



Marine
Management
Organisation

Marine Licensing T +44 (0)300 123 1032
Lancaster House www.gov.uk/mmo
Hampshire Court
Newcastle upon
Tyne NE4 7YH

[REDACTED]
Morven Offshore Wind Ltd
Chertsey Road
Sunbury on Thames
Middlesex
TW16 7BP
(by Email only)

MMO Reference: DCO/2025/00005
Planning Inspectorate Reference: EN0210005

21 July 2025

Dear Sir/ Madam,

Scoping request under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 for the proposed Morven Offshore Windfarm Transmission Assets Project by Morven Offshore Wind Limited

Thank you for your scoping opinion request of 13 February 2025 and for providing the Marine Management Organisation (MMO) with the opportunity to comment on the Morven Hawthorn Pit Grid Connection Project (MHPGC) Environmental Impact Assessment (EIA) scoping request.

The MMO provided an initial response to the Planning Inspectorate (PINS) within the statutory deadline advising a full response could not be provided as the Applicant had not contacted the MMO and set up the required cost recovery case. This Scoping Opinion is in addition to the one submitted to PINS on 13 March 2025 as per the Applicants instruction.

The MMO's role in Nationally Significant Infrastructure Projects

The MMO was established by the Marine and Coastal Access Act 2009 (the 2009 Act) to contribute to sustainable development in the marine area and to promote clean, healthy, safe, productive and biologically diverse oceans and seas. The responsibilities of the MMO include the licensing of construction works, deposits and removals in English inshore and offshore waters and for Welsh and Northern Ireland offshore waters by way of a marine licence¹. Inshore waters include any area which is submerged at mean high water spring (MHWS) tide. They also include the waters of every estuary, river or channel where the tide flows at MHWS tide. Waters in areas which are closed permanently or intermittently by a lock or other artificial means against the regular action of the tide are included, where seawater flows into or out from the area. In the case of Nationally Significant Infrastructure Projects (NSIPs), the 2008 Act enables Development Consent Order's (DCO) for projects which affect the marine environment to include provisions which deem marine licences².

As a prescribed consultee under the 2008 Act, the MMO advises developers during preapplication on those aspects of a project that may have an impact on the marine area or those who use it. In addition to considering the impacts of any construction, deposit or

¹ Under Part 4 of the 2009 Act

² Section 149A of the 2008 Act



removal within the marine area, this also includes assessing any risks to human health, other legitimate uses of the sea and any potential impacts on the marine environment from terrestrial works. Where a marine licence is deemed within a DCO, the MMO is the delivery body responsible for post-consent monitoring, variation, enforcement and revocation of provisions relating to the marine environment. As such, the MMO has a keen interest in ensuring that provisions drafted in a deemed marine licence (DML) enable the MMO to fulfil these obligations. Further information on licensable activities can be found on the MMO's website³. Further information on the interaction between the Planning Inspectorate and the MMO can be found in our joint advice note⁴.

Please find attached the scoping response from the MMO.

The MMO reserves the right to make further comments on the project throughout the preapplication process and may modify its present advice or opinion in view of any additional information that may come to our attention. This representation is also submitted without prejudice to any decision the MMO may make on any associated application for consent, permission, approval or any other type of authorisation submitted to the MMO either for the works in the marine area or for any other authorisation relevant to the proposed development.

If you require any further information, please do not hesitate to contact me using the details provided below.

Yours Sincerely,

[Redacted Signature]

[Redacted Name]

Marine Licencing Case Officer

D +44 (0) [Redacted]
E [Redacted]@marinemanagement.org.uk

³ <https://www.gov.uk/planning-development/marine-licences>

⁴ <https://www.gov.uk/government/publications/nationally-significant-infrastructure-projects-advice-note-eleven-working-with-public-bodies-in-the-infrastructure-planning-process>

Scoping Opinion

Marine Works (Environmental Impact Assessment) Regulations 2007 (“the Regulations”)

