



SCREENING FOR APPROPRIATE ASSESSMENT REPORT FOR
MARITIME USAGE LICENCE APPLICATION – LIC230006,
UCC DEPLOYMENT, OPERATION AND RECOVERY OF
HYDROPHONES OFF THE COAST OF COUNTIES WICKLOW AND
CORK

Application No. LIC230006

30th November 2023

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Statement of Authority

This Screening for Appropriate Assessment Report has been undertaken by experts within MARA with the appropriate expertise in environmental assessment.

1 Introduction

1.1 Project Overview

UCC are seeking a Maritime Usage Licence to deploy, operate and recover 4 Hydrophones off the coast of county Wicklow and 1 hydrophone off the coast of Cork. These deployments are proposed in order to describe seasonal and diurnal occurrence of whales, dolphins and porpoises (cetaceans) in the Irish Sea and the Celtic Sea. The work is being carried out as part of a larger multidisciplinary research project called CETUS and is funded by Sustainable Energy Authority of Ireland (SEAI).

1.2 Application documents submitted

A Maritime Usage Licence application was received from UCC on the 10th of October 2023 and was deemed complete on the 31st of October 2023. The following documents were submitted as part of this application:

- i. Application for a Maritime Usage Licence under the Maritime Area Planning Act 2021, dated 10th October 2023
- ii. Maritime Usage Licence Maps 1 and 2, dated 9th October 2023
- iii. Supporting Information for Screening for Appropriate Assessment (SISAA) Report, dated October 2023
- v. Risk Assessment for Annex IV Species Report, undated.
- vi. Assessment of Impacts of Maritime Usage (AIMU) Report, dated October 2023

1.3 Legislative background and AA process

The Marine Area Planning Act 2021 and amendments (MAP Act) requires that a Maritime Usage Licence be obtained from the Maritime Area Regulatory Authority (MARA) for a number of activities, including but not exclusively:

- Navigational and Maintenance Dredging
- Marine Environmental surveys for the purposes of scientific discovery and site investigations
- Installation of navigational markers/ moorings/ aids to navigation not undertaken by the Commissioners of Irish Lights
- Installation of non-permanent platforms or pontoons
- Depositing of any substance or object on or in the sea or seabed
- Removal of any substance or object from the sea or seabed
- Use of explosives
- Maintenance of any cable, pipeline, oil, gas or carbon storage facility / structure not provided for under any other statutory approval, and
- The harvesting of seaweed

Article 6(3) and 6(4) of Directive 92/43/EEC as amended (the Habitats Directive) place strict legal obligations on Member States regulating the conditions under which development that has the potential to impact on European Sites can be implemented and requiring that an Appropriate Assessment be carried out of plans or projects, not directly connected with or necessary to the management of a site as a European Site, but which are likely to have a significant effect thereon, either individually or in combination with other plans or projects . An AA Screening assessment is carried out to determine whether a plan or project is likely to have a significant effect on a European Site.

Article 6.3 states that: *“Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.”*

Article 6.4 states: *“if, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.*

Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.”

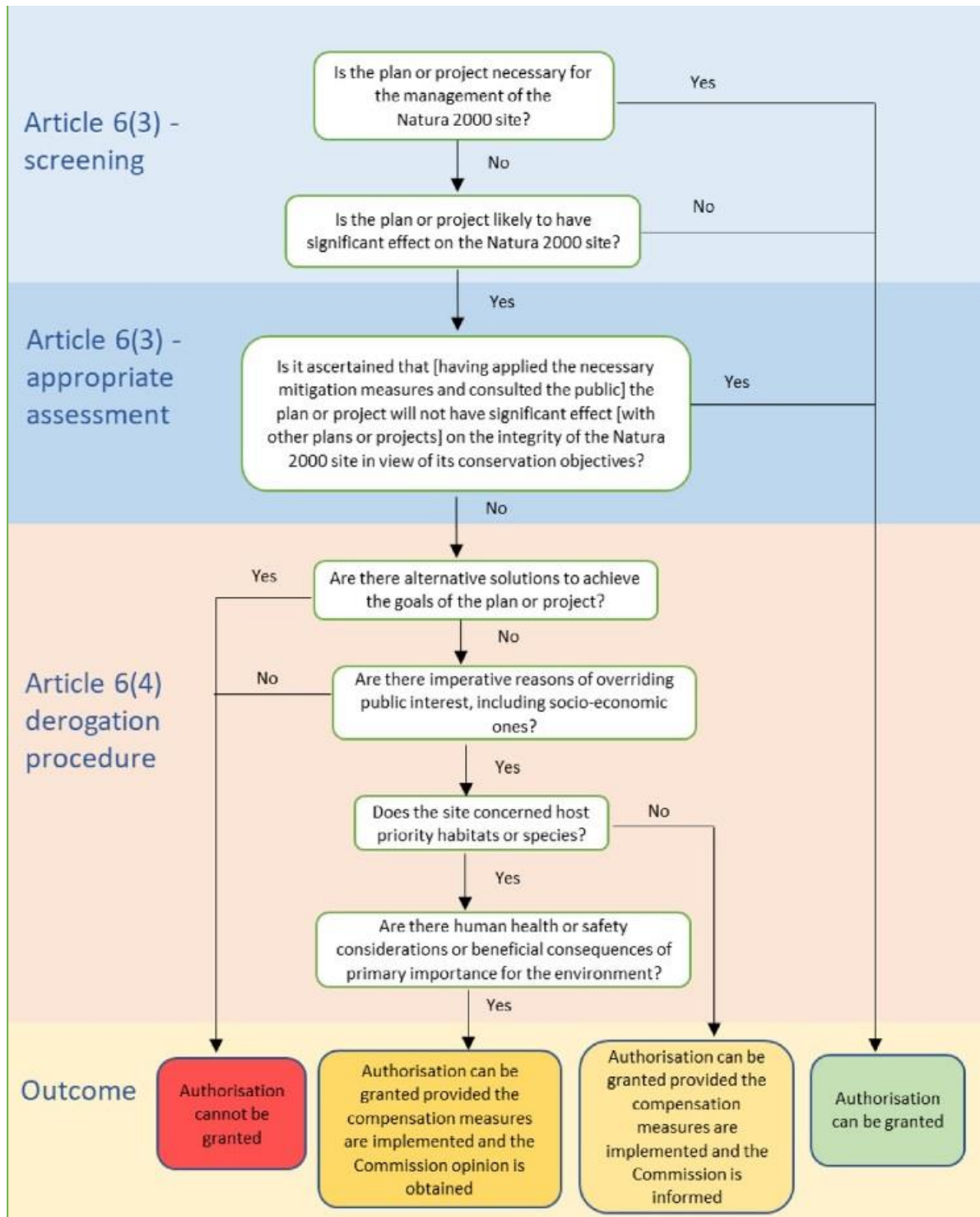


Figure 1 Article 6 Appropriate Assessment Process (from EU 2021/C437/01)

1.4 MARA Assessment Process

The Assessment, Research and Data (ARD) Unit within MARA is responsible for carrying out environmental screening and any environmental assessments determined as being required following screening, in accordance with the requirements set out in Habitats Directive.

