

**Cetacean study within the Irish and Celtic Sea
LIC230006**

Supporting Information for the Screening for Appropriate Assessment Report

October 2023

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Introduction

Background

This Supporting Information for Screening for Appropriate Assessment Report has been created to assess University College Cork's proposed temporary deployments of subsurface passive acoustic monitoring hydrophones at four locations along the coastline of County Wexford and one location along the coastline of County Cork. A Maritime Usage License Application for the project is submitted with this report. This report's main goal is to provide information to the Appropriate Assessment (AA) process to help inform the decision-making process as to whether the proposed project, both by itself and in conjunction with other plans or projects, has the potential to have a significant impact on any designated European Site considering the site's conservation goals.

Statement of Authority

██████████ BSc, MSc, and PhD researcher in marine ecology at University College Cork authored this report, on behalf of researchers on the cetacean ecology element, within the CETUS project, funded by SEAI.

Appropriate Assessment Process

Appropriate Assessment is the process through which the possible nature conservation implications of any plan or project on the Natura 2000 site network is considered by a Competent Authority, before a decision is made to allow that plan or project to proceed.

The European Commission's methodological guidance (European Commission, 2002) promotes a four-stage process to complete the AA. Each successive stage determines whether a further stage in the process is necessary. The four stages are the following:

Stage 1: Screening for Appropriate Assessment

In this initial stage, the focus is on evaluating and documenting the rationale and outcomes concerning Article 6(3). The primary objective is to ascertain whether a given plan or project has a direct association with or significant relevance to the management of a specific site. Additionally, this stage aims to determine if a project, either on its own or when combined with another project, holds the potential to cause adverse effects on European site(s).

Stage 2- Appropriate Assessment

In this stage, the assessment focuses on determining the project's impact on the integrity of a European site(s) concerning its conservation objectives, structure, and function. Mitigation measures should be applied to ensure that no adverse effects on the site(s) remain.

Stage 3 - Alternative Solutions

In the event that the Appropriate Assessment indicates potential adverse impacts European site(s), this stage explores alternative approaches to project implementation, aiming to avoid these the adverse effects whenever feasible. It's important to note that Stage 3 is not considered as the primary reliance point.

Stage 4 - Imperative Reasons of Overriding Public Interest

When no alternative solutions are available and adverse impacts persist, an assessment is conducted to see if compensatory measures can offset the harm to the European site(s), considering imperative reasons of overriding public interest (IROPI). European law stresses the need to explore alternatives outside the project area during this assessment. However, the IROPI test is stringent, and most projects are unlikely to pass it. Furthermore, it's worth mentioning that the developer does not rely heavily on Stage 4.

Aim of report

The purpose of this report is to inform the Appropriate Assessment process, as required under the Habitats Directive (92/43/EEC). The report assesses whether the proposed project, either alone or in-combination with other plans or projects, is likely to have significant effects on a European site. It will establish if a screening for an Appropriate Assessment, as described above, is required, thus meeting the Department's statutory obligations under the European Communities (Birds and Natural Habitats) Regulations 2011 to 2021 (the "Habitats Regulations"), to ensure compliance with the Habitats Directive (92/43/EEC).

The assessment in this report is based on the report Appropriate Assessment Screening for Development Management, OPR Practice Note PN01, published March 2021. The potential for substantial impacts on a European site is based upon the presence of a clear connection, known as the Source-Pathway-Receptor link, between the planned development and the European site, as outlined in OPR 2021. Therefore, we have assessed potential connectivity in two scenarios: 1) if there is an overlap between the Maritime usage license area and a Special Area of Conservation (SAC), which would indicate direct effects, and 2), if the SAC fell within the range of the anticipated impacts of the proposed activity, indicating indirect effects. Also, to evaluate the potential for the project to have significant effects on European sites when combined with other existing, ongoing, or foreseeable future plans or projects, an assessment for screening for cumulative impacts was made, by evaluating the current and foreseeable licensed maritime activities in the area.