Title: Morven Hawthorn Pit Grid Connection

Applicant: Morven Offshore Wind Ltd

MMO Reference: DCO/2025/00005

Contents

| | | |
|------|--|----|
| 1 | Proposal | 5 |
| 1.1 | Project Background | 5 |
| 2 | Location | 6 |
| 3 | Scoping Opinion | 7 |
| 3.2 | General Comments | 7 |
| 3.3 | Marine Planning | 7 |
| 3.4 | Nature Conservation | 7 |
| 3.5 | Benthic Ecology..... | 7 |
| 3.6 | Coastal Processes | 8 |
| 3.7 | Fish Ecology and Fisheries | 8 |
| 3.8 | Shellfish..... | 10 |
| 3.9 | Underwater Noise..... | 11 |
| 3.10 | Seascape and Landscape | 12 |
| 3.11 | Archaeology and Cultural Heritage..... | 12 |
| 3.12 | Navigation and Other users of the sea | 12 |
| 3.13 | Water quality | 12 |
| 3.14 | Dredging and Disposal | 12 |
| 3.15 | Population and Human Health..... | 13 |
| 3.16 | Cumulative Impacts & In-Combination Impacts..... | 13 |
| 4 | Conclusion..... | 13 |
| 5 | References | 14 |

1 Proposal

Morven Hawthorn Pit Grid Connection

1.1 Project Background

Morven Offshore Wind Limited, (herein, the Applicant) has submitted a scoping report for the proposed construction of the Morven Hawthorn Pit Grid Connection (MHPGC) project which will connect Morven Offshore Wind Farm (OWF) in Scotland to the National Grid substation at Hawthorn Pit, County Durham. High voltage direct current (HVDC) cables will transmit power from the offshore substation platform(s) within the Morven OWF array area, making landfall between Ryhope, Tyne and Wear and Easington Colliery, County Durham. The cables will comprise of up to a maximum of six high HVDC power cables, dedicated metallic return (DMR), and fibre optic cables. The total maximum length of the cable corridor is 341 kilometres (km), 80km of which is in Scottish waters, and 261km is in English waters.

For connection to the onshore cables, the offshore export cables will likely be installed through the intertidal zone using trenchless methods (e.g. horizontal directional drilling (HDD) or direct pipe, where cables are pulled through pre-installed underground ducts). The offshore export cables will then be jointed to the onshore export cables at transition joint bays on the landward side.

Seabed preparation work may be required prior to the installation of cables. Preparation work may include seabed levelling, removing surface and subsurface debris such as boulders, fishing nets or lost anchors. Methods such as plough, jetting, scar plough, remotely operated vehicle (ROV) grab, boulder grab, and grapnel run are potential seabed preparation methods. The clearance of unexploded ordnance (UXO) may also be required, depending on the findings of the Applicant's forthcoming UXO survey. The methods used for clearance of UXO will depend on the survey findings but may include low order deflagration or high order disposal.

Offshore export cables will be buried or protected with cable protection where burial is not practicable. Cable protection materials that may be used for the project include concrete mattresses, rock placement, rock bags, cable protection systems and frond mats.

2 Location

The MHPGC is located off the Northeast coast of England, which is displayed in Figure 1 below. The Cables will make landfall at the National Grid substation at Hawthorn Pit, County Durham and extend to the Morven OWF located in Scottish waters.



Figure 1: Location Plan and Scoping Boundary

3 Scoping Opinion

3.1.1 Pursuant of regulations 10 and 11 of the Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations), Morven Offshore Windfarm Ltd have requested a Scoping Opinion from PINS and the MMO provide an initial response. A further request for information was sought from the Applicant to provide a more detailed response. In so doing a Scoping Report entitled '*EN0210005-000004-Morven Hawthorn Pit Grid Connection Project Scoping Report*' has been submitted to the MMO for review. The MMO agrees with the topics outlined in the Scoping Report and in addition, we outline that the following aspects be considered further during the EIA and must be included in any resulting Environmental Statement (ES).

3.2 General Comments

3.2.1 The scoping report is a high-level, well written and comprehensive document which has identified the relevant general impacts associated with the proposed project.

3.3 Marine Planning

3.3.1 The MMO notes and welcomes the Applicant's consideration of the Northeast Inshore and Offshore Marine Plan areas within each relevant chapter of the ES.

3.3.2 The MMO would expect a full review of all plans and policies within the Policy and Legislative Chapter of an environmental statement. This should be a full assessment of all policies within a table format with more detail than 'see chapter XX' so that a full review of the marine plans can be undertaken at once.

3.4 Nature Conservation

3.4.1 The MMO defers to Natural England as the Statutory Nature Conservation Body (SNCB) on the suitability of the scope of the assessment with regards to Marine Protected Areas (MPAs).