The European Communities (Birds and Natural Habitats) Regulations 2011 as amended, give effect to the Habitats Directive as a matter of Irish law and require, inter alia, that a public authority carry out screening for Appropriate Assessment of a plan or project for which an application for consent is received. Where a public authority, following screening, determines that an Appropriate Assessment is required, these Regulations require that the assessment carried out by a public authority include a determination pursuant to Article 6(3) of the Habitats Directive as to whether or not the plan or project would adversely affect the integrity of a European site.

The ARD team of MARA is responsible for carrying out Stage 1 AA Screening Assessments and any Stage 2 Appropriate Assessment determined as being required following screening, in accordance with these Regulations and in respect of applications such as this one for a Maritime Usage Licence.

On receipt of an application to MARA for a Maritime Usage Licence the application, and any associated documentation is referred to the ARD Unit for the purposes of carrying out its environmental assessments.

On the completion of all environmental assessments by the ARD unit and after incorporating any suggested conditions which may be recommended by the ARD Unit, the application will then be evaluated by the Licencing Unit in MARA to give consent for the activities applied for.

This report has been prepared with reference to the following guidelines and legislation:

- Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild flora and fauna. Official Journal of the European Communities.
- Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (codified version).
- European Communities (Birds and Natural Habitats) Regulations 2011. SI No. 477 of 2011.
- EU Commission Notice Official Journal of the European Union 2021 C437/1
- Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. European Commission 2019. Office for Official Publications of the European Communities, Luxembourg.
- Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities. DEHLG, 2009. Revision 2010.
- Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters. Department of Arts, Heritage and the Gaeltacht, 2014
- Appropriate Assessment Screening for Development Management OPR Practice Note PN01 March 2021
- Relevant case law

2 Project Description

This Maritime Usage Licence application is for the deployment of four moorings in the Irish Sea, and one in the Celtic Sea, consisting of four hydrophones with an acoustic release system. Each mooring consists of a mooring weight, an acoustic release system, one or two hydrophones to record cetaceans, and two subsurface trawl floats. The setup is anchored on the seabed with a Bruce type anchor. The moorings will be recovered every 3-4 months for maintenance and redeployment, with the aim of recording sounds from whales across all seasons for at least one year and up to three years.

The proposed project aims to describe seasonal and diurnal occurrence of whales, dolphins and porpoises (cetaceans) in the Irish and Celtic Sea, in areas in proximity to existing or planned offshore wind farms. The proposed work is being carried out as part of a large multidisciplinary research project called CETUS. The CETUS project: Cetacean, Elasmobranch, Turtle, and Seabird distribution modelling platform supporting the sustainable development of offshore renewable energy and is funded by SEAI. This maritime usage forms the basis of the cetacean element of the work and is part of a PhD by Jasmine Stavenow at University College Cork (UCC).

2.1 Location

The proposed deployment areas in the Irish Sea off Wicklow (a- d) are shown in Figure 1 and the proposed deployment area in the Celtic Sea off Cork is shown in Figure 2. The total area of this maritime usage licence is 35 hectares (7 hectares per mooring). The closest point to the shoreline is 10km.

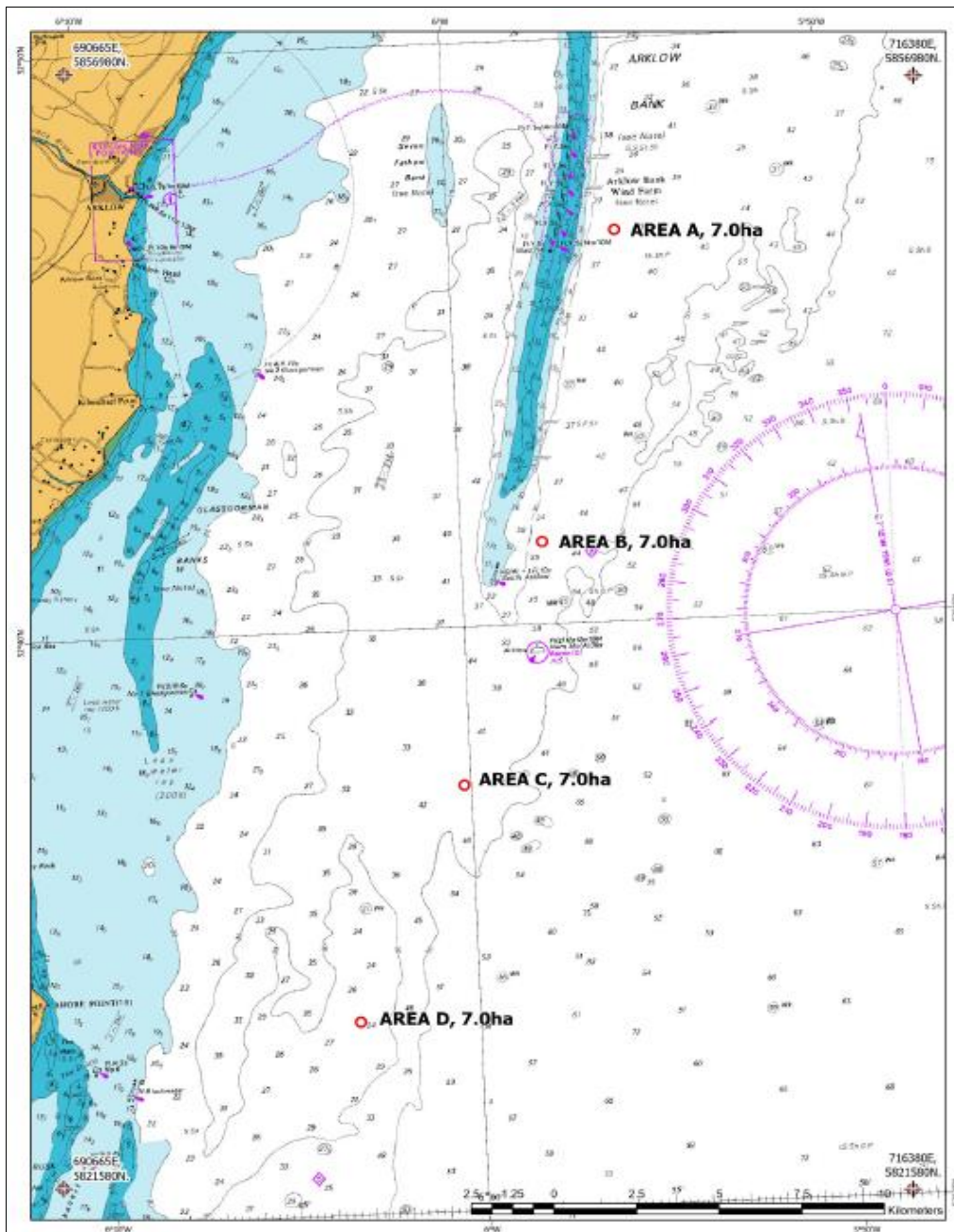


Figure 2: Location Map (Irish Sea)

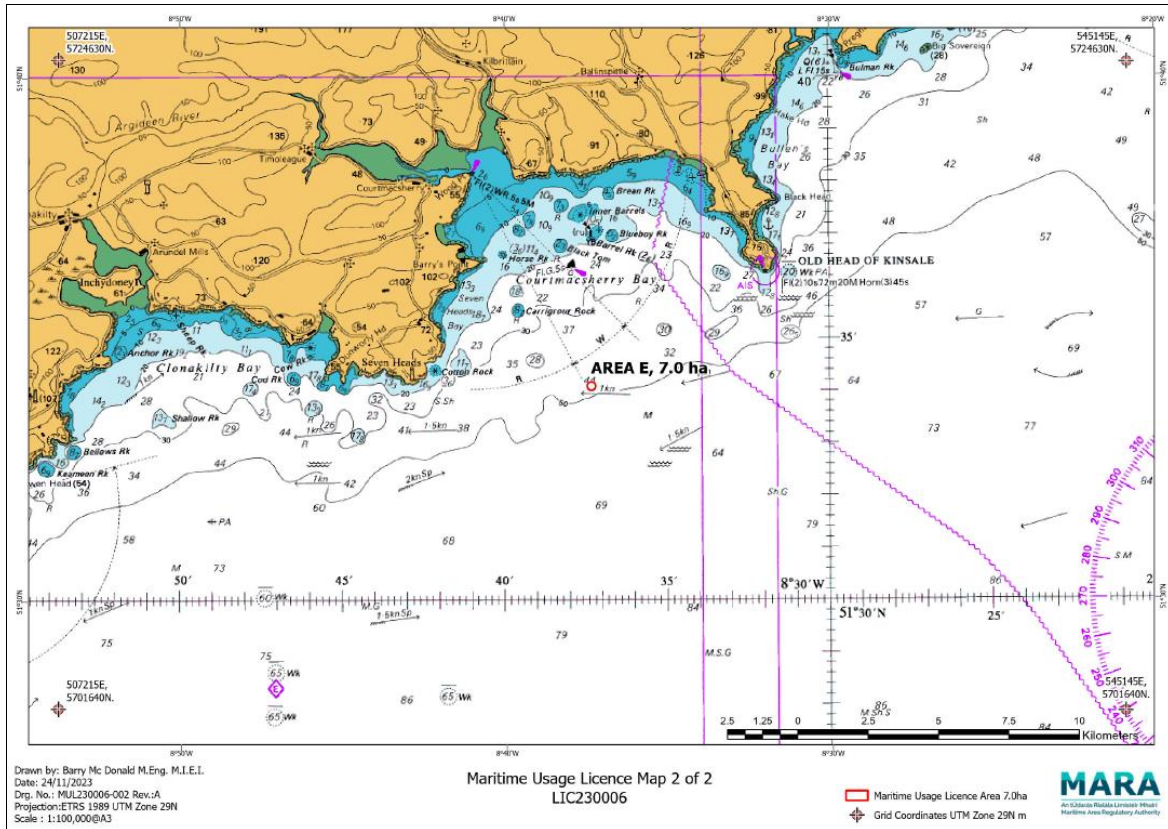


Figure 3: Location Map (Celtic Sea)

2.2 Description of the receiving environment

The proposed temporary moorings hydrophones will be deployed in 2 areas, one in the Irish Sea and the second in the Celtic Sea.

The Irish Sea site will consist of four hydrophone moorings deployed 2 km east of the Arklow Bank as shown in figure 2 above. The benthic substrate in the wider area mainly consists of deep circalittoral sand with depths between 30 and 60 metres (figure 4). The largest coastal towns closest to the area are Arklow and Gorey.

The Celtic Sea site will consist of one mooring deployed circa 10 km SW of the Old Head of Kinsale on the Cork coastline in the open sea (Figure 3). The benthic substrate in the wider area consists of soft rock, sand and gravel substrates with depths in the area of between 60 and 80 m (figure 5). The closest coastal town to the area is Kinsale.

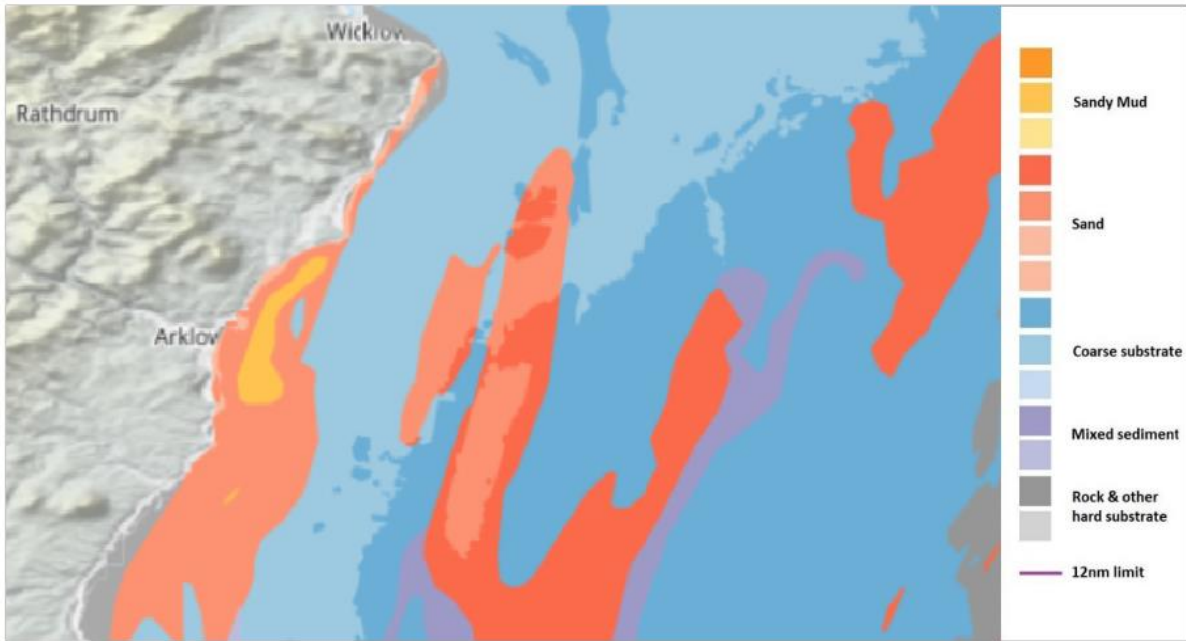


Figure 4 Substrate within the vicinity of the Irish Sea Maritime Usage Licence Application Area. <https://www.emodnet-seabedhabitats.eu/>

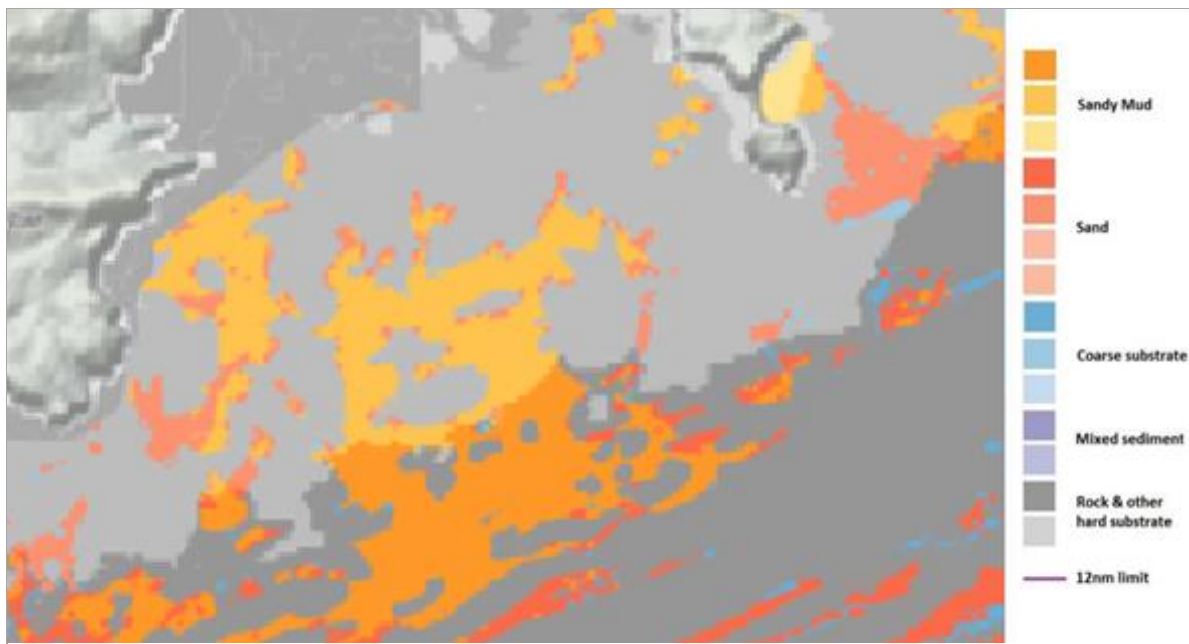


Figure 5 Substrate within the vicinity of the Celtic Sea Maritime Usage Licence Application Area. <https://www.emodnet-seabedhabitats.eu/>

2.3 Description of the proposed deployment

The proposed moorings will be subsurface system hydrophone deployments with no subsurface buoy. To support the hydrophone, the mooring will consist of an acoustic release system, a mooring chain and a Bruce type anchor. The acoustic release system has an inbuilt acoustic receiver, which enables the device to detect already tagged animals (sharks, skates and rays), and will contribute to the elasmobranch part of the CETUS project. On a specific

surface acoustic signal, the rising line contained within the rope canister in the acoustic release technology, is released and the equipment rises to the surface to be collected. In addition to the three floats supporting the rope canister on the acoustic release system, there will be two subsurface trawl floats to keep the mooring in an upright position. The height of the mooring setup, from the seabed to the top of the upper trawl float, will be up to 5m maximum.

The initial deployment for the Irish Sea moorings is anticipated to take place in December 2023. The initial deployment for the Celtic Sea mooring is planned for between January and March 2024. Precise dates for deployment are subject to relevant licenses and consents, weather and vessel availability. The initial deployments will be undertaken within 1 working day.

The moorings will be recovered every 3-4 months for maintenance and redeployment. Exact dates and timing for maintenance and redeployments are subject to relevant licenses and consents, weather and vessel availability. The procedure will incorporate either switching the battery and memory cards of the hydrophones used, or the hydrophones themselves. Each redeployment will be undertaken within 1 working day. The aim is to record sounds from all seasons for at least one year and up to three years, including redeployments.

The vessel for operational activities will depart from either Cork Harbour, Kinsale or Courtmacsherry, Co. Cork. The vessel and company contracted is subject to budget, weather and vessel availability.

3 Screening for Appropriate

3.1 Management of Natura 2000 site/s

Plans or projects that are directly connected with or necessary to the management of a Natura 2000 site do not require AA. The proposed project is not directly connected with or necessary for the management of a Natura 2000 site. Therefore this project is subject to screening for Appropriate Assessment to determine if it alone, or in-combination with other plans or projects, is likely to cause significant effects to a European site.

3.2 Identification of possible effects from Proposed Works

The operational impact of the proposed moorings is the immediate footprint of each unit (5 No.) which is 1 m².

The potential environmental impacts on Annex I Habitats are:

- Physical disturbance or habitat loss in the immediate footprint of the hydrophone
- Physical disturbance to the benthic habitat during the deployment and retrieval process
- Accidental pollution event

3.3 Identification of Likely Significant effects on Natura sites

A European site is only at risk of likely significant effects where the Source-Pathway-Receptor link exists between the proposed development and the European site (OPR 2021). Potential connectivity was considered if there was overlap with the Maritime Usage Licence Application Area and an SAC (direct effects) or if the SAC was within range of the effects of the proposed activity (indirect effect).

3.3.1. Annex I habitats

The seabed at the mooring sites consists of sand, soft rock and gravel substrates. Physical disturbance from equipment used to deploy the moorings may lead to an increase in suspended sediment concentrations (SSC). Such increases can lead to the clogging of feeding apparatus of filter feeders, smothering of sessile species, increase in scouring and rendering hard surfaces unsuitable for epibenthic settlement.

However any potential impact will be restricted to the very small area in the immediate vicinity of the mooring and recovery is expected to be rapid following retrieval of the moorings.

3.3.2 Annex II species

The potential environmental impacts on Annex II species as a result of the deployment, operation and recovery of these hydrophone moorings are:

- Temporary disturbance to species in the immediate vicinity of the deployment and recovery vessel
- Vessel strikes

In Ireland Annex II marine mammal species include the European otter, grey seal, harbour seal, harbour porpoise and bottlenose dolphin. As a result of the deployment and recovery of the units marine mammals may be impacted by visual disturbance and injury due to collision with survey vessels. However the presence of an additional vessel in the area is not deemed a significant increase in vessel activity given the typical levels of activity in this area.

The auditory ability and functional frequencies of marine mammals range from 7 Hz for certain Baleen whale species to 160 kHz for Harbour porpoise (Southall et al, 2019).

These hydrophones are passive and emit no sound. Therefore there is no potential impact of underwater noise from these hydrophones on marine mammals during the deployment and operation phase.

3.3.3 Birds

Temporary disturbance to birds may occur to individual birds in the immediate vicinity of the vessel during deployment and retrieval. This may result in birds being temporarily displaced from their chosen feeding/resting location; however, they are likely to move to another nearby location. The presence of an additional vessel in both areas is not deemed a significant increase in vessel activity given the typical levels of activity in these areas. This combined with the short duration of the deployment and retrieval process means that these activities are unlikely to have a significant effect on bird species, directly or indirectly, for all SPAs considered.

3.3.4 Accidental spillage

As vessels are required by law to adhere to regulations governing accidental leakages and spillages similarly the likelihood of such an occurrence is considered very low.

3.3.5 Invasive Alien Species

Ships hulls may act as a vector for the introduction of invasive alien species. This may adversely affect the structure and functioning of benthic communities and their constituent species.

3.4 Identification of the relevant European site/s

Special Area of Conservations (SAC) were screened on the potential for connectivity between the proposed project and their qualifying interests. Potential connectivity was considered if there was overlap with the maritime usage licence area and an SAC (direct effects) or if the SAC was within range of the effects of the proposed activity (indirect effects). Given the open nature of the marine environment SACs beyond this range are considered if there is a Source-Pathway-Receptor (OPR 2021) between the proposed activity and the qualifying interests of SACs.

3.4.1 Annex I habitats

Effects on Annex I habitats may be direct where the proposed project overlaps with habitats or SACs and indirect where the effects of the proposed project has effects on habitats which are at a distance from it. Therefore in the screening process those SACs which overlap with the proposed project and all SACs within 15km are assessed.

As these works are being undertaken in the marine environment, using the Source-Pathway-Receptor model, only the marine and coastal Annex I habitats were considered in this screening process.

The following five SACs were considered to be within the Zone of Influence of the proposed project:

- Blackwater Bank SAC
- Kilpatrick Sandhills SAC
- Cahore Polders and Dunes SAC
- Buckronev-Brittis Dunes and Fen SAC
- Courtmacsherry Estuary SAC

3.4.2 Annex II species

Marine mammals

After breeding most grey seals disperse away from their haul-out sites, therefore their usage of a particular SAC is very time and location specific. On this basis and considering newly available data on grey seal movements (Carter et al, 2022) there is potential for interactions between grey seals and projects 448 km distant from the SAC for which they are designated. This is considered the Zone of Influence for this species.

In Ireland the foraging range for harbour seal can be as far as 273 km (Carter et al, 2022) using the precautionary principle that latter value was considered in the screening process and is taken as the Zone of Influence for this species.

Otters are a semi-aquatic species who use the marine environment for foraging. Otters that forage on the coast have flexible foraging times linked to the tides. The Zone of Influence for this species is 20km along the shore.

In Ireland there are a number of SACs designated for the cetaceans, harbour porpoise and common bottlenose dolphin. As these species are highly mobile species specific Management Units (MU) are used to assess to the effect of an activity on them. The Zone of Influence of a project which has the potential to impact on a species is considered to be the MU for that species which overlaps with the project.

With respect to the proposed project the overlapping MU for harbour porpoise is the Celtic and Irish Seas; for the bottlenose dolphin it is the Irish Sea (IAMMWG, 2015).

Using the above criteria six Irish sites, eight British and sixteen French sites were identified to be within the Zone of Influence of the proposed project. These are:

Rockabill to Dalkey SAC
Lambay Island SAC
Slaney River Valley SAC
Saltee Islands SAC
Roaringwater Bay and Islands SAC
Blasket Islands SAC
The Maidens SAC
Pembrokeshire Marine SAC
Lleyn Peninsula and the Sarnau SAC
Cardigan Bay SAC
North Anglesey Marine SAC
West Wales Marine SAC
North Channel SAC
Bristol Channel Approaches SAC
Récifs et landes de la Hague
Anse de Vauville
Banc et récifs de Surtainville
Chausey
Baie du Mont Saint-Michel
Estuaire de la Rance
Baie de Lancieux, Baie de l'Arguenon, Archipel de Saint Malo et Dinard
Cap d'Erquy-Cap Fréhel
Baie de Saint-Brieuc – Est
Tregor Goëlo Est
Côte de Granit rose-Sept-Iles
Nord Bretagne DH
Baie de Morlaix
Abers - Côte des legends
Ouessant-Molène
Côtes de Crozon

Migratory fish

Once they leave freshwater salmon migrate to their feeding grounds in the northern Atlantic. Recent studies have found that salmon populations migrate towards oceanographic fronts for feeding (Rikardsen *et al.*, 2021). Salmon from northwest Spain and southeast Ireland appear to move out to the shelf edge before crossing the Atlantic towards Greenland.

Therefore the Zone of Influence for salmon is considered to be the eastern seaboard south of Dublin Bay for Irish Sea locations and southern seaboard for the Celtic Sea location.

The Freshwater Pearl Mussel utilises Atlantic salmon at a certain stage in its life cycle, Sea lamprey is a predator of salmon (OSPAR 2009). Therefore it is considered that if the salmon is significantly impacted by an activity there is a possibility that these species may also be negatively affected. This logic was also applied to sea lamprey which is a predator of salmon (OSPAR 2009). The Zone of Influence for these species was considered the same as that for Atlantic salmon.

Recent information on Twaite Shad recorded movement of up to 950km from the River Severn with one individual detected in the Blackwater Estuary (Davies *et al.* 2020).

However given the spatial and temporal nature of the proposed works more distant SAC designated for shad species are considered to not have connectivity with the Application Area; more distant sites are considered too far for any significant interaction to occur. Similarly distant SACs designated for River lamprey were considered too far for any significant interaction to occur.

Using this criteria the Slaney River Valley SAC was identified to be within the Zone of Influence of the proposed project.

All the relevant sites considered are summarised in Tables 1 and 2 below.

Table 1 Special Areas of Conservation (SAC) and their qualifying interests to be considered further in the screening process.

Site and Code	Distance from Survey Area	Qualifying Interests	Screened In/Out	Potential source of impact
Blackwater Bank (SAC Site Code 002953)	6.7 km	Sandbanks which are slightly covered by sea water all the time [1110]	Out	No Source-Pathway-Receptor link to habitats or species
Kilpatrick Sandhills SAC (SAC Site Code 001742)	7.3 km	Annual vegetation of drift lines [1210] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Atlantic decalcified fixed dunes (<i>Calluno -Elicetea</i>)[2150]	Out	No Source-Pathway-Receptor link to habitats or species
Buckroney-Brittis Dunes and Fen SAC (Site Code 000729)	9.5 km	Annual vegetation of drift lines ([1210] Perennial vegetation of stony banks [1220] Mediterranean salt meadows (<i>Juncetallia maritime</i>) [1410] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) 2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Atlantic decalcified fixed dunes (<i>Calluno -Elicetea</i>)[2150] Dunes with <i>Salix repens</i> app. <i>argentea</i> (<i>Salix arenariae</i>) [2170] Humid dune slacks [2190] Alkali fens [7230]	Out	No Source-Pathway-Receptor link to habitats or species

Site and Code	Distance from Survey Area	Qualifying Interests	Screened In/Out	Potential source of impact
Cahore Polders and Dunes SAC (Site Code 000700)	9.6 km	Annual vegetation of drift lines [1210] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Humid dune slacks [2190]	Out	No Source-Pathway-Receptor link to habitats or species
Courtmacsherry Estuary SAC (Site Code 001230)	12.8 km	Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Perennial vegetation of stony banks [1220] <i>Salicornia</i> and other annuals colonising mud and sand [1310] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	Out	No Source-Pathway-Receptor link to habitats

Site and Code	Distance from Survey Area	Qualifying Interests	Screened In/Out	Potential source of impact
Slaney River Valley SAC -[Site code IE000781]	25.2 km	<p>Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] Water courses of plain to montane levels with the <i>Ranunculus fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation [3260] Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0] <i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029] <i>Petromyzon marinus</i> (Sea Lamprey) [1095] <i>Lampetra planeri</i> (Brook Lamprey) [1096] <i>Lampetra fluviatilis</i> (River Lamprey) [1099] <i>Alosa fallax fallax</i> (Twite Shad) [1103] <i>Salmo salar</i> (Salmon) [1106] <i>Lutra lutra</i> (Otter) [1355] <i>Phoca vitulina</i> (Harbour Seal) [1365]</p>	Out	No Source-Pathway-Receptor link to habitats or species
Rockabill to Dalkey SAC [Site code IE003000]	52 km	<p>Reefs [1170] <i>Phocoena phocoena</i> (Harbour Porpoise) [1351]</p>	Out	No Source-Pathway-Receptor link to habitats or species

Site and Code	Distance from Survey Area	Qualifying Interests	Screened In/Out	Potential source of impact
Saltee Islands SAC [Site code IE0007071]	60.4 km	Mudflats and sandflats not covered by seawater at low tide [1140] Large shallow inlets and bays [1160] Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Submerged or partially submerged sea caves [8330] Halichoerus grypus (Grey Seal) [1364]	Out	No Source-Pathway-Receptor link to habitats or species
Lambay Island SAC [Site code IE000204]	79 km	Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Halichoerus grypus (Grey Seal) [1364] Phoca vitulina (Harbour Seal) [1365]	Out	No Source-Pathway-Receptor link to habitats or species
Pembrokeshire Marine/ Sir Benfro Forol SAC [UK0013116]	134 km	Sandbanks which are slightly covered by sea water all the time [1110] Mudflats and sandflats not covered by seawater at low tide [1140] Coastal lagoons [1150]*Priority feature Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Submerged or partially submerged sea caves [8330] Petromyzon marinus (Sea lamprey) [1095] Lampetra fluviatilis (River lamprey) [1099] Alosa alosa (Allis shad) [1102] Alosa fallax (Twaite shad) [1103] Lutra lutra (Otter) [1355] Rumex rupestris (Shore dock) [1441] Halichoerus grypus (Grey Seal) [1364]	Out	No Source-Pathway-Receptor link to habitats or species

Site and Code	Distance from Survey Area	Qualifying Interests	Screened In/Out	Potential source of impact
The Maidens [Site code UK0030384]	249 km	Halichoerus grypus (Grey Seal) [1364]	Out	No Source-Pathway-Receptor link to habitats or species
Roaringwater Bay and Islands SAC [Site code IE000101]	Within MU for Harbour Porpoise	Large shallow inlets and bays [1160] Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] European dry heaths [4030] Submerged or partially submerged sea caves [8330] Lutra lutra (Otter) [1355] Halichoerus grypus (Grey Seal) [1364] Phocoena phocoena (Harbour Porpoise) [1351]	Out	No Source-Pathway-Receptor link to habitats or species
Blasket Islands SAC [Site code IE002172]	Within MU for Harbour Porpoise	Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] European dry heaths [4030] Submerged or partially submerged sea caves [8330] Halichoerus grypus (Grey Seal) [1364] Phocoena phocoena (Harbour Porpoise) [1351]	Out	No Source-Pathway-Receptor link to habitats or species
Llyn Peninsula and the Sarnau / Pen Llyn a`r Sar [Site code UK0013117]	Within MU for Bottlenose Dolphin	Mudflats and sandflats not covered by seawater at low tide [1140] Salicornia and other annuals colonizing mud and sand [1310] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Submerged or partially submerged sea caves [8330] Lutra lutra Otter [1355] Tursiops truncatus (Common Bottlenose Dolphin) [1349] Halichoerus grypus (Grey Seal) [1364]	Out	No Source-Pathway-Receptor link to habitats or species

Site and Code	Distance from Survey Area	Qualifying Interests	Screened In/Out	Potential source of impact
Cardigan Bay [UK0012712]	Within MU for Bottlenose dolphin	Tursiops truncatus (Common Bottlenose Dolphin) [1349]	Out	No Source-Pathway-Receptor link to habitats or species
North Anglesey Marine / Gogledd Môn Forol [UK 0030398]	Within MU for Harbour Porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Out	No Source-Pathway-Receptor link to habitats or species
West Wales Marine / Gorllewin Cymru Forol [UK 0030397]]	Within MU for Harbour Porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Out	No Source-Pathway-Receptor link to habitats or species
North Channel [UK 0030399]	Within MU for Harbour Porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Out	No Source-Pathway-Receptor link to habitats or species
Bristol Channel Approaches / Dynesfeydd Môr Hafren [UK0030396]	Within MU for Harbour Porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Out	No Source-Pathway-Receptor link to habitats or species
Récifs et landes de la Hague [FR2500084]	Within MU for Harbour Porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Out	No Source-Pathway-Receptor link to habitats or species
Anse de Vauville [FR2502019]	Within MU for Harbour Porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Out	No Source-Pathway-Receptor link to habitats or species
Banc et récifs de Surtainville [FR2502018]	Within MU for Harbour Porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Out	No Source-Pathway-Receptor link to habitats or species

Site and Code	Distance from Survey Area	Qualifying Interests	Screened In/Out	Potential source of impact
Chausey [FR2500079]	Within MU for Harbour Porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Out	No Source-Pathway-Receptor link to habitats or species
Baie du Mont Saint-Michel [FR2500077]	Within MU for Harbour Porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Out	No Source-Pathway-Receptor link to habitats or species
Estuaire de la Rance [FR5300061]	Within MU for Harbour Porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Out	No Source-Pathway-Receptor link to habitats or species
Baie de Lancieux, Baie de l'Arguenon, Archipel de Saint Malo et Dinard [FR5300012]	Within MU for Harbour Porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Out	No Source-Pathway-Receptor link to habitats or species
Cap d'Erquy-Cap Fréhel [FR5300011]	Within MU for Harbour Porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Out	No Source-Pathway-Receptor link to habitats or species
Baie de Saint-Brieuc – Est [FR5300066]	Within MU for Harbour Porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Out	No Source-Pathway-Receptor link to habitats or species
Tregor Goëlo Est [FR5300010]	Within MU for Harbour Porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Out	No Source-Pathway-Receptor link to habitats or species
Côte de Granit rose-Sept-Iles [FR5300009]	Within MU for Harbour Porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Out	No Source-Pathway-Receptor link to habitats or species

Site and Code	Distance from Survey Area	Qualifying Interests	Screened In/Out	Potential source of impact
Nord Bretagne DH [FR2502022]	Within MU for Harbour Porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Out	No Source-Pathway-Receptor link to habitats or species
Baie de Morlaix [FR5300015]	Within MU for Harbour Porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Out	No Source-Pathway-Receptor link to habitats or species
Abers - Côte des legends [FR5300017]	Within MU for Harbour Porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Out	No Source-Pathway-Receptor link to habitats or species
Ouessant-Molène [FR5300018]	Within MU for Harbour Porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Out	No Source-Pathway-Receptor link to habitats or species
Côtes de Crozon [FR5302006]	Within MU for Harbour Porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Out	No Source-Pathway-Receptor link to habitats or species

Table 2 Special Protection Areas (SPA) and their qualifying interests to be considered further in the screening process.

Site and Code	Distance from Survey Area	Qualifying Interests	Screened In/Out	Potential source of impact
Cahore Marches SPA [IE004236]	10km	Wigeon (<i>Anas penelope</i>) [A050] Golden Plover (<i>Pluvialis apricaria</i>) [A140] Lapwing (<i>Vanellus vanellus</i>) [A142] Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395] Wetland and Waterbirds [A999]	Out	Temporary disturbance from one additional vessel not significant
Courtmacsherry Bay SPA IE004219	5.5km	Great Northern Diver (<i>Gavia immer</i>) [A003] Shelduck (<i>Tadorna tadorna</i>) [A048] Wigeon (<i>Anas penelope</i>) [A050] Red-breasted Merganser (<i>Mergus serrator</i>) [A069] Golden Plover (<i>Pluvialis apricaria</i>) [A140] Lapwing (<i>Vanellus vanellus</i>) [A142] Dunlin (<i>Calidris alpina</i>) [A149] Black-tailed Godwit (<i>Limosa limosa</i>) [A156] Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] Curlew (<i>Numenius arquata</i>) [A160] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Common Gull (<i>Larus canus</i>) [A182] Wetland and Waterbirds [A999]	Out	Temporary disturbance from one additional vessels not significant
Seven Heads SPA IE004191	6km	Chough (<i>Pyrrhocorax pyrrhocorax</i>) [A346]	Out	Temporary disturbance from one additional vessels not significant
Old Head of Kinsale SPA IE004021	7km	Kittiwake (<i>Rissa tridactyla</i>) [A188] Guillemot (<i>Uria aalge</i>) [A199]	Out	Temporary disturbance from one additional vessels not significant

3.5 Assessment of Likely Significant Effects

3.5.1 Annex I habitats

None of the sediment habitats where deployment will occur are designated and the mooring/anchor system is to be deployed on sediment habitats only therefore the possibility of likely significant effects on Annex I habitats as a result of the proposed deployment, operation and recovery of the moorings **can be excluded**.

3.5.2 Annex II species

Given the typical levels of vessel activity in this area the presence of an additional vessel is not deemed a significant increase. These temporary moorings will be equipped with non-invasive silent environmental sensors and will not impact on the auditory range of marine mammals. Therefore the possibility of likely significant effects on Annex II marine mammals and Annex II fish species as a result of the proposed deployment, operation and recovery of moorings **can be excluded**.

3.5.3 Birds

Given the typical levels of vessel activity in this area the presence of an additional vessel is not deemed a significant increase. Therefore the possibility of likely significant effects on bird species as a result of the proposed deployment, operation and recovery of the moorings **can be excluded**.

3.5.4 In-combination effects

Article 6(3) of the Habitats Directive requires that AA be carried out in respect of any plan or project which is likely to have a significant effect on one or more European sites, “either individually or in combination with other plans or projects”. Therefore, regardless of whether or not the likely effects of a plan or project are significant when considered in isolation, the potential for the plan or project to significantly affect European sites in combination with other past, present or foreseeable future plans or projects must also be assessed.

In a search of the Department’s Foreshore applications web site for counties Wicklow, Wexford and Cork, and those County Councils’ respective planning portal on the 29th November 2023 a number of projects were identified which may have potential to have in-combination effects with the proposed project.

Application	Project	Application Status	In-combination effects
FS007048	Energia Site Investigation off Wexford Coast	Determination	Presence of an additional vessel in the area is not deemed significant.
FS007555	Arklow Bank Wind Park Site Investigation off Wicklow Coast	Public consultation stage closing 01/12/23	Presence of an additional vessel in the area is not deemed of significance.

FS007339	Sure Partners Arklow Bank Wind Park Site Investigations	Determination	Presence of an additional vessel in the area is not deemed of significance.
FS007232	DP Energy - Latitude 52 Offshore Windfarm Ltd. Site Investigations off coast of counties Wicklow and Wexford	Applied	Presence of an additional vessel in the area is not deemed of significance.
FS007261	Shelmalere Offshore Wind Farm - Site Investigations off Counties Wexford and Wicklow	Consultation	Presence of an additional vessel in the area is not deemed of significance.
FS007471	Floating Cork Offshore Wind Limited Site Investigations off the coast of County Cork	Applied	Presence of an additional vessel in the area is not deemed of significance.

Given the typical levels of activity in this area the presence of an additional vessel in the area is not deemed significant. Therefore likely significant in-combination effects between this project and the above listed projects on the conservation objectives of Natura 2000 sites considered in this report **can be excluded**.

4. Conclusion

4.1 Appropriate Assessment Screening Conclusion

The qualifying interests of European sites which may experience likely significant effects as a result of the proposed project were identified using the Source-Pathway-Receptor approach.

It is concluded that likely significant effects as a result of this project, alone or in-combination with other plans and projects, on the conservation objectives of European sites can be excluded and therefore an Appropriate Assessment is not required.

5. References

Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities. DEHLG, 2009. Revision 2010.

Appropriate Assessment Screening for Development Management OPR Practice Note PN01 March 2021

Carter et al, 2022. Sympatric Seals, Satellite Tracking and Protected Areas: Habitat-Based Distribution Estimates for Conservation and Management, *Frontiers in Marine Science*, v9 2022.

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6. Site Specific Conservation Objectives

Blackwater Bank SAC IE002953

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002953.pdf

Cahore Polders and Dunes SAC IE0007000

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000700.pdf

Courtmacsherry Estuary SAC IE0001230

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO001230.pdf

Rockabill to Dalkey SAC IE003000

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO003000.pdf

Lambay Island SAC 000204

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000204.pdf

Slaney River Valley SAC

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000781.pdf

Saltee Islands SAC 000707

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000707.pdf

Roaringwater Bay and Islands SAC

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000101.pdf

Blasket Islands SAC

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002172.pdf

The Maidens

<https://www.daera.ni.gov.uk/sites/default/files/publications/daera/The%20Maidens%20SAC%20Conservation%20Objectives%202017.PDF>

North Anglesey Marine / Gogledd Môn Forol

<https://data.jncc.gov.uk/data/f4c19257-2341-46b3-8e29-49665cd8f3d2/NorthAnglesey-ConservationAdvice.pdf>

West Wales Marine / Gorllewin Cymru Forol

<https://data.jncc.gov.uk/data/029e40f3-5f67-4168-b10d-8730f2c40e0a/WWM-conservation-advice.pdf>

Lleyn Peninsula and the Sarnau / Pen Llyn a`r Sar SAC

<https://sac.jncc.gov.uk/site/UK0013117>

North Channel

<https://data.jncc.gov.uk/data/be0492aa-f1d6-4197-be22-e9a695227bdb/NorthChannel-conservationadvice.pdf>

Bristol Channel Approaches / Dynesfeydd Môr Hafren

<https://cdn.cyfoethnaturiol.cymru/media/679449/bristolchannelapproachesconservationobjectivesandadviceonactivities.pdf?mode=pad&rnd=13162576074000000>

Cardigan Bay SAC

<https://sac.jncc.gov.uk/site/UK0012712>

Pembrokeshire Marine/ Sir Benfro Forol SAC

<https://sac.jncc.gov.uk/site/UK001311>

North-west Irish Sea cSPA

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004236.pdf

Rockabill SPA

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004014.pdf

Skerries Islands SPA

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004122.pdf

Lambay Island SPA

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004069.pdf

Cahore Marches SPA

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004143.pdf

Courtmacsherry Bay SPA IE004219

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004219.pdf

Seven Heads SPA

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004191.pdf

Old Head of Kinsale SPA

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004021.pdf