy and Renantis Partnership –  
Broadshore Hub Wind Farm Development Area**

I have read the relevant parts of the scoping report on behalf of RYA Scotland and agree that Shipping and Navigation should be scoped into the EIA. Relatively few recreational craft are likely to pass through this area, but some will, and RYA Scotland wishes to contribute to the Navigational Risk Assessment and will work with our colleagues in the Cruising Association to do so.

Our responses to the questions posed in section 11.8 are as follows:

1. *Is the legislation, policy and guidance proposed for consideration as part of the Broadshore Hub WFDA's EIA Report (including the NRA) suitable and sufficient? Yes.*
2. *Is the study area defined, data sources considered, and proposed data sources to inform the NRA suitable and sufficient? Yes. As mentioned above, the number of recreational vessels likely to be recorded will be small, particularly since only about a third of such vessels will be transmitting an AIS signal. This proportion is an estimate. Nevertheless, some are likely to do so, for example ones on passage from Scandinavia and the Baltic, and these passages may be made in adverse weather conditions.*

3. *Is the methodology outlined for undertaking the risk assessment suitable, including on a cumulative level?* Yes. However, it is unclear why loss of station has been scoped out of the construction and decommissioning phases.
  
4. *Have all potential hazards (impacts) due to the presence of the Broadshore Hub WFDA been identified for shipping and navigation users?*  
I agree with what has been written. However, an additional hazard is the loss of Aids to Navigation on the devices, for example due to storm damage, and the time delay before damage can be rectified.
  
5. *Are the mitigation measures described suitable and sufficient for managing and mitigating risk associated with the potential hazards?* This is something that should be addressed in the Navigational Risk Assessment. Note that there is a significant time lag between data being received by the UKHO and the changes being implemented on the electronic charts used by most recreational sailors. This will have an influence on the way that information about the site is promulgated.

Yours sincerely,

[Redacted]

Dr G. Russell FCIEEM(retd) FRMetS  
Planning and Environment Officer, RYA Scotland

**Scottish Environment Protection Agency**

## Marc MacFarlane

---

**From:** Planning.North <Planning.North@sepa.org.uk>  
**Sent:** 25 January 2024 18:00  
**To:** MD Marine Renewables  
**Cc:** MD Marine Renewables  
**Subject:** PCS-20000204 SEPA Response to SCOP-0040

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

**Categories:** Saved in eRDM

To Whom It May Concern,

Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017  
SCOP-0040

Request For Scoping Opinion For Proposed Section 36 And Marine Licence Applications For  
Each Of The 3 Wind Farm Development Areas (“WFDAs”) (Broadshore, Scarben & Sinclair)  
Comprising The Broadshore Hub

BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area –  
Approximately 47km North of Fraserburgh

Thank you for the above consultation. Based on the information provided, it appears that this application falls below the thresholds for which SEPA provide site specific advice. Please refer to our standing advice and other guidance which is available on our [website](#). In addition, please also refer to our SEPA standing advice for the Department for Business, Energy and Industrial Strategy and Marine Scotland on marine consultations available [here](#).

If there is a significant site-specific issue, not addressed by our guidance or other information provided on our website, with which you would want our advice, then please reconsult us highlighting the issue in question and we will try our best to assist.

I trust these comments are of assistance - please do not hesitate to contact me if you require any further information.

Kind regards,  
Clare Pritchett  
Senior Planning Officer



For the future of our environment

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Dh'fhaodadh gum bi am fiosrachadh sa phost-d seo agus ceanglachan sam bith a tha na chois dìomhair, agus cha bu chòir am fiosrachadh a bhith air a chleachdadh le neach sam bith ach an luchd-faighinn a bha còir am fiosrachadh fhaighinn. Chan fhaod neach sam bith eile cothrom fhaighinn air an fhiosrachadh a tha sa phost-d no a tha an cois a' phuist-d, chan fhaod iad lethbhreac a dhèanamh dheth no a chleachdadh arithist. Mura h-ann dhuibhse a tha am post-d seo, feuch gun inns sibh dhuinn sa bhad le bhith cur post-d gu [postmaster@sepa.org.uk](mailto:postmaster@sepa.org.uk). Togalach Aonghais Mhic a' Ghobhainn, 6 Craobhraid Parklands, Eurocentral, Baile a' Chuilinn, Siorrachd Lannraig a Tuath, ML1 4WQ. Faodar conaltradh còmhla ri SEPA a sgrùdadh no a chlàradh no a sgaoileadh gus obrachadh èifeachdach an t-siostaim a ghlèidheadh agus airson adhbharan laghail eile.