3.5 Benthic Ecology

3.5.1 The information provided in Table 7.18 regarding the potential impacts of the proposed development on benthic ecological interests appears comprehensive and the MMO does not consider that there are any missing potential impacts that may be regarded as relevant.

3.5.2 The MMO notes that there are a small number of impacts that have been scoped out for benthic ecology (listed and detailed in Table 7.19), the MMO agrees with the rationale behind these being scoped out for the proposed development.

3.5.3 The MMO considers that the scoping approach and assessment is sensible and justifiable, and the exercise has been robustly underpinned by a very comprehensive suite of desk-based and field-based surveys and data sources.

3.5.4 Section 7.4.10 indicates that cumulative impacts of the proposed development will be assessed using the approach described in Chapter 4. Similarly, inter-related impacts of the proposed development will also be considered, using the approach laid down in Chapter 4. The MMO considers that the Applicant has provided an adequate description of the potential cumulative and inter-related impacts and effects on the physical and biological environment with regards to benthic ecology.

3.6 Coastal Processes

- 3.6.1 The MMO notes that no proposed impacts have been scoped out for physical processes; and these impacts have been considered under the following headings:
- Increased suspended sediment concentrations (SSCs) and associated deposition
 - Impact to seabed morphology (as a result of changes to waves, tides and sediment transport).
 - Impacts to sediment transport pathways due to the presence of infrastructure.
- 3.6.2 The MMO considers this to be acceptable for the offshore physical processes but requests that the Applicant also considers the nearshore and the landfall interface when looking at the physical processes receptors. The MMO notes that the coastline at the proposed landfall is an eroding coastline and considers that there is little mention currently of how the sediment transport pathways may impact these erosive rates and therefore the coastline. Also, how the longer-term impacts from climate change (i.e.. any changes in sea level rise) may change any impacts at later stages (i.e.. decommissioning).
- 3.6.3 The MMO queries why the impact to sediment transport (and seabed morphology) is not considered during the decommissioning phase. Section 3.9 states that the cable protection may be left in-situ however this is to be assessed at the time. If aspects are to be removed, *'the decommissioning sequence will generally be the reverse of the construction sequence and involve similar types and numbers of vessels and equipment'*. Therefore, the MMO would expect to see the impact of this potential removal to be discussed as part of the impact assessment. Should the cable protection be assessed as permanent and would remain in situ then this needs to be assessed.
- 3.6.4 The MMO considers that the desk-based data sources used are appropriate and the proposal of using numerical models is standard practice for assessing physical processes. This will be used alongside data from site specific surveys to validate the models.
- 3.6.5 The MMO notes that Section 4.7 of the document outlines the Cumulative Impact Assessment methodology, which follows the standard procedures the MMO has seen for other projects of this magnitude. This includes creating a Zone of Influence, and identifying all plans, projects or activities within that region which can then be screened in or out. These will then be included at a later stage of the process.

3.7 Fish Ecology and Fisheries

- 3.7.1 The MMO agrees that the potential impacts during the construction, operation and decommissioning phases have been scoped in/out appropriately, as summarised in the table 7.27 of the Scoping Report. However, please see point 3.7.4 regarding the scoping in of thermal emissions from operational cable.
- 3.7.2 The MMO is content that the accidental release of pollutants will be scoped out of the assessment on the basis that the risk of pollution events will be managed by the implementation of an Environmental Management Plan (EMP) and Marine Pollution Contingency Plan (MPCP).
- 3.7.3 The MMO agrees that the presence of vessels during construction is unlikely to represent a significant change from baseline noise levels of shipping and therefore has no objection to underwater sound from vessels used for the project being scoped out of the assessment.

- 3.7.4 The Applicant proposes to scope out thermal emissions from operational cables from their assessment and has used the findings from a study by Meißner *et al.* (2007) to support their decision. The study, conducted at Nysted OWF in Denmark, found the temperature change in the top 30 centimetres (cm) of sediment above a high voltage cable (132 kilovolt (kV)) to be a maximum of 2 degrees Celsius (°C). The MMO notes that as the target burial depth for cables at MHPGC will be between 0.5 metres (m) to 2.5m, the Applicant considers that the temperature change at the seabed surface where demersal fish will be in contact with the heated sediments is likely to be minimal and therefore not lead to impacts on fish and shellfish receptors. The MMO is generally content that thermal emissions from operational cables is scoped out of further assessment for fish, except for sandeel which have a burrowing nature and spend their winter hibernation period buried in the sand.