Methodology

Appropriate Assessment Guidance

EU and national guidance exist in relation to Member States' fulfilling their requirements under the EU Habitats Directive, with particular reference to Article 6(3) and 6(4) of that Directive. The methodology followed in relation to this AA has had regard to the following guidance:

- Appropriate Assessment Screening for Development Management OPR Practice Note PN01 March 2021
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPW 1/10 & PSSP 2/10.
- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities. (Department of Environment, Heritage and Local Government, 2010).

Description of the Proposed Project

Background of research project

The proposed maritime usage aims 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. The CETUS project: Cetacean, Elasmobranch, Turtle, and Seabird distribution modelling platform is a research project aimed at providing, *inter alia*, scientific information to inform the sustainable development of offshore renewable energy and is funded by Sustainable Energy Authority of Ireland (SEAI). The project includes a multi-disciplinary team of researchers working on multiple species, across the Irish and Celtic Seas.

Passive acoustic monitoring devices (PAM) are regularly used to monitor cetacean acoustics, which provides information, *inter alia*, on habitat use, seasonal and diel occurrence. The devices proposed to be used in this study have been deployed in EU waters (and elsewhere) and are regularly used to monitor dolphin and porpoise occurrence in SACs, using very similar moorings (e.g., Amundin, M. et al. 2022. Stedt, J. et al. 2023). Within Ireland, the cetacean research group have previously deployed PAM devices in Broadhaven, Killary, and recently in Roaringwater Bay (Todd et al. 2020, Todd et al. 2023). We could find no evidence from any of the published studies that the moorings had a negative effect on the environment or marine species.

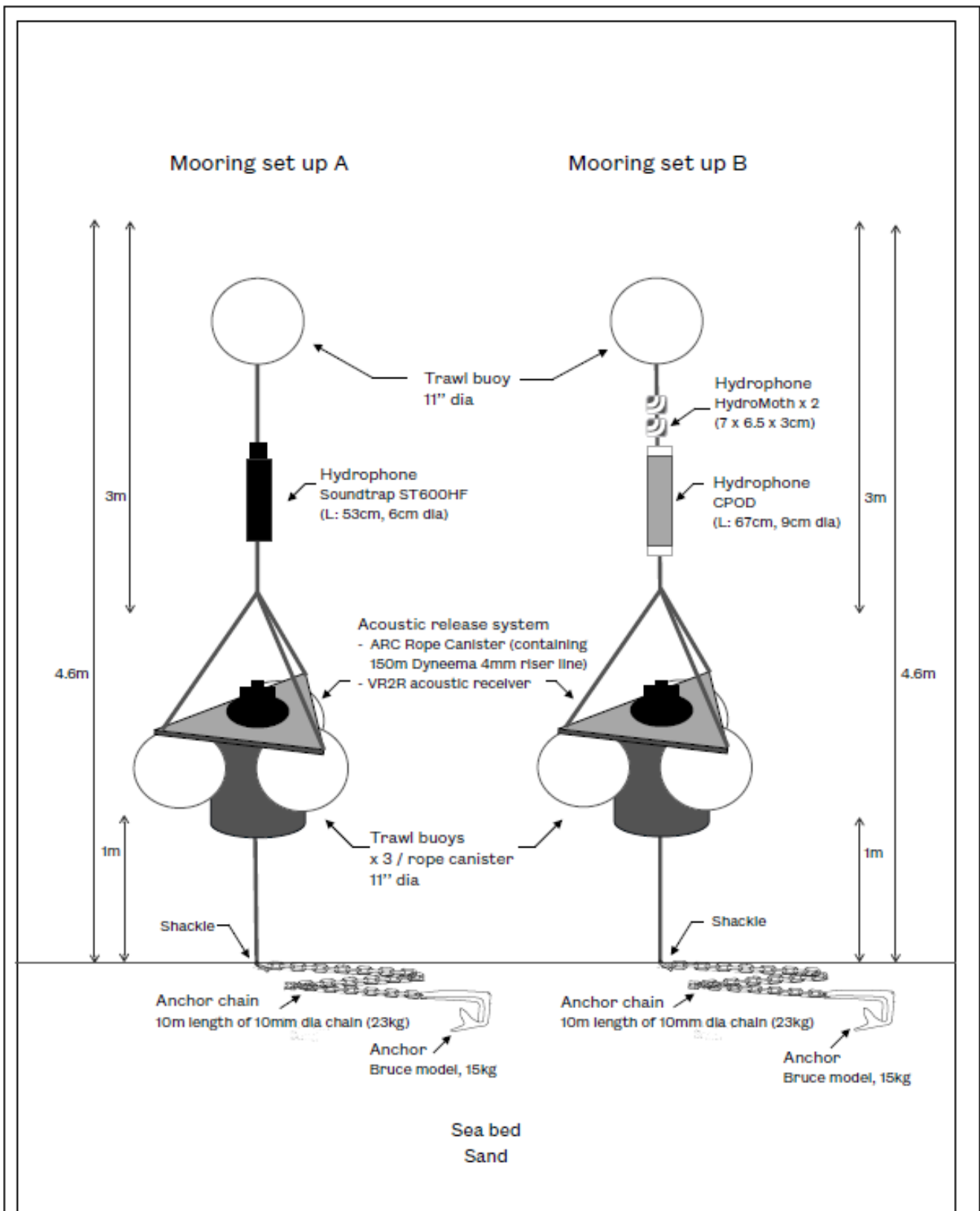
The Arklow Bank off the coast off Co. Wicklow, has the only current operational offshore wind energy site in Ireland. The site supports a great variety of seabirds, elasmobranch (sharks, skates and rays) and cetaceans (whales, dolphins and porpoises) species and is one of the study sites for the CETUS project. Additionally, with the expanded plans for offshore wind in the Irish Sea and Celtic Sea there are several study sites involved in the CETUS project, and the need for baseline data of cetaceans and other animals occurrence is a priority.