# **Scottish Fishermen's Federation**

## Marc MacFarlane

---

**From:** Mohammad Fahim Hashimi <f.hashimi@sff.co.uk>  
**Sent:** 23 February 2024 16:37  
**To:** MD Marine Renewables  
**Cc:** Marc MacFarlane; Elspeth Macdonald  
**Subject:** RE: SCOP-0040 – BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area – Scoping Consultation – Response Required by 24 February 2024  
**Attachments:** SFF Response\_Broadshore Hub EIA Scoping Report Consultation\_Final 230224.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Dear Marc,

Thank you for sharing the Broadshore Hub Wind Farm Development Area – Scoping Consultation opportunity with SFF.

Please find attached SFF's response on the above consultation for your reference.

Should you have any questions about our response, feel free to contact me.

**Best wishes**

**Fahim Mohammad Hashimi**  
**Offshore Energy Policy Manager**

---

**Scottish Fishermen's Federation (SFF)**  
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Our Ref: FH-BHub/24-0001

Your Ref: SCOP-0040

E-mail:

[MD.MarineRenewables@gov.scot](mailto:MD.MarineRenewables@gov.scot)

23 February 2024

Dear Marc,

Scottish Fishermen'  
Federation  
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Scotland UK

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E: [sff@sff.co.uk](mailto:sff@sff.co.uk)

[www.sff.co.uk](http://www.sff.co.uk)

### **SFF Response on Broadshore Hub Wind Farm Development Area EIA Scoping Consultation**

This response to the scoping request is presented by the Scottish Fishermen's Federation on behalf of the 450 plus fishing vessels in membership of its constituent associations, the Anglo Scottish Fishermen's Association, Fife Fishermen's Association, Fishing Vessel Agents and Owners Association, Mallaig & North West Fishermen's Association, Orkney Fisheries Association, Scottish Pelagic Fishermen's Association, the Scottish White Fish Producer's Association and Shetland Fishermen's Association. The chair of NECrIFG has also been consulted and agrees.

#### **General comments**

SFF note from section 3.2 of the Broadshore Hub WFDA's Scoping Report (SR) that a parameter-based Project Design Envelop (PDE) approach (also known as the 'Rochdale Envelope') will be adopted for the Environmental Impact Assessment (EIA) Report. Therefore, the following comments are based on existing details provided in this Scoping Report and further comments will be shared in due course once the Project's designed is finalised.

#### **Wind Turbine Generator (WTGs) foundation/spatial footprint**

SFF notes from section 3.4 'Wind Turbine Generator Substructure' (p42) of the SR that depending on the water depth (which is from c.55-100 to 110m) seabed conditions, and other factors, the Broadshore Hub WFDA's will use both floating (namely, TLP, semi-submersible buoy, semi-spar and barge) and fixed foundations designs would be considered in the EIA.

Being concerned of the spatial footprint of floating WTGs and the potential snagging hazard that their moorings system creates to fishing vessels, SFF would propose to the Applicants, particularly the Broadshore OWF Ltd to use the fixed foundation design for as much WTGs as possible (as a fixed

Members:

Anglo Scottish Fishermen's Association · Fife Fishermen's Association · Fishing Vessel Agents & Owners Association (Scotland) Ltd ·  
Mallaig & North-West Fishermen's Association Ltd · Orkney Fisheries Association · Scottish Pelagic Fishermen's Association Ltd ·  
The Scottish White Fish Producers' Association Ltd · Shetland Fishermen's Association

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foundation wind farm in a water depth of Greater than 70meters is planned for another offshore wind development in Scottish waters.