Sandeel burrow to depths of between 20cm to of 50cm for certain species in specific sediment types (Holland *et al.*, 2005 and Rowley, 2008), so the MMO considers that there is potential for sandeels to be exposed to the effects of thermal heating in the sediment layers they inhabit, based on the Applicant's proposed 0.5m minimum cable burial depth. The MMO appreciates that the burial depth of 0.5m is the minimum, but at this stage the exact extent of the cable burial route buried to a depth of 0.5m is not known. Therefore, the EIA is required to assess the 'worst-case' scenario that assumes the greatest potentially significant impact in terms of magnitude and significance, which is 0.5m burial. As already stated, sandeel can burrow to this depth, and deeper, therefore the MMO considers that an impact is possible and thus an impact pathway is present. Only once a discussion on this has taken place, can the likelihood of significant effects on sandeel can be predicted. The MMO therefore requests that thermal emissions from cables is scoped into the EIA for the operational stage.

- 3.7.5 The MMO notes that the Applicant intends to carry out a desk-based assessment using existing data and literature sources. Fish and *elasmobranch* species with spawning and nursery grounds overlapping the project's scoping boundary have been identified and mapped (Figures 7-14 to 7-18) using Coull *et al.*, 1998, Ellis *et al.*, 2012 and Aires *et al.*, 2014. These sources are appropriate.
- 3.7.6 The MMO notes that migratory fishes that are assumed likely to be present within the project's regional fish and shellfish ecology study area during their migrations have been identified along with the timing of their up/downstream migration periods. The source of this information appears to come primarily from the Seagreen 1 and Seagreen 1A OWF EIA and Eastern Green Link 2 environmental appraisal report (EAR). The MMO requests that the Applicant should expand on how information and/or data on migratory fishes was acquired for these EIAs and EAR. For example, if the information came from fisheries survey data or peer-reviewed literature.
- 3.7.7 The MMO notes that particle size analysis (PSA) data collected during the project's benthic survey will be used to classify sediments to determine sandeel habitat and herring spawning habitat suitability within the project's scoping boundary, following the methods by Reach *et al.* (2013) and Latto *et al.* (2013), for herring and sandeel respectively. The Applicant should note that the MarineSpace (2013a and 2013b) methods for determining sandeel habitat suitability and potential herring spawning habitat, respectively, have recently been revised. The MMO requests that the Applicant adheres to the methods described by Reach *et al.* (2024) and Kyle-Henney *et al.* (2024) to determine habitat suitability for sandeel and herring, respectively.

- 3.7.8 International Herring Larvae Survey (IHLS) data will be used to identify areas of herring spawning habitat. Table 7.22 of the report implies that IHLS data from 2022 will be used. The MMO requests that the Applicant uses a minimum of ten years of IHLS data to inform their assessment. Data up to and including 2024 are available from International Council for the Exploration of the Sea (ICES).
- 3.7.9 The MMO considers that the approach to the cumulative effects assessment (CEA) appears reasonable. Cumulative impacts to fish will be assessed within a 50km buffer of the MHPGC Project, except for the effects of underwater noise (UWN) which will cover a 100km zone of influence due to the wider range of effect from UWN. Inter-related effects will be considered across the project's lifetime and for individual stages of the development for receptors. The MMO is of the opinion that the Applicant's approach to assessment appears appropriate, though further information on the screening in/out of projects within the study area is required in order to fully identify where potential risks of these effects lie.
- 3.7.10 It is unclear whether UXO clearance activities will be included under the deemed marine licence (DML), or if the Applicant intends to submit a separate Marine Licence Application (MLA) for these activities. The MMO has reviewed the approach to the UWN assessment for fish and is generally content with the Applicant's proposal to use the hearing thresholds by Popper *et al.* (2014) in the UWN modelling to determine the range of impact to fish from mortality and potential mortal injury, recoverable injury, temporary threshold shift (TTS), masking and behaviour. The MMO's position is that UXO investigation can be part of the DML but a separate MLA should be sought for clearance activities.
- 3.7.11 The MMO notes that discussions in sections 7.5.5.8 and 7.5.5.9 on the catch compositions from fisheries surveys at the Teesside OWF array area and Blyth OWF area do not provide any information of the gear type/s used in these surveys. For the ES, when discussing catch composition, abundance etc, the MMO requests that the Applicant provides information on the gear types used for each survey, the timing of surveys, and the limitations associated with the survey methods.

