

<b>Assessment, Research and Data Unit</b>			
<b>Appropriate Assessment Report and Determination for a Maritime Usage Licence</b>			
<b>To:</b>	Maritime Authorisations Unit	<b>From:</b>	Dr. Alison McCarthy Senior Marine Advisor
<b>Date</b>	03/11/2025	<b>Maritime Usage Licence Application No:</b>	MUL240042
<b>Approved for issue by:</b>	John Evans, Director of ARD Unit		
<b>Applicant:</b>	Port of Cork Company, Tivoli Terminal Building, Tivoli Dock & Industrial Estate, Cork, T23 YNT9.		
<b>Type of maritime usage in accordance with Schedule 7 of the Maritime Area Planning Act, 2021:</b>	<i>(3) Marine environmental surveys for the purposes of site investigation or in support of an application under Part XXI of the Act of 2000.</i>		
<b>Location of proposed Maritime Usage:</b>	Dognose Bank, Corkbeg, Whitegate in the southeast of Cork Harbour		
<b>Licence application received:</b>	19/06/2023 (application submitted to Foreshore Division of Department of Environment, Climate and Communications) 01/10/2024 (application transferred to MARA in accordance with (5A) of Section 1E of the Foreshore Act 1933).		
<b>Section 117(6)(a) notice requesting Natura Impact Statement issued:</b>	21/05/2025		
<b>Natura Impact Statement received:</b>	12/08/2025		
<b>Section 117(3) request for additional information (RAI) issued:</b>	20/01/2025, 24/02/2025		
<b>Response to RAI received:</b>	14/02/2025, 03/04/2025		
<b>Public consultation:</b>	22/08/2025 to 21/09/2025		
<b>Submissions from the public received:</b>	None	<b>Observations from public bodies received:</b>	Eight

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## **Statement of Authority**

This Appropriate Assessment Report has been undertaken by the Assessment, Research and Data (ARD) Unit within the Maritime Area Regulatory Authority (MARA), a specialist unit with appropriate expertise in environmental assessment.

## **1 Introduction**

### **1.1 Background**

This maritime usage licence (MUL) application from the Port of Cork Company (the applicant) is for marine environmental surveys for the purposes of site investigation, falling under Schedule 7(3) of the Maritime Area Planning Act 2021, as amended (the MAP Act). The proposed site investigation activities (i.e. the proposed maritime usage) are associated with the future port infrastructure identified in the Port of Cork Masterplan 2050<sup>1</sup> including Offshore Renewable Energy (ORE) infrastructure. The application was originally submitted as a Foreshore application to the Foreshore Division of the Department of Housing, Local Government and Heritage (DHLGH), application Ref. FS007098. The application was transferred to MARA from the Department of Environment, Climate and Communications in accordance with (5A) of Section 1E of the Foreshore Act 1933, as amended, to be assessed as an application for a MUL under the MAP Act.

### **1.2 Legislative Context**

Part 5, Section 117 of the MAP Act sets out the requirements for MARA to undertake appropriate assessment in respect of a MUL application. The EU Habitats Directive (Council Directive 92/43/EC) and the Birds Directive (2009/147/EC) are transposed into Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011, as amended (the Regulations) and by Part XAB of the Planning and Development Act 2000. The requirements for screening for appropriate assessment and for undertaking appropriate assessment are set out in Regulation 42 of the Regulations. Where appropriate assessment is required to be undertaken on a MUL application, a minimum 30-day public consultation period is required on the application and the Natura Impact Statement (NIS) under Section 117 of the MAP Act and in line with Regulation 42 of the Regulations.

### **1.3 Screening for Appropriate Assessment**

MARA issued an appropriate assessment screening determination on 20/05/2025. The determination concluded that the proposal by the Port of Cork Company to carry out marine environmental surveys for the purposes of site investigation will require appropriate assessment, as it cannot be excluded, on the basis of objective scientific information, that the proposed activities, individually or in combination with other plans or projects, will have a significant effect on a European Site(s). Following MARA's screening determination, the

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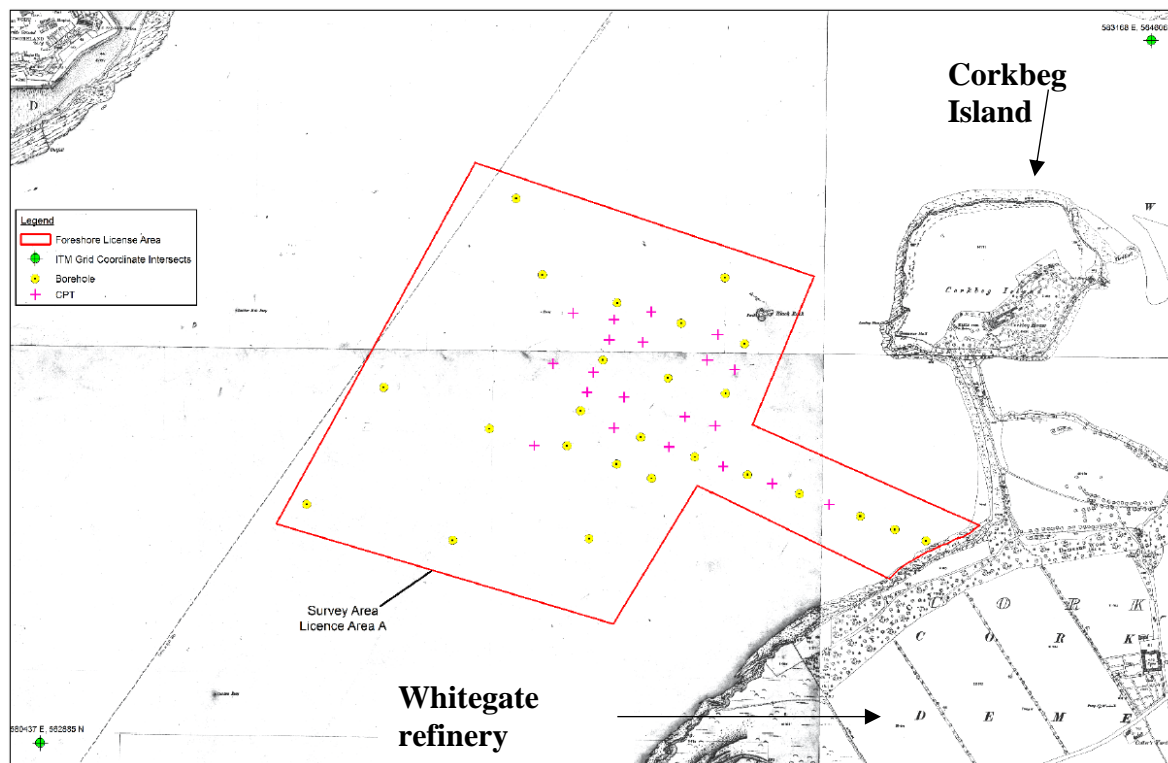
<sup>1</sup> [Port of Cork Masterplan 2050. Published May 2023.](#)

applicant submitted an NIS, dated August 2025. The applicant undertook a period of public consultation on the application and the NIS from 22/08/2025 to 21/09/2025. MARA consulted with a number of public bodies in tandem with the public consultation period. The submissions and observations received are detailed in the accompanying Maritime Usage Licence Assessment Report for this application.

## 2 Location and Proposed Maritime Usage

### 2.1 Site Location and Characteristics

The MUL application area is 98.5 ha and is located at Dognose Bank, Corkbeg, Whitegate in the southeast of Cork Harbour (see Figure 1).



**Figure 1:** MUL application area in Cork Harbour along with indicative sample locations.

The MUL application area comprises a small intertidal area of sandy substrate and low energy sublittoral coarse seabed substrate<sup>2</sup>. Intertidal mudflats are found to the east of Corkbeg Island. Water depths at the MUL application area are up to 18 m. The area is located in the Cork Harbour coastal waterbody (Water Framework Directive (WFD) site code: IE\_SW\_060\_0000), which has been classed as 'at risk' of not achieving good status. The eastern part of the MUL application area is within the main navigation channel in Cork Harbour which is subject to regular maintenance dredging. The site is subject to high levels of shipping activity and is adjacent to the Irving Oil refinery jetty and close to the Whitegate power station. The surrounding land use is primarily agricultural and industrial.

<sup>2</sup> [EMODnet Map Viewer](#) (Circalittoral is the subzone of the rocky sublittoral below that dominated by alga. Infralittoral is a subzone of the sublittoral in which upward-facing rocks are dominated by erect algae.)

## 2.2 Description of the Proposed Maritime Usage

The proposed site investigation activities are shown on Table 1, along with the estimated duration of the activities. The applicant has provided indicative locations for the boreholes and CPT tests (see Figure 1), though the geotechnical and geophysical surveys could take place throughout the MUL application area. The applicant notes the surveys will take approximately 19 weeks in total to complete. The applicant has requested a 5 year licence duration to allow for scheduling and tendering of vessels and equipment.

**Table 1.** The details of the proposed site investigation activities along with the estimated duration.

Proposed maritime usage activities	Estimated duration
Geophysical surveys – sub bottom profiler single channel seismic reflection, underwater multichannel analysis of surface waves (UMASW) and seismic refraction surveys	3 weeks
Geotechnical surveys – approximately 20 boreholes (cable percussive with rotary follow-on), 0.5 m <sup>2</sup> diameter, up to 25 m in depth. A geotechnical drilling rig mobilised on board a jack-up barge will be used (along with a tug vessel).  Approximately 20 Cone Penetration Tests (CPTs), up to 10 m in depth, using a dynamically positioned vessel.	12 weeks
Sub-tidal benthic sampling (using Van Veen Grabs) and video surveys for benthic faunal analysis and habitat classification.	During the months of April to September
Intertidal benthic core samples (19 cm diameter) will be taken in soft intertidal sediments	During the months of April to September
Marine mammal surveys will take place via vantage point surveys from the shoreline.  Underwater acoustic surveys - a submerged microphone attached to specialised recorder device.	Any time during the licence period.  During the geophysical and geotechnical surveys.

### 3 European Sites and Qualifying Interests

Yes – possible visual and above water noise disturbance

#### 3.1 Identification of European sites likely to be affected

Eight European Sites were screened in for appropriate assessment (AA) as part of MARA's appropriate assessment screening determination. This included two Special Areas of Conservation (SACs) and six Special Protection Areas (SPAs). These European sites, their Qualifying Interests (also referred to as Special Conservation Interests or SCIs for the SPA sites) and likely or potential source of impact as a result of the proposed site investigation activities are given in Table 4 below. The potential source of impact identified at the screening stage and possible significance of those impacts on the Qualifying Interests (QIs) are summarised on Table 3.

**Table 3:** Potential direct and indirect impacts on the Qualifying Interests of European sites identified at screening stage and possible significance of those impacts.

Potential impacts	Possible significance of potential impacts (duration, magnitude, etc.)
Above water noise and visual disturbance and displacement	Potential for survey activities generating noise from survey vessels, survey equipment and increased human presence to be at an intensity and duration that would cause significant disturbance to birds
Underwater noise disturbance and displacement to birds	Potential for sound sources from survey activities to be at a level and duration that would cause a significant disturbance to birds
Underwater noise disturbance impacts on marine mammals	Potential for survey activities to be at a level and duration that would significantly impact marine mammals.
Water quality deterioration impacting habitats and species	An increase in suspended sediments from survey activities or water pollution from survey vessels that would cause habitat and associated species degradation

**Table 4:** European sites and qualifying interests which were screened in for appropriate assessment along with potential source of impact and site-specific conservation objectives.

European Site & site code	Approx. distance from MUL application area (km)	Qualifying Interests	Potential source of impact	Site-specific conservation objectives
Cork Harbour SPA [004030]	< 0.5	Little Grebe ( <i>Tachybaptus ruficollis</i> ) [A004] Great Crested Grebe ( <i>Podiceps cristatus</i> ) [A005] Cormorant ( <i>Phalacrocorax carbo</i> ) [A017] Grey Heron ( <i>Ardea cinerea</i> ) [A028] Shelduck ( <i>Tadorna tadorna</i> ) [A048] Wigeon ( <i>Anas penelope</i> ) [A050] Teal ( <i>Anas crecca</i> ) [A052] Pintail ( <i>Anas acuta</i> ) [A054] Shoveler ( <i>Anas clypeata</i> ) [A056] Red-breasted Merganser ( <i>Mergus serrator</i> ) [A069] Oystercatcher ( <i>Haematopus ostralegus</i> ) [A130] Golden Plover ( <i>Pluvialis apricaria</i> ) [A140] Grey Plover ( <i>Pluvialis squatarola</i> ) [A141] 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] Redshank ( <i>Tringa totanus</i> ) [A162] Black-headed Gull ( <i>Chroicocephalus ridibundus</i> ) [A179] Common Gull ( <i>Larus canus</i> ) [A182] Lesser Black-backed Gull ( <i>Larus fuscus</i> ) [A183]	Above water noise and visual disturbance and displacement to birds.  Below water noise disturbance and displacement to birds.  Water quality deterioration impacting habitats and species.	<a href="#">NPWS (2014)</a> Conservation Objectives: Cork Harbour SPA 004030. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

		Common Tern ( <i>Sterna hirundo</i> ) [A193] Wetland and Waterbirds [A999]		
Ballycotton Bay SPA [004022]	15–20 (direct distance)	Teal ( <i>Anas crecca</i> ) [A052] Ringed Plover ( <i>Charadrius hiaticula</i> ) [A137] Golden Plover ( <i>Pluvialis apricaria</i> ) [A140] Grey Plover ( <i>Pluvialis squatarola</i> ) [A141] Lapwing ( <i>Vanellus vanellus</i> ) [A142] Black-tailed Godwit ( <i>Limosa limosa</i> ) [A156] Bar-tailed Godwit ( <i>Limosa lapponica</i> ) [A157] Curlew ( <i>Numenius arquata</i> ) [A160] Turnstone ( <i>Arenaria interpres</i> ) [A169] Common Gull ( <i>Larus canus</i> ) [A182] Lesser Black-backed Gull ( <i>Larus fuscus</i> ) [A183]	Above water noise and visual disturbance and displacement to birds using suitable habitat in vicinity.  Below water noise disturbance and displacement to birds using suitable habitat in vicinity	<a href="#">NPWS (2014)</a> Conservation Objectives: Ballycotton Bay SPA 004022. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
Sovereign Islands SPA [004124]	20–25	Cormorant ( <i>Phalacrocorax carbo</i> ) [A017]	Above and below water noise and visual disturbance and displacement to foraging birds.	<a href="#">NPWS (2025)</a> Conservation Objectives: Sovereign Islands SPA 004124. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
Ballymacoda Bay SPA [004023]	20–25	Common Gull ( <i>Larus canus</i> ) [A182] Lesser Black-backed Gull ( <i>Larus fuscus</i> ) [A183]	Above and below water noise and visual disturbance and displacement to foraging birds.	<a href="#">NPWS (2015)</a> Conservation Objectives: Ballymacoda Bay SPA 004023. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

Old Head of Kinsale SPA [004021]	25–30	Kittiwake ( <i>Rissa tridactyla</i> ) [A188] Guillemot ( <i>Uria aalge</i> ) [A199]	Above and below water noise and visual disturbance and displacement to foraging birds.	<a href="#">NPWS (2025)</a> Conservation Objectives: Old Head of Kinsale SPA 004021. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
Courtmacsherry Bay SPA [004219]	30–35	Common Gull ( <i>Larus canus</i> ) [A182]	Above and below water noise and visual disturbance and displacement to foraging birds.	<a href="#">NPWS (2014)</a> Conservation Objectives: Courtmacsherry Bay SPA 004219. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
Hook Head SAC [000764]	<100	<i>Tursiops truncatus</i> (Common Bottlenose Dolphin) [1349] <i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Underwater noise impacts from survey activities.	<a href="#">NPWS (2025)</a> Conservation Objectives: Hook Head SAC 000764. Version 2. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
Roaringwater Bay and Islands SAC [000101]	<100	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Underwater noise impacts from survey activities.	<a href="#">NPWS (2011)</a> Conservation Objectives: Roaringwater Bay and Islands SAC 000101. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

## 4 Assessment and Mitigation

### 4.1 Assessment of Likely/Possible Impacts on European Sites

The potential impacts on European sites and their QIs in view of the sites' conservation objectives are summarised as above water noise and visual disturbance and displacement, underwater noise disturbance and displacement, and water quality deterioration. This section discusses those impacts individually. Any mitigation measures recommended on foot of the assessment in this section are included in Section 4.6 - Mitigation Measures.

#### 4.1.1 Above water noise and visual disturbance and displacement

Table 3 identified the potential for survey activities generating noise to be at an intensity and duration that would cause significant disturbance to birds, including birds foraging in nearby intertidal areas. Cork Harbour SPA supports nationally and internationally important numbers of waders and waterbird species, including wintering waterbirds. The site is also designated for breeding Common tern, though it is not known to breed in the vicinity of the MUL application area<sup>3</sup>. Most of the main intertidal areas in Cork Harbour form part of the SPA and the protected wetland habitats cover 2,587 ha. Part of the SPA is the intertidal mudflat area at Whitegate Bay which is <0.5 km from the proposed MUL application area. Due to its proximity to the Ballycotton Bay SPA, this intertidal mudflat area may also support waterbirds from that SPA.

The applicant notes that the primary disturbance caused to birds foraging on the intertidal area appears to be from unexpected movements and impulsive noise (e.g. from dogs/dog walkers). Site investigation noises will be continuous in nature and not significantly above background levels in the busy Cork Harbour area. Any noise and visual disturbance caused to birds in the intertidal part of the SPA would be short-term and would not cause a significant decrease in the range, timing and intensity of use of areas by the SCI bird species. Table 3 identified that above water noise and visual disturbance might also impact diving seabird species from a number of coastal SPAs that may forage in Cork Harbour. Again, the disturbance and displacement from foraging in and around the MUL application area would be short term and due to the size and scale of the activities it would not impact on the availability or access to suitable foraging habitat for those seabirds identified on Table 3.

There will be no significant impact from above water noise on the conservation objectives, or bird populations, of those SPAs listed on Table 3 from the proposed activities.

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<sup>3</sup> Known Common tern breeding sites are on Rocky Island near Haulbowline, Spike Island, Ringaskiddy, Monstown Creek and on artificial structures at Ringaskiddy.

#### 4.1.2 Underwater noise disturbance and displacement

##### *Birds*

The potential for underwater noise from the activities to cause a significant disturbance to birds was identified at the AA screening stage (see Table 3). The impact of underwater noise disturbance on birds is not greatly understood, though some studies have shown behavioural responses in diving birds (on Cormorants, Guillemots and Lesser scaup) which spend comparatively longer periods of time underwater than other birds. Flushing disturbance can be expected to displace diving seabirds from close proximity to the survey vessels and underwater equipment, thereby limiting their exposure to the highest sound pressures generated. The likelihood of these birds being in the vicinity of the noise generating activities (geophysical and geotechnical) is low, due to the surface activity associated with such operations disturbing the birds prior to commencement of the underwater noise. There is not expected to be an impact on wading birds from underwater noise due to the limited amount of time they would be exposed to the noise and given the temporary nature of the proposed activities.

Given the temporary nature of the proposed activities, the mobile nature of the birds and their displacement due to flushing, underwater noise would be very unlikely to have a significant effect on diving seabird populations from those SPAs with diving bird species as listed on Table 3.

##### *Marine Mammals*

The appropriate assessment screening report and determination issued by MARA identified the potential for underwater sound sources from survey activities to be at a level and duration that would cause a significant negative impact on marine mammals from Hook Head SAC and Roaringwater Bay and Island SAC (see Table 3). Bottlenose dolphin and Harbour porpoise are QIs of Hook Head SAC and harbour porpoise is a QI of Roaringwater Bay and Islands SAC. Both sites are approximately 100 km from the MUL application area. It is possible that individuals protected as part of both SACs may forage within Cork Harbour. Both species have been frequently recorded in the harbour, mainly around the mouth of the harbour and Roches Point, about 2 km south of the MUL application area and in small numbers. In terms of the conservation objectives of both European sites, the relevant target for marine mammals is that underwater noise would not be at a level that would result in a significant negative impact to their populations.

Marine mammals depend on sound for a wide range of functions including navigation, perception of their environment, communication, prey identification and capture, and the detection of predators. The production of underwater noise from the proposed site investigation activities could interfere with these functions by inducing permanent auditory injury (or Permanent Threshold Shift) at very close range or temporary hearing impairment

(or Temporary Threshold Shift – TTS) and disturbance at further distances from the noise source. The frequency of noise produced by the geophysical surveys (described on Table 1) as well as the borehole drilling are within the hearing ranges of Harbour porpoise (200 Hz–180 kHz) and Bottlenose dolphin (150 Hz–160 kHz).

For the geophysical surveys, PTS and TTS are only likely within very close range (<1 m) of the sound source, based on published research of similar drilling activity. Behavioural disturbance, however, could occur up to 5 km from the geophysical surveys, which is the Effective Deterrence Range<sup>4</sup> for Harbour porpoise, which is the most sensitive to noise disturbance from geophysical surveys. Mitigation measures are therefore required in order to minimise adverse impacts on Harbour porpoise and Bottlenose dolphin from Roaringwater Bay SAC and Hook Head SAC, that might be foraging in or around the MUL application area. Section 4.6 details the mitigation measures which must be undertaken during geophysical and geotechnical surveys on a precautionary basis. Marine Mammal Observers must be employed for all geophysical and geotechnical surveys and the current national guidance<sup>5</sup> on underwater noise must be adhered to. The current guidance includes the provision of a 30-minute soft start, or ramp-up procedure prior to commencement of the surveys and a monitored zone around the survey vessels. No surveys can commence if a marine mammal is detected within the monitored zone. Taking into account these mitigation measures (see Section 4.6), then there will not be significant adverse impacts on marine mammal populations.

#### 4.1.3 Water quality deterioration

The applicant proposes to utilise a variety of survey equipment, survey vessels, a jack-up barge and a tug vessel. Such survey activities have the potential to lead to accidental spillages of harmful materials (e.g. fuel, oil or wastewater) into marine waters or the intertidal area, potentially affecting water quality. The geotechnical activities as well as the use of a jack-up barge could increase suspended sediments in the water column. This could in turn lead to sediment deposition on nearby coastal habitats and habitat degradation. Whitegate Bay is <0.5 km from the MUL application area and it forms part of Cork Harbour SPA. Lough Beg, which also forms part of the SPA, is < 2 km to the west of the MUL application area. There is the potential for water quality deterioration to impact on the intertidal mudflat and wetland habitat areas in these parts of the SPA, which in turn could impact the benthic and intertidal species assemblages which the protected waders and waterbirds feed on.

With regard to water quality impacts from accidental spillages, the applicant notes in the NIS that there will be no refuelling of vessels or equipment carried out in the MUL application area and that a Project Environmental Implementation Plan will be implemented. The

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<sup>4</sup> [JNCC Report 2025](#)

<sup>5</sup> [NPWS 2014](#).

applicant also notes that an ecologist will be onsite for the duration of the activities. Mitigation is required in Section 4.6 to ensure that these measures are taken, in accordance with the plans and particulars submitted with the MUL application.

Approximately 15 m<sup>3</sup> of drill arisings (drilling muds) will be generated cumulatively from the boreholes. The applicant notes that drill arisings will be brought to surface level in a casing to prevent contact with the seawater and then bagged and disposed of accordingly. Mitigation is required to ensure that this is carried out (see Section 4.6). It is recommended to include a condition in any licence granted to ensure that the holder conforms to the appropriate certification standards for preventing pollution from vessels, as required by the Marine Survey Office (see Section 4.6). It is also recommended that a condition should be included in any licence granted to ensure the holder is prepared for any accidental oil pollution events by having a response plan in place. As noted, the applicant states that they will have an ecologist onsite for the duration of the activities, which will ensure these measures are implemented correctly. Given these measures, it is unlikely that spillages of harmful materials from the survey activities will occur.

In relation to suspended sediments and sediment deposition, the footprint of the boreholes and grab sampler is relatively small (approximately is 0.5 m<sup>2</sup> and 0.1 m<sup>2</sup> respectively). Only minimal quantities of suspended sediments are expected to be released from these geotechnical surveys and from positioning of the jack-up barge. The seabed in the MUL application area is described as coarse substrate, which is expected to resettle quickly and to not dissipate widely.

Considering this, and the mitigation recommended for the prevention of water quality deterioration, as discussed, it is not expected that water quality deterioration will occur from the proposed activities. Subsequent impacts on the intertidal and wetland SPA habitats and associated species assemblages are not expected, subject to the recommended mitigation measures which are outlined in Section 4.6.

#### **4.2 Assessment of In-combination effects**

Article 6(3) of the Habitats Directive requires that an appropriate assessment 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 or possible 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 plans or projects must also be assessed. All types of plans or projects that could, in-combination with the project under consideration, have a significant effect, should be taken into account. This in-combination assessment has been undertaken using professional and scientific judgement.

#### 4.2.1 Defining the Cumulative Effects Spatial Scope (CESS)

Impacts of underwater noise associated with the proposed activities are considered to have the widest spatial reach, with Harbour porpoise being most sensitive to noise disturbance. The CESS was defined at appropriate assessment screening stage as 10 km, based on geophysical survey equipment recommended Effective Deterrence Ranges.

#### 4.2.2 Defining the Cumulative Effects Temporal Scope (CETS)

The temporal scope for examination of cumulative effects has been defined considering the period over which the proposed activities are proposed. The applicant has applied for a 5-year licence duration and thus the Cumulative Effects Temporal Scope (CETS) is 5 years.

#### 4.2.3 Impacts and Pathway Identification

Impact	Potential Cumulative Pathway
Above water noise and visual disturbance and displacement	Pathway possible via light and sound travelling through air with impacts possible within the CESS where there is spatial and temporal overlap with other visual and above water noise producing projects.
Disturbance and displacement from underwater noise	Pathway possible via sound travelling through water with impacts possible within 10 km, or the CESS, and where there is temporal overlap with other underwater noise producing projects.
Deterioration in water quality causing habitat and species degradation	Pathway possible via substances in the water or on intertidal areas with impacts possible where there is spatial and temporal overlap with similar activities.

#### 4.2.4 Prediction:

The magnitude and extent of identified likely cumulative effects have been predicted below.

##### *Above water noise and visual disturbance and displacement*

There is the potential for increased visual and above water noise disturbance and displacement if other relevant projects were to take place at the same time.

##### *Disturbance and displacement from underwater noise*

There is the potential for increased underwater noise disturbance effects if other relevant projects, capable of producing similar underwater noise sources, were to take place at the same time.

##### *Deterioration in water quality*

There is potential for increased risk of accidental incidents or water quality deterioration if other relevant projects were to take place in the vicinity of the proposed activities at the same time.

#### 4.2.5 Identification of Plans or Projects that could act in combination:

A search was carried out on 03/11/2025 of relevant databases (including EPA, Foreshore, MARA, planning authorities) for other plans and projects with characteristics that may cause in-combination effects with the proposed site investigation activities, on the QIs of the European sites identified on Table 3. Particular attention has been given to those projects shown on Table 4, which are within the CESS and CETS of the proposed activities and as they may have the potential to cause cumulative effects on the QIs of those sites listed on Table 3. The in-combination assessment also considers the potential cumulative impacts from minor development projects in the CESS and CETS of the proposed activities.

Table 4: Those projects to which particular attention is given due to the nature and location of the activities in the context of this in-combination assessment.

Application Ref.	Project description	Distance from application area (km)	Project Status
S0013-03	EPA Dumping at Sea permit – Port of Cork Company	overlap	Permitted
FS007126	Foreshore licence, maintenance dredging – Port of Cork Company	overlap	Granted
FS007136	Foreshore application, site investigations – ESB Wind Development Ltd.	overlap	Applied
OA04.321875	An Coimisiún Pleanála - Planning application for redevelopment of port facilities	<3	Applied
MUL230029	Dredging and deposit of dredged material - Department of Defence	<3	Applied
S0005-03	EPA Dumping at Sea permit – Department of Defence	<3	Granted
S0021-03	EPA Dumping at Sea permit – Port of Cork Company	<4	Applied
S0039-01	EPA Dumping at Sea permit – Port of Cork Company	<4	Applied
MUL240036	Marine environmental surveys for the purposes of site investigation - EirGrid	<5	Granted

The following plans in particular were identified as having the potential to result in in-combination effects. In general these plans support ORE development including supporting infrastructure in ports and harbours:

- The Climate Action Plan 2025;
- Port of Cork Masterplan 2050;
- Cork County Development Plan 2022–2028;
- The National Development Plan 2021–2030, and
- South Coast Designated Maritime Area Plan (SC-DMAP).

#### 4.2.6 In-Combination Effects Assessment conclusion

There is potential for in-combination effects on the conservation objectives of the European sites addressed in this appropriate assessment, where impacts from the proposed site investigation activities could interact synergistically with other plans and projects, to create adverse effects on the integrity of the European sites. In order for synergistic interactions to occur both sources of impacts must reach a threshold of interactive potential that is of sufficient character, magnitude, duration or intensity. The assessment in Section 4.1 of this report, has already assessed the potential for significant effects of the proposed site investigation activities on European sites.

The main pressures resulting from the proposed site investigation activities on European sites were identified as above water noise and visual disturbance, below water noise disturbance and water quality deterioration. Particular attention was given to those projects listed above (Table 4) as having spatial and temporal overlap.

It is not possible to exclude the possibility of in-combination effects on the conservation objectives of the European sites considered in this assessment as a result of underwater noise, in combination with those projects which will produce similar underwater noise sources. Therefore, a suitable mitigation measure must be included in any Maritime Usage Licence granted to avoid in-combination effects as a result of underwater noise (see Section 4.6).

#### 4.3 Residual Effects

This assessment has identified Likely/Possible Significant Impacts on European Sites and their conservation interests in Section 4.1 and recommends mitigation measures for each in Section 4.6 below. It is considered that the mitigation measures described and their implementation through licence conditions will remove, or reduce to imperceptible levels, all negative impacts and that residual effects will not arise.

#### 4.4 Assessment of Transboundary effects

The mitigation measures proposed as part of this appropriate assessment will mitigate against any transboundary effects on other European sites.

#### 4.5 Public consultation

A public consultation was undertaken from 22/08/2025 to 21/09/2025 with the public invited to make submissions. In addition to the public consultation, observations were invited from relevant public bodies. No submissions were received on foot of the public consultation, while eight submissions were received from relevant public bodies. These submissions have been considered as part of the appropriate assessment and are summarised in Section 6 of the associated Maritime Usage Licence Assessment Report undertaken as part of the MUL application assessment.

## **4.6 Mitigation Measures**

Mitigation measures for those impacts identified in Section 4.1 - Assessment of Likely/Possible Significant Impacts on European Sites and their conservation interests are detailed below.

### 4.6.1 Underwater noise mitigation

The most up to date national underwater noise guidance must be adhered to for all geophysical and geotechnical activities, including the relevant monitored zones for the particular geophysical surveys being undertaken. Should there be a revised or updated national guidance published then that should be adhered to.

#### Marine Mammals

- (i) The Holder shall appoint a marine mammal observer(s) for the purposes of overseeing the Permitted Maritime Usage. The Holder shall ensure the marine mammal observer(s) shall satisfy the requirements of the most up to date national guidance. During the activity the Holder shall comply with the directions of the marine mammal observer(s).
- (ii) The Holder shall implement risk control and mitigation measures for marine mammals in strict accordance with the most up to date national guidance.
- (iii) The Holder shall, within 30 days of completion of the Permitted Maritime Usage, forward a report of the marine mammal observer(s) operations and mitigation undertaken, to [offshore@npws.gov.ie](mailto:offshore@npws.gov.ie) and [compliance@mara.gov.ie](mailto:compliance@mara.gov.ie)
- (iv) The Holder shall publish the report and recording and data forms on their website within 60 days of completion of the Permitted Maritime Usage unless otherwise agreed with the Grantor.

### 4.6.2 Water quality mitigation

As noted in Section 4.6.1, the Holder must ensure that the activities are carried out in accordance with the plans and particulars submitted in support of the application. Drill arisings must be collected and disposed of appropriately, as follows:

- The Holder shall take all practicable efforts to ensure that any arisings from boring and drilling activities are collected and are stored and disposed of in accordance with the relevant National and European waste legislation and protocols as may be amended from time to time.

The Marine Survey Office (MSO) is responsible for the implementation of all national and international legislation in relation to safety of shipping and the prevention of pollution of the marine environment from ship-based sources. The following mitigation measure is required to ensure that all appropriate standards are met, as required by the MSO.

- The Holder shall ensure that all vessels engaged in this Permitted Maritime Usage conform to Irish Certification standards for vessels, as required by the Marine Survey Office.

To ensure that the Holder of any licence granted is prepared in advance to deal with accidental spillages from survey vessels, the following mitigation measure is required:

- Accidental events

The Holder shall ensure that there is an oil pollution emergency plan on-board any survey vessels. This plan should specify:

- (i) Information on the location and detail of spill response resources on-board;
- (ii) Information on crew training in relation to oil pollution response;
- (iii) How crew will interface with other site investigation operators, where applicable.

#### 4.6.3 In-combination mitigation

##### In-combination effects



- (i) Prior to the commencement of the Permitted Maritime Usage, the Holder shall coordinate with other authorisation holders carrying out geophysical, seismic and geotechnical activities within a 10 km radius of the Licensed Area.
- (ii) Where a vessel-to-vessel distance of greater than 10 km cannot be maintained with respect to geophysical, seismic and geotechnical activities, the Holder shall coordinate with other authorisation holders to prevent temporal overlap of the activities. Where the Holder can submit evidence that there is a vessel-to-vessel distance of greater than 10 km, no temporal co-ordination of activities is required.
- (iii) Where the Holder becomes aware of temporal overlap that cannot be resolved within the prescribed distance, the Holder shall notify the Grantor who shall determine the timing of activities.
- (iv) Records of all engagements held and agreements reached, if any, shall be maintained by the Holder and made available to the Grantor if requested.

## **5 Appropriate Assessment Conclusion**

The applicant provided an NIS which detailed the potential impact of the proposed project on relevant European sites and whether these impacts would adversely affect the integrity of the sites in light of their conservation objectives. The appropriate assessment screening process identified likely/possible significant impacts due to above and below water noise and visual disturbance and displacement and water quality deterioration. Likely significant impacts from the proposed activities could not be ruled out, beyond reasonable scientific


doubt, without mitigation. The potential for in-combination effects from the proposed activities with other plans and projects could not be ruled out, beyond reasonable scientific doubt, without mitigation.

Mitigation measures were identified to ensure that impacts on European sites and their QIs and SCIs do not occur. Therefore, with adherence to the mitigation measures specified in section 4.6 Mitigation Measures, and in view of best scientific knowledge, and of the sites' conservation objectives, the project, individually, or in-combination with other plans or projects, will not have adverse effects on European sites.

Signature and Date of Recommending Marine Advisor	 <b>Dr. Alison McCarthy</b>  Senior Marine Advisor Assessment, Research and Data 03/11/2025
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## 6 Appropriate Assessment Determination

Having considered this report, the documents submitted by the Port of Cork Company, the observations received on foot of the public consultation and public body consultation on the application, along with my own assessment, it can be concluded, and I determine, for the purposes of Article 6(3) of the Habitats Directive and Regulation 42(11) of the Birds and Natural Habitats Regulations, that the **proposal to undertake ‘Marine environmental surveys for the purposes of site investigation or in support of an application under Part XXI of the Act of 2000’ by the Port of Cork Company Tivoli Terminal Building, Tivoli Dock & Industrial Estate, Cork, T23 YNT9 (MUL240042)** (either individually or in combination with any other plans or projects), will not adversely affect the integrity of any European sites, in view of the sites’ conservation objectives, subject to the implementation of the mitigation measures specified in Section 4.6 Mitigation Measures adopted and outlined above, which must be included as conditions to any consent that may be granted in respect of the respective maritime usage licence application.

Signature and Date of Decision Maker	 <hr/> <b>John Evans</b> Director of Assessment, Research and Data 07/11/2025
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