Where use of fixed foundation WTGs is not feasible due to technical issues, in such situations, SFF's first preferred WTG floating foundation option is TLP, and buoy to be the second/last preferred option since they have lesser spatial footprint on seabed. For the same reasons, SFF's preferred mooring system is 'tension mooring' as defined under sub-section 3.5.1.4 (p57) of the Scoping Report. We object to the use of 'Shared Mooring' as defined in sub-section 3.4.1.5 of the SR since it creates further snagging hazard to the fishing vessels.

### **Cable Burial and Protection**

SFF notes from section 3.7.2 that the cables may be surface laid or buried. Being concerned of fishermen's safety, first of all, SFF would suggest to the Applicants to make all efforts to reach the required depth of cable burial and avoid using cable protection measures as much as possible since the volume of cable protection mass will disrupt the marine habitat and would create snagging hazard for fishing vessels within array area, intelink and export cables routes.

In terms of using cable protections, SFF is opposed to using concrete mattresses and rock bags in open water since they create severe snagging hazards for bottom trawl fishing vessels and static gears. SFF's preferred cable protection measure is rock dump/protection considering industry standard rock size (1" - 5") with a 1:3 profile followed by an overtrawl sweep alongside a long-term monitoring programme. We do not object to use of sandbags in cable protection works as long as their size is not significant to create snagging hazard for fishing vessels.

In terms of crossing point, as they create obstacles and snagging hazard to the fishing industry, SFF would suggest that the cable crossing should be avoided as much as possible otherwise the design of cables and pipelines crossing points should be consulted with fishing industry to ensure their impacts are mitigated.

### **Pre-construction Works -Boulder Clearance**

SFF notes from section 3.9.2 (p74) that Broadshore Hub WFDAs, pre-construction activities include boulder clearance. Since the relocation of boulders from their natural positions and re-positioning them on new surface causes snagging hazard for fishing vessels, SFF would suggest avoiding the relocation of boulders as much as possible. However, where boulders relocation is unavoidable, we recommend the new locations/coordinates of the relocated boulders should be recorded and shared with fishermen. Fishermen require geographical readings to decimal of a minute format (3 decimal places sufficient) rather than going down to actual seconds and the datum should be WGS84 rather than ED50.

### **Decommissioning**

SFF notes from section 3.9.5 (p77), of the SR that the requirement for submission of a decommissioning programme by the Applicants for approval by Scottish Ministers is mentioned. Specific details on the decommissioning activities are not known at this stage of consent but further details will be provided in the Broadshore Hub WFDAs EIA Report.

To reiterate safety concern of the fishing vessels, SFF would like to see all development related infrastructures are recovered/removed to shore followed by overtrawl sweeps (seabed sweeps using fishing gears). The seabed is restored to its pre-development condition post-decommissioning, and it is safe for fishing operations to fully resume in the area.

## **Ch. 6 Benthic Ecology**

### **6.8 Scoping Questions**

Following are the SFF's response on the relevant scoping questions:

**Question:** Have all benthic ecology impacts resulting from the Broadshore Hub WFDA's been identified in the Broadshore Hub WFDA's Scoping Report?

**SFF's answer:**

SFF would like to see the 'Impacts to benthic invertebrates due to thermal emissions from subsea electrical cables' to also be scoped in since any temperature change in the invertebrate's habitat would have adverse effects on their behaviour and increase their mortality rate.

**Question:** Do you agree with the Scoping In and Out of impact pathways in relation to benthic and intertidal ecology?

**SFF's answer:**

See answer above.

## **Ch. 7. Fish and Shellfish Ecology**

### **7.8 Scoping Questions**

**Question:** Do you agree with the potential impacts scoped in and out?

**SFF's response:**

Yes.

## **Ch. 10. Commercial Fisheries**

### **13. Scoping Questions**

**Question:** Do you agree that the embedded mitigation measures described provide a suitable means for managing and mitigating the potential effects of the Broadshore Hub WFDA's on commercial fisheries receptors?