3.8 Shellfish

- 3.8.1 The MMO notes that potential impacts to be scoped in for shellfish ecology are described in Table 7.27. This includes, temporary habitat loss and disturbance of habitats, underwater sound, increased suspended sediment concentrations (SSC) and associated sediment deposition, long-term habitat loss, colonisation of hard structures, electromagnetic fields (EMF) and release of sediment bound contaminants. The MMO agrees with the impacts scoped in for shellfish receptors.
- 3.8.2 The MMO notes that potential impacts to be scoped in for shellfisheries are described in Table 7.50. This includes temporary loss or restricted access to fishing grounds, displacement of fishing activity into other areas, interference with fishing activity, increased steaming distances and times, snagging risk, loss or damage to fishing gear and long-term loss or restricted access to fishing grounds. The MMO agrees with the potential impacts scoped in for shellfisheries.
- 3.8.3 The MMO considers that the approach to the scoping assessment and data gathering is appropriate. However, the MMO considers that the Applicant should include further evidence to characterise the baseline environment for shellfish.
- 3.8.4 The MMO highlights that modest data exists relating to the existence of specific spawning grounds or spawning migrations for the majority of commercially exploited

shellfish species in UK waters. However, locations of fished stocks may serve as a useful proxy for spawning grounds for the majority of species, particularly the more sedentary ones. Therefore, indicative spawning and nursing maps can be highlighted within fished ICES rectangles. In addition to the data sources identified by the Applicant, the MMO requests the use of additional data sources for characterising the nursery and spawning areas of edible crab (*Cancer pagurus*), lobster (*Homarus gammarus*) and Norway Lobster (*Nephrops norvegicus*) (CEFAS, 2023; ICES 2023, Eaton *et al.*, 2003).

- 3.8.5 In addition to the data sources identified by the Applicant, the Applicant may want to make use of the Fisheries Dependent Information (FDI) data which provides landings, effort, catches from Member States and UK (2014-2020) (STECF, 2024) to support the characterisation of the baseline environment for shellfisheries.
- 3.8.6 The MMO notes that careful consideration should be taken when interpreting results from trawl surveys as these are not designed to target shellfish species and therefore do not provide an accurate abundance estimate for shellfish. The MMO considers that presence/absence data or catch rates should only be implied for shellfish when using these gear types.
- 3.8.7 The MMO considers that there is an adequate description of the methodology to assess cumulative impact assessments and Inter-related effects for shellfish species.

3.9 Underwater Noise

- 3.9.1 The MMO notes that three impacts pathways relevant to UWN have been scoped into the EIA, these comprise:
- Increased underwater sound from UXO clearance.
 - Increased underwater sound from non-impulsive sound sources.
 - Increased underwater sound from geophysical surveys.
- 3.9.2 These impact pathways are appropriate and the MMO agrees with the scoping decision for each of these. The MMO considers that the pathways could be refined to indicate the receptors of focus, but this does not require clarification.
- 3.9.3 The MMO notes that one impact pathway has been scoped out of the EIA: Effects of the particle motion element of underwater sound on marine mammals during all phases. The justification for this scoping decision is that: *“The ability of marine mammals to detect particle motion is poorly understood (Mooney et al. 2016) and consequently there is no evidence that particle motion has any effect on marine mammals.”* The MMO considers that this is fairly typical of EIAs for underwater noise, and the MMO does not find the justification unacceptable.
- 3.9.4 For impulsive sounds (e.g. UXO) UWN modelling will be undertaken, the results of which will be presented in an underwater sound technical report, and any possible impacts will be incorporated into the relevant receptor-specific chapter. The report states that *“a range of UXO sizes and clearance methodologies will be explored... (e.g. largest and most likely size/type)”* and that *“the modelled sound contours will be applied to the marine mammal density values...and used to quantify the number of animals that may experience injury...or disturbance impacts”* (pp 265). The MMO deems that this is appropriate.
- 3.9.5 The MMO notes that it is often the case that developers will seek consent for any UXO clearance in a separate Marine Licence and this is the MMO’s position. The MMO

requests that this is clarified in the eventual EIA.