This application forms the basis of the cetacean element of the CETUS Project and is part of a PhD project being carried out at University College Cork (UCC) by cetacean researcher [REDACTED]. The project will involve the deployment and maintenance of temporary sub-surface moorings, equipped with hydrophones (underwater recording devices). The project is proposing the deployment of four moorings in the Irish Sea, and one in the Celtic Sea. The aim of these deployments to use this passive, low impact, monitoring methodology is to record sounds from whales, dolphins and porpoises across all seasons for at least one year, and up to three years.

Design of deployment

The design of the mooring set up is a sub-surface system hydrophone deployment, with no surface buoy. The hydrophone model will be either a Soundtrap ST600HF (Mooring set up A, Figure 1) or a CPOD/FPOD paired with two HydroMoths (Mooring set up B, Figure 1), depending on the deployment site. From the License map 1 and 2, Area A, D and E will be mooring set up A, and Area B and C will be mooring set up B (Figure 2, Figure 3).

To support the hydrophone, the mooring will consist of an ARC Acoustic release system, a mooring chain and a Bruce type anchor. The ARC acoustic release system has an inbuilt VR2R 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 raises to the surface to be collected. In addition to the three floats supporting the rope canister on the ARC acoustic release system, there will be two subsurface trawl floats, to keep the mooring in an upright position. The height of the mooring set up, from the seabed to the top of the upper trawl float, will be up to 5m maximum.



Drawing title: Mooring Details for CETUS Cetacean Acoustic Monitoring
 Location: Irish Sea and Celtic Sea
 By: [REDACTED] University College Cork
 Scale: 1:50 (not all elements drawn to scale)
 Date: September 2023
 Drawing No: LIC230006

Figure 1. Scaled sketch of mooring set up A and B, to be deployed in the Irish and Celtic Sea for the CETUS cetacean study.

Deployment Procedure and Maintenance operations

The initial deployment for the Irish Sea moorings is anticipated to take place between October and November 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 for operational activities, or company contracted is subject to budget, weather, and vessel availability.

Receiving Environment

The temporary moorings with hydrophones will be deployed in two main areas, one study site in the Irish Sea, and a second in the Celtic Sea. The Irish Sea study site will consist of four hydrophone moorings, deployed 2km east of the Arklow bank, in a latitudinal gradient southward to Gorey, in Co. Wicklow (Figure 2). The benthic substrate in the wider area consists mainly of deep circalittoral sand, and depths vary between 30-60m. The Celtic Sea study will consist of one mooring deployed ca 10km SW off Old Head of Kinsale on the Co. Cork coastline in the open sea (Figure 3). The benthic substrate in the wider area consists of rock, sand, and gravel substrates, with depths in the area ranging from ca. 60 – 80m. The proposed moorings are not located within any European designated site(s) (i.e SAC or SPA) or ferry routes.