**SFF's response:**

SFF has the following comments on the proposed embedded mitigation:

- We want 'the Fisheries Management and Mitigation Strategy (FMMS)' to be developed and adopted pre-consent in consultation with fishing industry to ensure all fishing industry's concerns are considered and addressed accordingly.
- In relation to 'Development of and adherence to a Navigational Safety Plan (NSP), that will include Notice to Mariners (via Kingfisher Bulletins or other appropriate methods)'. We suggest the NtM are issued in sufficient time to avoid any disruptions to the fishing activities in the intended area.

We would propose the following mitigation measures/commitments to be considered too:

- As part of the proposed commitments, there is no measure for disruption payments for the fishing vessels. SFF suggest that the cooperation agreement should be considered for both the static and mobile gears where they are required to be relocated.
- Utilise the services of an O.F.L.O due to the location in relevance to fishermen.
- No mention has been made to mitigation once operational and loss of fishing opportunities to the fishing industry.

**Question:** Do you agree with the scoping in and out of impact pathways in relation to commercial fisheries?

**SFF's response:**

No. SFF notes from the Table 10.4 (p331) that 'Physical presence of infrastructure and potential exposure of that infrastructure leading to gear snagging' has been scoped in. We agree with this being scoped in; however, since snagging in some limited cases has human casualties, we propose that the possibility of a loss of life should also be highlighted as to a risk of snagging hazards not just to fishing gear.

In addition, we note from section '10.6.2 Potential Impacts Scoped Out', Table 10.5 that the "Additional steaming to alternative fishing grounds for vessels that would otherwise cross through the Broadshore Hub WFDA's" during the operation and maintenance has been scoped out.

SFF would like to see the above point is scoped in since it would have an impact of steaming times to and from port notwithstanding if shifting to different fishing grounds during a trip, prior to these being in place a vessel could fish uninterrupted to new grounds, with these in place they will have to detour. In addition, the developments sit on the transition route of fishing vessels e.g. Broadshore clearly intersects directly with the pelagic vessels transit route from Peterhead and Fraserburgh to fishing ground in Shetland the same is relevant to other types of fisheries.

## **Ch. 14. Shipping and Navigation**

### **14.9 Scoping Questions**

No specific comment.

In conclusion, SFF stresses that our primary concern is protecting the rights of fishermen to safely undertake their trade, and this is the cornerstone of our response. Our position is that fishing activities should continue unaffected and unharmed post-development. If fishermen impacted are to be denied the right to earn their living, we could not support the development of any proposal for a windfarm.

Best regards

[Redacted]

Mohammad Fahim Hashimi  
**Offshore Energy Policy Manager**  
**Scottish Fishermen's Federation**

# **Scottish and Southern Electricity Networks**



## Marc MacFarlane

---

**From:** Miller, Raeanne <Raeanne.Miller@sse.com>  
**Sent:** 22 February 2024 17:11  
**To:** MD Marine Renewables  
**Subject:** REF: SCOP-0040 – BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area  
**Attachments:** SHETransmission\_BroadshoreWind\_ScopingResponse\_22.02.24.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

**Objective:** -1

Good evening,

Thank you for the opportunity to consult on the Broadshore Hub Wind Farm Development Area scoping report (SCOP-0040 – BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area).

Scottish Hydro Electric Transmission plc. (SSEN Transmission) have provided a response to this consultation, which is attached.

I would be happy to discuss any further queries or concerns you, or the proponents may have. Please do not hesitate to be in touch should that be the case.

Best wishes,

Raeanne

**Dr. Raeanne Miller** | Senior Marine Consents Manager

SSEN Transmission

10 Henderson Rd, Inverness, IV1 1SN

**M:** [Redacted] | **E:** [Raeanne.Miller@sse.com](mailto:Raeanne.Miller@sse.com)

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and

**Marine Scotland – Licensing and Operations Team**

By email: [MS.MarineRenewables@gov.scot](mailto:MS.MarineRenewables@gov.scot)

22 February 2024

Dear Sir/Madam,

**REF: Broadshore Hub Wind Farm Development Areas, Moray Firth – Scoping Report 2024**

Thank you for the opportunity to respond to the Scoping Report associated with the Broadshore Hub Offshore Wind Farm Development.

Scottish Hydro Electric Transmission Plc (SSEN Transmission) welcomes the inclusion of subsea cables in section 13.4.7 and elsewhere within this report. However, we note that in section 13.4.7 of the scoping report, no subsea cables were identified within the marine infrastructure and other users study area.

As part of our responsibilities to deliver and maintain critical national transmission infrastructure within and connecting the North of Scotland, which is required to support Net Zero targets, SSEN Transmission is currently developing additional electricity transmission subsea cable projects that may interact with the identified areas for the Broadshore Hub, associated export cables, and potential landfall locations. These projects include a subsea HVDC connection between Spittal, in Northern Scotland, and the Peterhead area ([Spittal – Peterhead Subsea Cable Link - SSEN Transmission \(ssen-transmission.co.uk\)](#)).

We recognise that final decisions on export cable routes and landfall locations for the Broadshore Hub project have not yet been made. SSEN Transmission request that present and future cables, both power and telecoms, are given due consideration and that the provision is maintained for cables to cross both export cables and the generation site, and that the freedom of the seas is maintained.

SSEN Transmission remains committed to working with other legitimate users of the sea in a proactive manner, enabling all parties to deliver successful projects wherever reasonably possible. We would welcome ongoing discussion and consultation between both parties as projects progress, and where necessary that proximity and crossing agreements are developed.

I would be happy to discuss any questions or concerns in relation to the above.

Yours Sincerely,

[Redacted]

**Raeanne Miller**

Senior Marine Consents and Environment Manager

[Raeanne.Miller@sse.com](mailto:Raeanne.Miller@sse.com)

**Scottish Water**

**From:** Planning Consultations <PlanningConsultations@scottishwater.co.uk>  
**Sent:** Tuesday, January 30, 2024 10:23 AM  
**To:** MD Marine Licensing <ms.marinelicensing@gov.scot>  
**Subject:** SW Ref: DSCAS-0102531-Z4L - Your Ref: SCOP-0040 Broadshore Hub Wind Farm

Dear Marine Licensing,

Please see the attached letter regarding SW Case: **DSCAS-0102531-Z4L - Your Ref: SCOP-0040 Broadshore Hub Wind Farm**

If you have any questions then please do not hesitate to contact Scottish Water.

Kind Regards,

Ruth Kerr.

Ruth Kerr

Technical Analyst  
North Regional Team

Strategic Development  
Development Services  
Dedicated Freephone Helpline: 0800 389 0379

[DevelopmentOperations@scottishwater.co.uk](mailto:DevelopmentOperations@scottishwater.co.uk)

Scottish Water.

Trusted to serve Scotland.

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Scottish Water

[www.scottishwater.co.uk](http://www.scottishwater.co.uk)

Tuesday, 30 January 2024



Marine Licensing  
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Aberdeen

Development Operations  
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Buchanan Gate Business Park  
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Development Operations  
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[www.scottishwater.co.uk](http://www.scottishwater.co.uk)



Dear Customer,

**Broadshore Offshore Wind Farm, 47 km north of Fraserburgh,  
Moray, AB43 9BY  
Planning Ref: SCOP-0040  
Our Ref: DSCAS-0102531-Z4L  
Proposal: Broadshore Offshore Wind Farm -Renewables - Wind**

**Please quote our reference in all future correspondence**

### **Audit of Proposal**

Scottish Water has no objection to this planning application; however, the applicant should be aware that this does not confirm that the proposed development can currently be serviced. Please read the following carefully as there may be further action required. Scottish Water would advise the following:

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### **Drinking Water Protected Areas**

A review of our records indicates that there are no Scottish Water drinking water catchments or water abstraction sources, which are designated as Drinking Water Protected Areas under the Water Framework Directive, in the area that may be affected by the proposed activity.

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### **Surface Water**

For reasons of sustainability and to protect our customers from potential future sewer flooding, Scottish Water will not accept any surface water connections into our combined sewer system.



There may be limited exceptional circumstances where we would allow such a connection for brownfield sites only, however this will require significant justification from the customer taking account of various factors including legal, physical, and technical challenges.

In order to avoid costs and delays where a surface water discharge to our combined sewer system is anticipated, the developer should contact Scottish Water at the earliest opportunity with strong evidence to support the intended drainage plan prior to making a connection request. We will assess this evidence in a robust manner and provide a decision that reflects the best option from environmental and customer perspectives.

### **General notes:**

- ▶ Scottish Water asset plans can be obtained from our appointed asset plan providers:
  - ▶ Site Investigation Services (UK) Ltd
  - ▶ Tel: 0333 123 1223
  - ▶ Email: [sw@sisplan.co.uk](mailto:sw@sisplan.co.uk)
  - ▶ [www.sisplan.co.uk](http://www.sisplan.co.uk)

I trust the above is acceptable however if you require any further information regarding this matter please contact me on **0800 389 0379** or via the e-mail address below or at [planningconsultations@scottishwater.co.uk](mailto:planningconsultations@scottishwater.co.uk).

Yours sincerely,

**Ruth Kerr.**

Development Services Analyst

[PlanningConsultations@scottishwater.co.uk](mailto:PlanningConsultations@scottishwater.co.uk)

### **Scottish Water Disclaimer:**

*"It is important to note that the information on any such plan provided on Scottish Water's infrastructure, is for indicative purposes only and its accuracy cannot be relied upon. When the exact location and the nature of the infrastructure on the plan is a material requirement then you should undertake an appropriate site investigation to confirm its actual position in the ground and to determine if it is suitable for its intended purpose. By using the plan you agree that Scottish Water will not be liable for any loss, damage or costs caused by relying upon it or from carrying out any such site investigation."*

**Sport Scotland**

## Marc MacFarlane

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**From:** Gillian Kyle <Gillian.Kyle@sportscotland.org.uk>  
**Sent:** 31 January 2024 15:03  
**To:** MD Marine Renewables  
**Subject:** RE: SCOP-0040 – BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area – Scoping Consultation – Response Required by 24 February 2024

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

**Categories:** Saved in eRDM

Good afternoon,

RYAS are aware of project. No objections from **sportscotland**.

Gillian

**Transport Scotland**

## Marc MacFarlane

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**From:** Andrew Erskine  
**Sent:** 26 February 2024 11:08  
**To:** MD Marine Renewables  
**Cc:** Iain Clement; LOGAN Lesley  
**Subject:** Broadshore Hub Offshore SR TS Response Feb 2024  
**Attachments:** Broadshore Hub Offshore SR TS Response Feb 2024.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

**Categories:** Saved in eRDM  
**Objective:** -1

Dear Sir/Madam,

Please find attached the Transport Scotland response to the Broadshore Hub Offshore application.

Regards,

Andrew Erskine

Marc MacFarlane  
Marine Directorate  
375 Victoria Road  
Aberdeen  
AB11 9DB

Your ref:  
SCOP-0040

Our ref:  
GB01T19K05

Date:  
23/02/2024

[MD.MarineRenewables@gov.scot](mailto:MD.MarineRenewables@gov.scot)

Dear Sirs,

**REGULATION 12 OF THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017**

**REGULATION 13 AND SCHEDULE 4 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2007**

**REQUEST FOR SCOPING OPINION FOR PROPOSED SECTION 36 AND MARINE LICENCE APPLICATIONS FOR EACH OF THE 3 WIND FARM DEVELOPMENT AREAS (“WFDAs”) (BROADSHORE, SCARABEN & SINCLAIR) COMPRISING THE “BROADSHORE HUB” LOCATED APPROXIMATELY 47KM NORTH OF FRASERBURGH**

With reference to your recent correspondence on the above development, we acknowledge receipt of the Scoping Report (SR) prepared by Royal HaskoningDHV in support of the above development.

This information has been passed to SYSTRA Limited (SYSTRA) for review in their capacity as Term Consultants to Transport Scotland – Roads Directorate. Based on the review undertaken, Transport Scotland would provide the following comments.

**Proposed Development**

The proposed development comprises three separate projects, the Broadshore Project, the Sinclair Project and the Scaraben Project, collectively referred to as the Broadshore Hub for the purpose of the SR. The projects will collectively comprise between 38 and 72 turbines, to be located between 47 and 61km north of Fraserburgh. The nearest trunk road to the site is the A90(T) at Fraserburgh.

## **Assessment of Environmental Impacts**

The SR states that the SR for the Broadshore Hub is for the assessment of offshore elements only, and separate Scoping Reports and consent applications will be submitted for the Broadshore Hub Onshore Transmission Development Areas (OnTDAs), with a separate assessment in a further EIA Report.

On the understanding that the potential traffic related impacts associated with the proposed development will be considered within the Onshore EIA, we can confirm that Transport Scotland has no further comment to make on the Offshore Scoping Report.

I trust that the above is satisfactory but should you wish to discuss in greater detail, please do not hesitate to contact me or alternatively, Alan DeVenny at SYSTRA's Glasgow Office on 0141 343 9636.

Yours faithfully

[Redacted]

**Iain Clement**

**Transport Scotland  
Roads Directorate**

cc Alan DeVenny – SYSTRA Ltd.

**United Kingdom Chamber of Shipping**



**From:** [Robert Merrylees](#)  
**To:** [MD Marine Renewables](#)  
**Cc:** [Kirsty Black](#); [Lauren Cowan](#); [Marc MacFarlane](#)  
**Subject:** RE: SCOP-0040 – BlueFloat Energy and Renantis Partnership – Broadshore Hub Wind Farm Development Area – Scoping Consultation – Response Required by 24 February 2024  
**Date:** 14 February 2024 12:08:07  
**Attachments:** [image002.png](#)

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Dear Sir / Madam,

The UK Chamber of Shipping welcomes the respond to the Scoping Report request for the Broadshore Hub Wind Farm Development Areas (WFDA) in Scottish waters.

The Chamber has reviewed the Shipping and Navigation chapter to of the Scoping Report and responds to the set questions below:

- Is the legislation, policy and guidance proposed for consideration as part of the Broadshore Hub WFDA EIA Report (including the NRA) suitable and sufficient?

The Chamber would expect to see Scotland's Sectoral marine plan for offshore wind energy referenced and used.

- Is the study area defined, data sources considered, and proposed data sources to inform the NRA suitable and sufficient?

The Chamber agrees with the study area of 10nm as industry standard, however would like to see a cumulative routeing study area of 50nm for the cumulative assessment. This is again industry standard for such projects.

The Chamber welcomes additional 12-month of AIS data to provide seasonal smoothing to the MGN 654 compliant survey data.

The Chamber would expect to see a longer data set of MAIB analysed as part of the NRA, at least 20 years, given the long period that the development will be erected for.

- Is the methodology outlined for undertaking the risk assessment suitable, including on a cumulative level?

No concerns identified.

- Have all potential hazards (impacts) due to the presence of the Broadshore Hub WFDA been identified for shipping and navigation users?

The Chamber believes that should the applicant proceed with floating turbines then loss of station of a turbine should be considered during the construction and decommissioning phases, in particular when the structures are in transit or under tow.

In addition, should the development use floating turbines then wet storage areas need to be considered from a navigational risk perspective, including loss of station from a wet storage area as well as displacement of vessels from areas that may typically be used for anchoring activity.

- Are the mitigation measures described suitable and sufficient for managing and mitigating risk associated with the potential hazards?

The Chamber considers this a typical list as expected, however given the specific

characteristics of a floating development there are some nuanced differences and additional things to consider. For example, the Lighting and Marking Plan (LMP), need to consider the removal of one or more lit turbines on the boundary for maintenance or repair and how lighting and marking will be managed in such an occurrence.

- Do you have any other matters or information sources that you wish to present?

The Chamber recommends the project fully consider the additional risk factors associated with floating offshore wind projects out with those for fixed projects. The risk consultants NASH Maritime produced such a report for ORE Catapult, of which the freely available version is accessible via: <https://www.nashmaritime.com/news/floating-offshore-wind-navigational-planning-and-risk-assessment>

Should you wish to have any more detail on the above comments please let me know. Otherwise the Chamber recommends early consultation engagement from the developer for capturing commercial navigational interests.

Yours faithfully,

Robert

**Robert Merrylees**

Policy Manager (Safety & Nautical) & Analyst

**UK Chamber of Shipping**

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DD +44 (0) 20 7417 2843

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