- 3.9.6 For non-impulsive sounds – likely to include sources such as vessel activity, cable laying, cable protection installation and other such activities – the MMO notes that different assessments will be undertaken for marine mammals and fish, the detail of which is contained in those receptor-specific chapters of the Scoping Report.
- 3.9.7 For non-impulsive sounds effects on marine mammals, desk top study will be used to define the zone of influence for the assessment, comments on which the MMO defers to Natural England/JNCC. The Applicant proposes to model sound emissions from a suite of different vessel types to enable a quantitative assessment. The MMO has no concerns with this proposal.
- 3.9.8 For non-impulsive sounds effects on other receptors, page 97 refers to Chapter 7.8: Commercial Fisheries to illustrate the proposed assessment, however, exposure to underwater noise is not highlighted within this chapter. Rather, Chapter 7.5: Fish and Shellfish Ecology lists “*Underwater sound impacting fish and shellfish receptors*” as an impact pathway being scoped in. This chapter indicates that modelling will be undertaken to investigate this pathway. The description of the assessment does not differentiate between impulsive and non-impulsive sounds in the way that the report does for marine mammals, however the description indicates that both injury and disturbance/disruption will be considered, implying consideration of both types of noise. Particle motion will also be considered. The MMO has no concerns with this proposal and notes that noise should be assessed from a fisheries perspective too.
- 3.9.9 The proposed methodology for the cumulative impacts assessment is outlined in Chapter 4.7. The MMO notes that methodology appears appropriate and the relevant projects to be considered seem sensible.

3.10 Seascape and Landscape

- 3.10.1 The MMO defers to Historic England, Natural England (as the SNCB) and relevant local planning authorities on the suitability of the scope of the assessment with regards to Seascape and Landscape.

3.11 Archaeology and Cultural Heritage

- 3.11.1 The MMO defers to Historic England on the suitability of the scope of the assessment with regards to Archaeology and Cultural Heritage impacts.

3.12 Navigation and Other users of the sea

- 3.12.1 The MMO defers to the Maritime Coastguard Agency (MCA) and Trinity House on the suitability of the scope of the assessment with regards to navigation of vessels.

3.13 Water quality

- 3.13.1 The MMO defers to The Environment Agency on the suitability of the scope of the assessment with regards to water quality.

3.14 Dredging and Disposal

- 3.14.1 If dredge and disposal is required, a disposal method should be provided including the maximum volume and area of material to be disposed of. This must be provided in order to make an assessment of the proposed activity and to allow the proposed volumes to be included on any Development Consent Order. This is usually part of a Site Characterisation Report (SCR).
- 3.14.2 As part of the review of this document the MMO has to designate the disposal area

with our scientific advisors. The disposal area for offshore wind farm cable routes is usually the whole cable corridor (for this case it would be the area within English waters). However, there are several things to consider when designating a disposal site:

- Disposal sites cannot overlap - if there are disposal site(s) open within the cable route then the disposal site would have to be split around the open site(s) and if the Applicant plans to dispose within the open site(s) then the SCR must fully assess the amount that would be disposed of within the open site(s).
- Specific disposal parameters - if there are any requirements for specific disposals, for example in relation to disposal within MPAs it is better if these sites are designated as one area so any conditions can be linked to a specific area.

3.14.3 In addition to above if any cable protection will be used, plastics should be used as the final option and a full assessment of use must be included within the ES.

3.15 Population and Human Health

3.15.1 The MMO defers to the Local Authority and UK Health Security Agency (UKHSA) on the suitability of the scope of the assessment with regards to population and human health impacts.

3.16 Cumulative Impacts & In-Combination Impacts

3.16.1 The MMO is content with the proposal for cumulative impacts and in-combination impacts.

4 Conclusion

4.1. The topics highlighted in this scoping opinion should be assessed during the EIA process and the outcome of these assessments should be documented in the EIA report in support of the Application to PINS. This statement, however, should not necessarily be seen as a definitive list of all EIA (and HRA) requirements. Given the scale and program of these planned works, other assessments may be required.