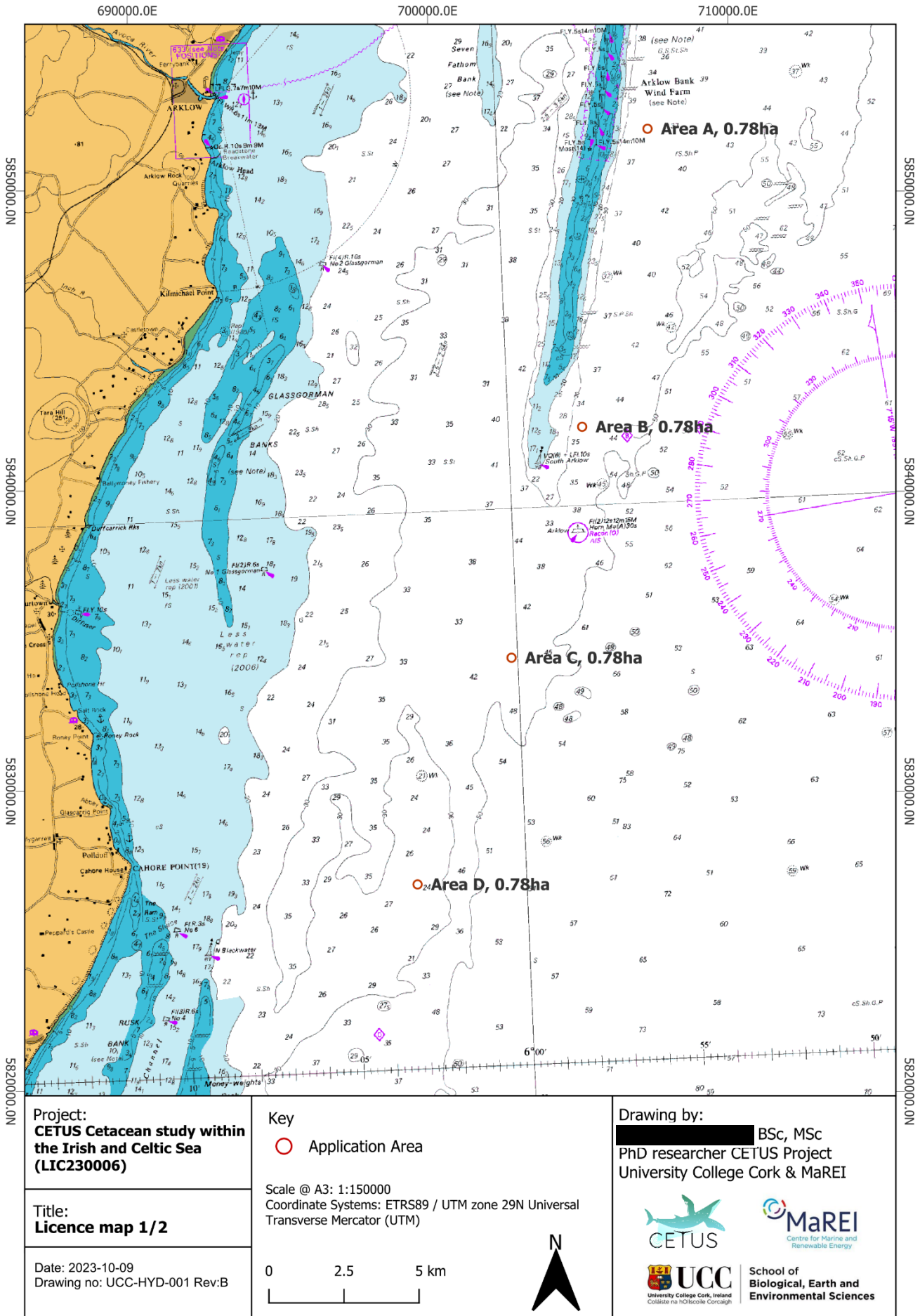


Figure 2. Map showing the four locations of the Irish sea deployment sites, within the CETUS project.



Figure 3. Map of the Celtic Sea deployment site, within the CETUS project.

Identification of the relevant European sites

Special Areas of Conservation (SACs) in proximity to (up to 20km) our planned project sites were collated, for assessing potential linkage between the proposed project and the qualifying interests of the SACs. We examined potential connectivity in two scenarios: 1) in cases where there was an overlap between the Maritime Usage License Application Area and an SAC, which indicates direct effects, and 2) if the SAC fell within the range of the anticipated impacts of the proposed activity, signifying indirect effects. For SACs situated beyond this range, consideration was given based on the presence of a Source-Pathway-Receptor relationship as defined in OPR 2021, between the proposed activity and the qualifying interests of SACs. See Table 1 for a summary of the identified SACs.

Description of European sites (from SAC Site Synopsis)

Wicklow Reef SAC [Site code 002274]

Wicklow Reef is situated just to the north of Wicklow Head on the east coast of Ireland in Co. Wicklow. The substrate is a mixture of cobbles, bedrock and sand and is subject to strong tidal streams.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

[1170] Reefs

The reef occurs at a depth of 12-30 m and reaches a thickness of at least 0.3-0.5 m. It is composed of consolidated sand grains formed into a honeycomb structure by the activities of the worm *Sabellaria alveolata*. There is a good diversity of species associated with the reef, including hydroids (e.g. *Hydrallmania falcata*), a variety of polychaete worms, the snail *Calliostoma zizyphinum*, the bivalves *Musculus discor* and *Mytilus edulis*, other molluscs, bryozoans, barnacles, amphipods, crabs, starfish, brittlestars and sea squirts. Wicklow Reef is of high conservation value as it is the only documented example in Ireland of a biogenic reef. Further, it supports a number of uncommon species.

Blackwater Bank SAC [Site code 002953]

Blackwater Bank SAC consists of a series of sandbanks running roughly parallel to the coastline of Co. Wexford. The total area of this site is approximately 12,407 ha. This designation includes the Lucifer Bank, Blackwater Bank and Moneyweights Bank. These features are at the southern end of a series of offshore sandbanks that run along the eastern seaboard of Ireland as far north as Co. Dublin.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

[1110] Sandbanks which are slightly covered by sea water all the time

The sandbanks in this site form a series of banks from Cahore Point, in the north, extending almost as far southwards as Rosslare, Co. Wexford. These features range from 2-4 km from the shoreline. Offshore sandbanks are generally formed from varying sediment fractions that range from cobbles to fine sand. The sediment surface is often rippled, through the action of currents and storms, and builds up into sand waves that may measure more than 1 m in height and several metres in width.

These banks are characterized predominantly by fine sand to medium sand with smaller percentages of very fine sand. Previous surveys indicated an area of high hydrodynamic activity with strong, tidally induced current speeds operating. Such currents do not allow for the settling out of finer particles of organic and inorganic matter. This type of current regime also tends to make the sediments quite mobile, with material being transported over some distance during strong phases of the tidal cycle. Such areas are characterized by low species densities. Low species numbers and densities in such habitat are probably due to the inhospitable nature of the environment, i.e. mobile sands, which demand specialized lifestyles for animals to either cope with, or escape from, sand abrasion.

Cahore Polders and Dunes SAC [Site code 000700]

This site is located just south of Cahore Point, 10 km south of Courtown, Co. Wexford. The site comprises a sand dune system that extends along the coast for over 4 km, backed by areas of polder grassland, wetland and drainage channels. It is underlain by rocks of Cambrian age. A sand dune ridge and sandy beach forms the eastern boundary of the site. These dunes are highest in the north (up to 18 m high) and gradually become lower towards the south. The dunes display a well-developed zonation of fixed dunes grading eastwards to Marram (*Ammophila arenaria*)- dominated dunes, embryo dunes and, at the top of the beach, drift line vegetation.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

- [1210] Annual Vegetation of Drift Lines
- [2110] Embryonic Shifting Dunes
- [2120] Marram Dunes (White Dunes)
- [2130] Fixed Dunes (Grey Dunes)
- [2190] Humid Dune Slacks

Cahore Polders and Dunes is a site of considerable conservation value, containing good examples of fixed dune, Marram dune, embryonic shifting dune, dune slack and drift line habitat; all of these habitats are listed on Annex I of the E.U. Habitats Directive, and fixed dunes with priority status. The presence of a number of species that are listed on the Flora (Protection) Order, 2015 and of other rare species is notable. It is also of high conservation value as a site for wintering waterfowl, in particular Greenland White-fronted Goose, Golden Plover, Lapwing and Wigeon

Courtmacsherry Estuary SAC [Site code 001230]

This site is located in west Cork, some 12 km south of Bandon and immediately east of the village of Timoleague. The estuary consists of the drowned valley of the Argideen River, which is now filled with sediments, resulting in an extensive area of mudflats. The site contains a complex of coastal habitats, including ten which are listed in the E.U. Habitats Directive.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

- [1130] Estuaries
- [1140] Tidal Mudflats and Sandflats
- [1210] Annual Vegetation of Drift Lines
- [1220] Perennial Vegetation of Stony Banks
- [1310] Salicornia Mud
- [1330] Atlantic Salt Meadows
- [1410] Mediterranean Salt Meadows
- [2110] Embryonic Shifting Dunes
- [2120] Marram Dunes (White Dunes)
- [2130] Fixed Dunes (Grey Dunes)

The greater part of this estuary site is mudflat and tidal channels, but three rivers flow into the site and areas of fresh- and saltmarsh are found. Most of the mudflat at Courtmacsherry is unvegetated, although in places cord-grass (*Spartina* sp.) occurs.

Courtmacsherry Estuary is an important site for the complex of coastal habitats found there, including ten listed on Annex I of the E.U. Habitats Directive, and for the large numbers of birds that use the area. The presence of rare and scarce plant species adds further interest and value to the site.

[Annex I habitats](#)

Direct effects, as described and defined in the 'Identification of Possible Effects' section, are only anticipated in cases where the proposed project intersects with habitats located within Special Areas of Conservation (SACs). Consequently, for the assessment of screening phase, our consideration is therefore considering if SACs share a geographic overlap with the proposed project.

Given that these deployments exclusively take place in the open marine environment, we focused our assessment for screening process solely on marine Annex I habitats, guided by the Source-Pathway-Receptor model (as described in OPR 2021). Using this criterion, we determined that none of the Annex I habitat SACs fell within the Zone of Influence of the proposed project.

European Site Name and Code	Distance (km) from Project	Qualifying/Special Conservation interest	Considered further in screening	Source Pathway Receptor
Wicklow Reef SAC [Site code 002274]	20	Reefs [1170]	No	No Source-Pathway-Receptor link to habitats
Blackwater Bank SAC [Site code 002953]	6.7	Sandbanks which are slightly covered by sea water all the time [1110]	No	No Source-Pathway-Receptor link to habitats
Cahore Polders and Dunes SAC [Site code 000700]	9.6	Annual vegetation and 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]	No	No Source-Pathway-Receptor link to habitats
Courtmacsherry Estuary SAC [Site code 001230]	12.8	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 maritima</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]	No	No Source-Pathway-Receptor link to habitats

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

Identification of potential environmental impacts

Management of Natura 2000 site/s

Projects or proposals that are intrinsically linked to the administration of a Natura 2000 site are exempt from the need for an Appropriate Assessment (AA). In this case, the proposed project is not connected to or essential for the management of a Natura 2000 site.

Consequently, this project is subject to a preliminary assessment for Appropriate Assessment, aiming to ascertain whether, on its own or in conjunction with other plans or initiatives, it may potentially result in noteworthy impacts on a European site.

Identification of possible effects

The potential for substantial impacts on a European site is contingent upon the presence of a clear connection, known as the Source-Pathway-Receptor link, between the planned development and the European site, as outlined in OPR 2021. We assessed potential connectivity in two scenarios: 1), if there was an overlap between the Maritime Usage Application License Area and a Special Area of Conservation (SAC), which would indicate direct effects, and 2), if the SAC fell within the range of the anticipated impacts of the proposed activity, signaling indirect effects.

Annex I habitats

The operational influence of our proposed moorings is limited to the direct area covered by the unit's anchor, which measures 1 square meter. The potential ecological consequences on Annex I Habitats are: 1) Physical disruption to the benthic habitat during the deployment and retrieval processes 2) Physical interference with the benthic habitat within the immediate vicinity of the moorings, and 3) The possibility of a pollution incident.

The seabed at the sites of the moorings consists mainly of sand. For communities inhabiting such sediment, any impact is restricted to the immediate area under the mooring, and the recovery of the community is typically rapid following the removal of the equipment.

Three out of four of the SACs in proximity to the proposed mooring sites has one or more of the Annex I Marine Habitats as Qualifying interests. The protected Annex I habitats in nearest proximity are Reefs, Sandbanks, Estuaries and Mudflats and sandflats not covered by seawater at low tide (Table 1). All those areas are in SACs, ranging between 6.7-20km from the nearest proposed mooring site. The nearest SAC is Blackwater Bank SAC (with Sandbanks as the main Qualifying interest), and that is over 6.7km distance from the nearest mooring location in our application for maritime usage, meaning there is no overlap in areas where the bottom substrate is protected. The five moorings will be deployed on sediment habitats only, and the only effect of the mooring will be in direct relation to where the anchor is set in the seabed, therefore no Annex I Reef habitat will be impacted. The possibility of significant effects on Annex I habitats as a result of the proposed deployment, maintenance and recovery of this data buoy can be excluded.

Annex II species

In Ireland, Annex II marine mammal species are European otter (*Lutra lutra*), Grey seal (*Halichoerus grypus*), Harbour seal (*Phoca vitulina*), Harbour porpoise (*Phocoena phocoena*), and Bottlenose dolphin (*Tursiops truncatus*). Leatherback sea turtle (*Dermochelys coriacea*) and the Loggerhead sea turtles (*Caretta caretta*), regularly reported in Irish waters, are also listed as Annex II species. The potential impact on these animals, due to our proposed maritime activity is related to vessel operations during the deployment and retrieval of moorings.

Potential impacts from the vessel includes visual and acoustic disturbance to the environment, and the risk of injury from collisions with the vessel. However, the temporary presence of a single additional vessel in this environment is unlikely to constitute a significant increase in vessel activity for the area given the typical activity levels in the region.

During the operational phase, the moorings will be equipped with non-invasive, silent environmental sensors. Consequently, there is no potential for underwater noise to impact marine mammals, or other listed Annex II species in the area.

The moorings themselves will be sub-surface, with an acoustic release system, with no surface buoy or a rising line leading up it. The height of the mooring set up, from seabed to top of the sub-surface trawl float, will be maximum 5m. This mooring set up minimizes the risk for entanglement in the rising line leading up to a surface buoy through the water column, by any of the Annex II species, or other animals.

Birds

During the deployment and maintenance of the moorings, there is a low risk of a temporary disturbance to birds in the immediate vicinity. Our vessel activity may potentially lead to the temporary displacement of individual birds from their preferred feeding or resting areas. However, any displacement is likely to be minimal and temporary, and any disturbed birds will likely relocate to nearby areas. In addition, the presence of one additional vessel in this area will not constitute a significant increase in vessel activity, given the typical levels of activity observed in this region. Moreover, considering the brief duration of the deployment and retrieval process, these activities are unlikely to have a substantial impact on bird species, either directly or indirectly.

Considering the typical levels of vessel activity in this area, the temporary addition of another vessel is not considered a significant increase. Therefore, we rule out any substantial impacts on bird species resulting from the proposed deployment, maintenance, and retrieval of our moorings.

Accidental spillage

Marine vessels are legally obligated to comply with regulations concerning accidental leakages and spillages. We will use vessel operators that comply with all maritime environmental regulations, and therefore the probability of incidents occurring is considered highly unlikely.

Invasive Alien Species

The hulls of ships can serve as a potential means for the introduction of invasive alien species, which can have consequences on the composition and operation of benthic communities and constituent species. However, the boats identified to be used for deployment/retrieval are relatively small and currently operate in Irish waters, and therefore no risk of introduction of alien species is anticipated. Additionally, equipment used will be cleaned and checked before deployment, and will only be used within the proposed sites for the duration of the project. Therefore, we conclude that there is no chance of introduction of alien species because of our study.

In-combination and cumulative effects

Article 6(3) of the Habitats Directive mandates the performance of an Appropriate Assessment (AA) for any plan or project that is anticipated to have a noteworthy impact on one or more European sites, either on its own or when considered alongside other plans or projects. Therefore, even if the anticipated effects of a plan or project are not deemed

significant when assessed in isolation, it is important to evaluate the potential for the plan or project to have significant effects on European sites when combined with other existing, ongoing, or foreseeable future plans or projects.

During a search conducted on September 19, 2023, on the Department's Foreshore applications website, several projects were identified that might have the potential to collectively impact the proposed project, as their areas of interest overlap with the proposed mooring sites for the maritime usage license application (Table 2).

Application	Project	Application Status	Cumulative effects
FS007048 Energia Site Investigation off Wexford Coast	Site Investigations relating to a possible offshore windfarm off the coast of Wicklow	Determination 09/2021	Presence of an additional vessel in the area is not deemed significant
FS007555 - Arklow Bank Wind Park off coast of County Wicklow	Site Investigations	Applied 04/2023	Presence of an additional vessel in the area is not deemed significant
FS007339 Sure Partners Arklow Bank Wind Park Phase 2 Site Investigations	Site Investigations relating to a possible offshore windfarm off the coast of Wicklow at Arklow Bank	Determination 05/2022	Presence of an additional vessel in the area is not deemed significant
FS007232 - DP Energy - Latitude 52 Offshore Windfarm Ltd. Site Investigations off coast of counties Wicklow and Wexford	Site Investigations relating to a possible offshore windfarm off the coast of Wicklow and Wexford	Applied 12/2021	Presence of an additional vessel in the area is not deemed significant
FS007261 Shelmalere Offshore Wind Farm - Site Investigations off Counties Wexford and Wicklow.	Site Investigations relating to a possible offshore windfarm of Counties Wexford and Wicklow.	Consultation 11/2020	Presence of an additional vessel in the area is not deemed significant
FS007471 Floating Cork Offshore Wind Limited Site Investigations for proposed Offshore Wind Farm, off County Cork	Site Investigations relating to a possible offshore windfarm of County Cork	Applied 09/2022	Presence of an additional vessel in the area is not deemed significant

Table 2. Foreshore applications overlapping the proposed mooring sites, their current application status, and possible cumulative effects.

Considering the levels of activity in the vicinity, the temporary introduction of an additional vessel, for one day every 3 months as would be the case during our deployments and redeployments, is not regarded as a significant factor. Consequently, our proposed work will

not contribute to any cumulative effects in conjunction with and the other projects listed above on the conservation objectives of protected sites, as assessed in this report.

Conclusion

This report has been prepared to inform whether there is a need for the Appropriate Assessment Process to screen if the proposed project, individually or in combination with other plans or projects, is likely to have significant effects on any European site(s). To do this, we used the Source-Pathway-Receptor approach to identify the conservation interests of European sites that might be affected by the proposed project.

After careful evaluation, it has been determined that the likelihood of significant effects on the conservation goals of these European sites, whether from this project alone or when combined with other plans and projects for the area, can be safely excluded. Our project involves deploying temporary moorings that are small, non-invasive, silent and are set in the seabed with an anchor. The proposed project is not directly connected with any European site, excluding direct effects on their seabeds. The proposed project will not give rise to likely significant effects on the qualifying interests of any SAC, neither will the proposed project give rise to likely significant in-combination effects on the special conservation interests of any SAC. Therefore, our report concludes that there is no need to proceed the Appropriate Assessment Process.

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Site Specific Conservation Objectives

Wicklow Reef SAC [Site code 002274]

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002274.pdf

Blackwater Bank SAC [Site code 002953]

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

Cahore Polders and Dunes SAC [Site code 000700]

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

Courtmacsherry Estuary SAC [Site code 001230]

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