Yours Sincerely,

[Redacted Signature]

[Redacted Name]

Marine Licencing Case Officer

D +44 (0) [Redacted]
E [Redacted]@marinemanagement.org.uk

5 References

- CEFAS, 2023. Edible crab (*Cancer pagurus*). Cefas stock status report, Crown Copyright.
- CEFAS, 2023. Lobster (*Homarus gammarus*). Cefas stock status report, Crown Copyright.
- Coull, K.A., Johnstone, R., and Rogers, S.I. (1998). Fisheries Sensitivity Maps in British Waters. Published and distributed by UKOOA Ltd., v + 58 pp.
- D.R. Eaton, J. Brown, J.T. Addison, S.P. Milligan, L.J. Fernan, 2003. Edible crab (*Cancer pagurus*) larvae surveys off the east coast of England: implications for stock structure. *Fisheries Research* 65, 191–199.
- Ellis, J., R., Milligan, S., P., Readdy, L., Taylor, N. and Brown, M., J. (2012). Spawning and nursery grounds of selected fish species in UK waters. Science Series Technical Report, 147. Cefas, Lowestoft.
- Holland, G. J., Greenstreet, S. P., Gibb, I. M., Fraser, H. M., & Robertson, M. R. (2005). Identifying sandeel *Ammodytes marinus* sediment habitat preferences in the marine environment. *Marine Ecology Progress Series*, 303, 269-282.
- ICES, 2023. Working Group on Nephrops Surveys (WGNEPS; outputs from 2022 meeting). ICES Scientific Reports. Report. <https://doi.org/10.17895/ices.pub.22211161.v1>
- Kyle-Henney, M., Reach, I., Barr, N., Warner, I., Lowe, S. and Lloyd Jones, D. (2024) Identifying and Mapping Atlantic Herring Potential Spawning Habitat: An Updated Method Statement. A report for the marine aggregates industry.
- Latto P. L., Reach I.S., Alexander D., Armstrong S., Backstrom J., Beagley E., Murphy K., Piper R. and Seiderer L.J., (2013). Screening Spatial Interactions between Marine Aggregate Application Areas and Sandeel Habitat. A Method Statement produced for BMAPA.
- MarineSpace Ltd, ABPmer Ltd, ERM Ltd, Fugro EMU Ltd and Marine Ecological Surveys Ltd, (2013a). Environmental Effect Pathways between Marine Aggregate Application Areas and Sandeel Habitat: Regional Cumulative Impact Assessments and Case Study Environmental Impact Assessments. A report for BMAPA.
- MarineSpace Ltd, ABPmer Ltd, ERM Ltd, Fugro EMU Ltd and Marine Ecological Surveys Ltd, (2013b). Environmental Effect Pathways between Marine Aggregate Application Areas and Atlantic Herring Potential Spawning Habitat: Regional Cumulative Impact Assessments. Version 1.0. A report for the British Marine Aggregates Producers Association.
- Meißner, K., Bockhold, J. and Sordyl, H. (2007). Problem Kabelwärme? – Vorstellung der Ergebnisse von Feldmessungen der Meeresbodentemperatur im Bereich der elektrischen Kabel im dänischen Offshore-Windpark Nysted Havmøllepark (Dänemark). MeeresumweltSymposium 2006. Hrsg. Bundesamt für Seeschifffahrt und Hydrographie. Hamburg, Germany pp.153-161.
- Reach I., S, Latto P, Alexander D, Armstrong S, Backstrom J, Beagley E, Murphy K, Piper R, and Seiderer L., J. (2013). Screening Spatial Interactions between Marine Aggregate

Application Areas and Atlantic Herring Potential Spawning Areas. A Method Statement produced for BMAPA. 40pp

Reach, I., Kyle-Henney, M., Barr, N., Warner, I., Lowe, S. and Lloyd Jones, D. (2024) Identifying and Mapping Sandeel Potential Supporting Habitat: An Updated Method Statement. A report for the marine aggregates industry.

STECF, 2024, Fisheries Dependent Information (FDI), access:

Rowley, S.J. (2008). *Ammodytes tobianus* Lesser sand eel. In Tyler-Walters H. and Hiscock K. *Marine Life Information Network: Biology and Sensitivity Key Information Reviews*, [online]. Plymouth: Marine Biological Association of the United Kingdom. [cited 24-11-2023]. Available from: