

Assessment, Research and Data Unit Appropriate Assessment Report and Determination for a Maritime Usage Licence			
To:	Maritime Authorisations Unit	From:	Dr. Ciar O'Toole Senior Marine Advisor
Date	24/09/2025	Maritime Usage Licence Application No:	MUL240023
Approved for issue by:		John Evans, Director of ARD Unit	
Applicant:		Irish Rail, Engineering & New Works Building, Inchicore, Dublin 8.	
Type of maritime usage in accordance with Schedule 7 of the Maritime Area Planning Act, 2021:		<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 in Support of the East Coast Rail Infrastructure Protection Projects.</i>	
Location of proposed Maritime Usage:		Various sites along coast of Co.'s Dublin and Wicklow	
Licence application received:		15/07/2024	
AA Screening determined		05/02/2025	
Natura Impact Statement received:		21/03/2025	
Further information requests issued:		06/02/2025	
Responses to further information requests received:		21/03/2025	
Public consultation:		10/07/2025 to 15/08/2025	
Submissions from the public received:		One	
Submissions from public bodies received:		Seven	

Contents

Statement of Authority	1
1 Introduction	1
1.1 Background.....	1
1.2 Legislative Context	1
1.3 Screening for Appropriate Assessment.....	1
2 Location and Proposed Maritime Usage	2
2.1 Site Location and Characteristics	2
3 European Sites and Qualifying Interests.....	3
3.1 Identification of European sites likely to be affected	3
4 Assessment and Mitigation.....	19
4.1 Assessment of Likely/Possible Impacts on European Sites.....	19
4.2 Assessment of In-combination effects.....	22
4.3 Residual Effects	26
4.4 Assessment of Transboundary effects	26
4.5 Public consultation	26
4.6 Mitigation Measures	26
5 Appropriate Assessment Conclusion	29
6 Appropriate Assessment Determination	30

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

Application Documents submitted.

A number of documents were submitted by the applicant, Irish Rail Ltd., as part of their application for a Maritime Usage Licence (MUL). The relevant documents submitted by the applicant include the MUL application form dated 7 June 2024, and the Natura Impact Statement (NIS) report submitted to MARA on 20 March 2025.

Brief description of the project

Iarnród Éireann (IÉ) are proposing to conduct geotechnical, geophysical, ecological and marine archaeological site investigations to inform the East Coast Railway Infrastructure Protection Project (ECRIPP) required to defend long sections of the Dublin to Rosslare coastal rail line from coastal erosion and flooding. The proposed survey works are planned across four site locations along the Dublin and Wicklow coasts.

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 published an appropriate assessment (AA) screening determination on 06/02/2025. The AA screening determination concluded that the proposed maritime usage application 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 applicant submitted a Natura Impact Statement, submitted to MARA on 21 March 2025. The applicant undertook a period of public consultation on the application and the NIS from 10 July 2025 to 15 August 2025. MARA consulted with a number of public bodies in tandem with the public consultation period. These are detailed in the accompanying Maritime Usage Licence Assessment Report prepared by the ARD Unit.

2 Location and Proposed Maritime Usage

2.1 Site Location and Characteristics

The proposed survey works, across four site locations along the Dublin and Wicklow coasts (Figure 1, Area's A-D), will include upper foreshore intertidal and sub tidal works (Table 1). The activities have been assessed as potentially occurring at any time of year. Table 2 shows the predicted noise levels for the relevant subtidal survey activities.

Table 1: Proposed marine environmental surveys and the estimated duration of activities, across all sites, unless otherwise stated.

Proposed activity	Estimated duration
Geotechnical surveys – borehole surveys, trial pits, cone penetration tests, sediment sampling	Across the first 12 months, only in Area A
Geophysical– seismic refraction tomography and multichannel analysis of surface waves (land-based), multibeam echo sounder (boat based)	Across the first 12 months, only in Area A
Benthic surveys – intertidal transects, subtidal day grabs	Multiple occasions across proposed licence period
Ecological surveys- breeding birds, bat surveys, day grabs, drop down camera surveys	Multiple occasions across proposed licence period
Metal detector surveys	Multiple occasions across proposed licence period

The applicant has stated that the geophysical and geotechnical works will occur in the first 12 months of receiving the licence and that the other works listed in Table 1 will occur multiple times over the licence duration. The applicant has requested a licence duration of 10 years.

There are four distinct areas of the proposed maritime usage licence, as shown in Figure 1; A: Merrion Gates to Dun Laoghaire, B: Dalkey Tunnel to Killiney South, C: Bray Head to Greystone North Beach and D: Greystones South to Wicklow.

Table 2 Summary of the noise sources from geophysical and geotechnical surveys.

Noise Source	Frequency	Sound Pressure Level (dB re 1 ^μ Pa @ 1m)
Multi beam Echo sounder	200 - 700 kHz	200-228 dB
Shipping Noise	50 - 300 kHz	160-175 dB

Brief description of the site characteristics

The proposed maritime usage area is comprised of a number of marine habitats. These habitats include mudflats and sandflats not covered by seawater at low tide, annual vegetation of drift lines, salicornia and other annuals colonising mud and sand, embryonic shifting dunes, European dry heaths, reefs, vegetated sea cliffs of the Atlantic and Baltic

coasts, perennial vegetation of stony banks, Atlantic salt meadows, Mediterranean salt meadows, calcareous fens and alkaline fens.

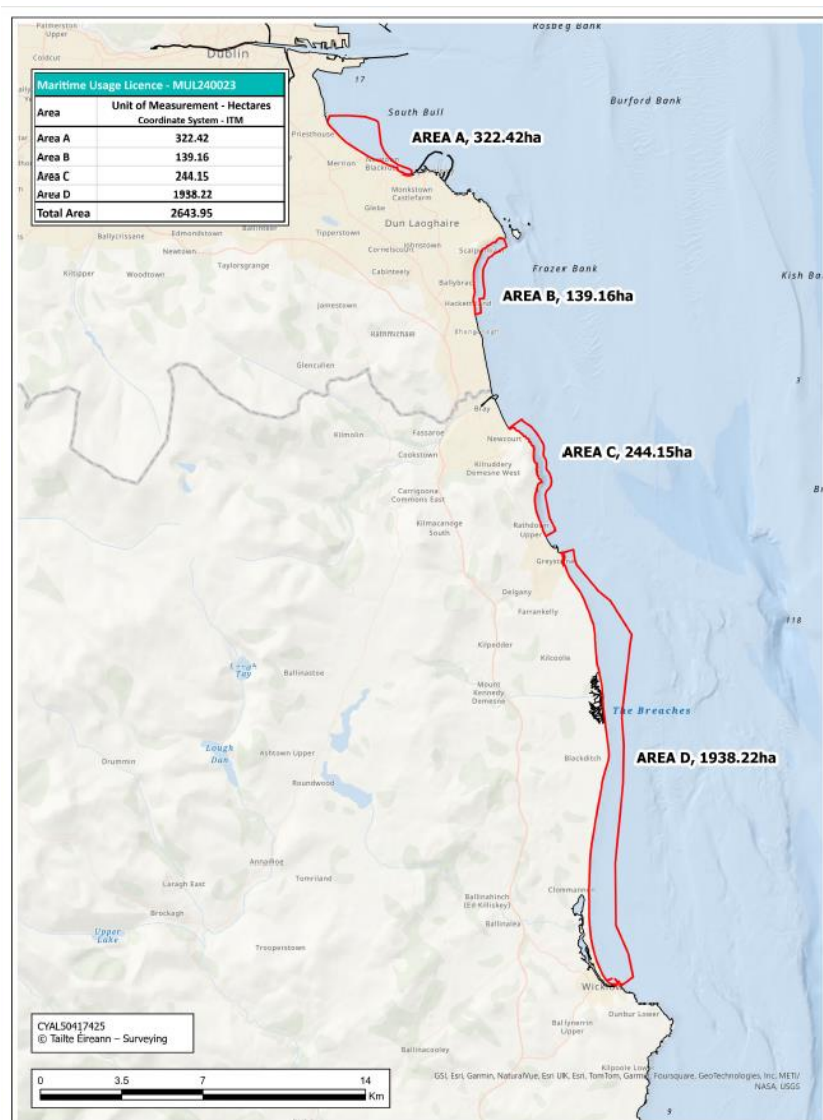


Figure 1: Proposed Maritime usage licence Areas A to D.

3 European Sites and Qualifying Interests

3.1 Identification of European sites likely to be affected

Site-specific conservation objectives for sites, habitats and species listed in Table 4 were used when considering potential impacts of the proposed activity. Details of these sites are available on the NPWS website (<https://www.npws.ie/protected-sites>). Sixty-nine European Sites were screened in for appropriate assessment (AA) as part of MARA's appropriate assessment screening determination dated 31 January 2025. This included fifty-five Special Areas of Conservation (SACs) and fourteen 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. Pressures and threats for all Qualifying Interests and Species of Conservation Interests are considered in the Article 12¹ and Article 17² reports produced by the NPWS and are considered when assessing potential impacts of the proposed maritime usage.

The distances given in Table 4 are from the MUL application area which is the red line boundary shown on Figure 1. 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 impacts (duration, magnitude, etc.)
Disturbance from above ground/water and underwater noise, intertidal disturbance	Possible temporary disturbance to birds foraging in the intertidal and coastal areas, and for nesting bird species. A number of bird species listed as SCI's could potentially be temporarily disturbed and displaced by the proposed works as they are all either breeding or feeding in the SAC at various times of year. Breeding Roseate tern and Little tern would be of particular concern. Potential disturbance to marine mammal species. Possible temporary disturbance and displacement for seal species potentially using area for haul out
Habitat disturbance	Temporary disturbance to habitats with SACs from proposed activities
Habitat loss	Temporary habitat loss
Habitat degradation	Temporary degradation of habitats
Introduction of invasive species	Introduction to the intertidal of staff and heavy machinery across multiple sites introduces a risk of introducing invasive species. Survey vessels also have a risk of introducing marine invasive species.

¹ <https://www.npws.ie/status-and-trends-ireland%E2%80%99s-bird-species-%E2%80%93-article-12-reporting>

² <https://www.npws.ie/publications/article-17-reports/article-17-reports-2019>

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 Code	Distance from the MUL area (km) or other unit used	List of Qualifying Interests	Potential source of impact	Site specific conservation objective
South Dublin Bay SAC (Site Code IE000210)	Within site boundary	Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Embryonic shifting dunes [2110]	Habitat disturbance, loss or degradation Introduction of invasive species	NPWS (2013) Conservation Objectives: South Dublin Bay SAC 000210. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
Bray Head SAC (Site Code IE 000714)	Within site boundary	Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] European dry heaths [4030]	Habitat disturbance, loss or degradation Introduction of invasive species	NPWS (2017) Conservation Objectives: Bray Head SAC 000714. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.
The Murrough Wetlands SAC (Site Code IE 002249)	Within site boundary	Annual vegetation of drift lines [1210] Perennial vegetation of stony banks [1220] Atlantic salt meadows (Glaucopuccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210] Alkaline fens [7230]	Habitat disturbance, loss or degradation Introduction of invasive species	NPWS (2021) Conservation Objectives: The Murrough Wetlands SAC 002249. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

Rockabill to Dalkey SAC (Site Code IE003000)	Less than 1 km	Reefs [1170] <i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Habitat disturbance, loss or degradation Introduction of invasive species Disturbance from above ground/water and underwater noise	NPWS (2013) Conservation Objectives: Rockabill to Dalkey Island SAC 003000. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
North Dublin Bay SAC (Site Code IE000206)	Approx 5 km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	NPWS (2013) Conservation Objectives: North Dublin Bay SAC 000206. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
Codling Fault Zone SAC (Site code IE003015)	Approx. 20 km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	NPWS (2025) Conservation Objectives: Codling Fault Zone SAC 003015. Version 2. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
Lambay Island SAC (Site Code IE000204)	Approx. 20 km	<i>Halichoerus grypus</i> (Grey Seal) [1364] <i>Phoca vitulina</i> (Harbour Seal) [1365] <i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise Intertidal disturbance	NPWS (2024) Conservation Objectives: Lambay Island SAC 000204. Version 2. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
Carnsore Point SAC [Site code IE002269]	Approx 150km	<i>Phoca vitulina</i> (Harbour Seal) [1365]	Disturbance from above ground/water and underwater noise	NPWS (2024) Conservation Objectives: Carnsore Point SAC 002269. Version 2. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

Slaney River Valley SAC [Site code IE000781]	> 100 km	<i>Phoca vitulina</i> (Harbour Seal) [1365]	Disturbance from above ground/water and underwater noise Intertidal disturbance	NPWS (2011) Conservation Objectives: Slaney River Valley SAC 000781. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
Hook Head SAC [Site code IE000764]	> 100 km	<i>Tursiops truncatus</i> (Common Bottlenose Dolphin) [1349] <i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	NPWS (2025) Conservation Objectives: Hook Head SAC 000764. Version 2. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
Saltee Islands SAC [Site code IE0007071]	> 100 km	<i>Halichoerus grypus</i> (Grey Seal) [1364]	Disturbance from above ground/water and underwater noise Intertidal disturbance	NPWS (2011) Conservation Objectives: Saltee Islands SAC 000707 and Saltee Islands SPA 004002. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
Roaringwater Bay and Islands SAC [Site code IE000101]	> 100 km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	NPWS (2011) Conservation Objectives: Roaringwater Bay and Islands SAC 000101 Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
Blasket Islands SAC [Site code IE002172]	> 100 km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	NPWS (2014) Conservation Objectives: Blasket Islands SAC 002172. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

Kenmare River SAC [Site code IE002158]	> 100 km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	NPWS (2013) Conservation Objectives: Kenmare River SAC 002158. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
Belgica Mound Province SAC [Site code IE002327]	> 100 km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	NPWS (2025) Conservation Objectives: Belgica Mound Province SAC 002327. Version 2. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
Inishmore Island SAC [Site code IE000213]	> 100 km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	NPWS (2024) Conservation Objectives: Inishmore Island SAC 000213. Version 2. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
Kilkieran Bay and Islands SAC [Site code IE002111]	> 100 km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	NPWS (2014) Conservation Objectives: Kilkieran Bay and Islands SAC 002111. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
West Connacht Coast SAC [Site code IE002998]	> 100 km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	NPWS (2025) Conservation Objectives: West Connacht Coast SAC 002998. Version 2. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
Bunduff Lough and Machair/Trawalua/Mullaghmore SAC [000625]	> 100 km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	NPWS (2015) Conservation Objectives: Bunduff Lough and Machair/Trawalua/Mullaghmore SAC 000625. Version 1. National Parks and Wildlife

				Service, Department of Arts, Heritage and the Gaeltacht.
Llyn Peninsula and the Sarnau SAC [Site code UK0013117]	>100km	<i>Tursiops truncatus</i> (Common Bottlenose Dolphin) [1349] <i>Halichoerus grypus</i> (Grey Seal) [1364]	Disturbance from above ground/water and underwater noise Intertidal disturbance	To ensure that the integrity of the site is maintained and that it makes the best possible contribution to maintaining Favourable Conservation Status (FCS) for the species in UK waters
The Maidens [Site code UK0030384]	>100km	<i>Halichoerus grypus</i> (Grey Seal) [1364]	Disturbance from above ground/water and underwater noise Intertidal disturbance	To ensure that the integrity of the site is maintained and that it makes the best possible contribution to maintaining Favourable Conservation Status (FCS) for the species in UK waters
The Murlough SAC [Site code UK0016612]	>100km	<i>Phoca vitulina</i> (Harbour seal) [1365]	Disturbance from above ground/water and underwater noise Intertidal disturbance	To ensure that the integrity of the site is maintained and that it makes the best possible contribution to maintaining Favourable Conservation Status (FCS) for the species in UK waters
Strangford Lough SAC [Site code UK0016608]	>100km	<i>Phoca vitulina</i> (Harbour seal) [1365]	Disturbance from above ground/water and underwater noise Intertidal disturbance	To ensure that the integrity of the site is maintained and that it makes the best possible contribution to maintaining Favourable Conservation Status (FCS) for the species in UK waters

The North Channel SAC [Site code UK0030399]	>100km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	To ensure that the integrity of the site is maintained and that it makes the best possible contribution to maintaining Favourable Conservation Status (FCS) for the species in UK waters
Cardigan Bay SAC [Site code UK0012712]	>100km	<i>Tursiops truncatus</i> (Common Bottlenose Dolphin) [1349] <i>Halichoerus grypus</i> (Grey Seal) [1364]	Disturbance from above ground/water and underwater noise Intertidal disturbance	To ensure that the integrity of the site is maintained and that it makes the best possible contribution to maintaining Favourable Conservation Status (FCS) for the species in UK waters
North Anglesey Marine SAC [Site code UK0030398]	75 – 100 km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	To ensure that the integrity of the site is maintained and that it makes the best possible contribution to maintaining Favourable Conservation Status (FCS) for the species in UK waters
West Wales Marine SAC [Site code UK0030397]	>100km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	To ensure that the integrity of the site is maintained and that it makes the best possible contribution to maintaining Favourable Conservation Status (FCS) for the species in UK waters
Bristol Channel Approaches SAC [Site code UK003039]	>100km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	To ensure that the integrity of the site is maintained and that it makes the best possible contribution to maintaining Favourable Conservation Status (FCS) for the species in UK waters

Récifs et landes de la Hague SAC [Site code FR2500084]	>100km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	There are no specific conservation objectives relating to these species in this SAC, so the conservation objectives from Blasket Islands SAC [Site code IE002172] were used
Anse de Vauville SAC [Site code FR2502019]	>100km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	There are no specific conservation objectives relating to these species in this SAC, so the conservation objectives from Blasket Islands SAC [Site code IE002172] were used
Banc et récifs de Surtainville SAC [Site code FR2502018]	>100km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	There are no specific conservation objectives relating to these species in this SAC, so the conservation objectives from Blasket Islands SAC [Site code IE002172] were used
Chausey [Site code FR2500079]	>100km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	There are no specific conservation objectives relating to these species in this SAC, so the conservation objectives from Blasket Islands SAC [Site code IE002172] were used
Baie du Mont Saint-Michel [Site code FR2500077]	>100km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	There are no specific conservation objectives relating to these species in this SAC, so the conservation objectives from Blasket Islands SAC [Site code IE002172] were used
Estuaire de la Rance SAC [Site code FR5300061]	>100km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	There are no specific conservation objectives relating to these species in this SAC, so the conservation objectives from Blasket Islands SAC [Site code IE002172] were used

Baie de Lancieux, Baie de l'Arguenon, Archipel de Saint Malo et Dinard [Site code FR5300012]	>100km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	There are no specific conservation objectives relating to these species in this SAC, so the conservation objectives from Blasket Islands SAC [Site code IE002172] were used
Cap d'Erquy-Cap Fréhel [Site code FR5300011]	>100km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	There are no specific conservation objectives relating to these species in this SAC, so the conservation objectives from Blasket Islands SAC [Site code IE002172] were used
Baie de Saint-Brieuc [Site code FR5300066]	>100km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	There are no specific conservation objectives relating to these species in this SAC, so the conservation objectives from Blasket Islands SAC [Site code IE002172] were used
Tregor Goëlo [Site code FR5310070]	>100km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	There are no specific conservation objectives relating to these species in this SAC, so the conservation objectives from Blasket Islands SAC [Site code IE002172] were used
Côte de Granit rose-Sept-Iles [Site code FR5300009]	>100km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	There are no specific conservation objectives relating to these species in this SAC, so the conservation objectives from Blasket Islands SAC [Site code IE002172] were used
Nord Bretagne DH [Site code FR2502022]	>100km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	There are no specific conservation objectives relating to these species in this SAC, so the conservation objectives from Blasket Islands SAC [Site code IE002172] were used

Baie de Morlaix SAC [Site code FR5300015]	>100km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	There are no specific conservation objectives relating to these species in this SAC, so the conservation objectives from Blasket Islands SAC [Site code IE002172] were used
Abers - Côte des legends [Site code FR5300017]	>100km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	There are no specific conservation objectives relating to these species in this SAC, so the conservation objectives from Blasket Islands SAC [Site code IE002172] were used
Ouessant-Molène [Site code FR5300018]	>100km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	There are no specific conservation objectives relating to these species in this SAC, so the conservation objectives from Blasket Islands SAC [Site code IE002172] were used
Côtes de Crozon [Site code FR5302006]	>100km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	There are no specific conservation objectives relating to these species in this SAC, so the conservation objectives from Blasket Islands SAC [Site code IE002172] were used
Mers Celtiques – Talus du golfe de Gascogne [Site code FR5302015]	>100km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	There are no specific conservation objectives relating to these species in this SAC, so the conservation objectives from Blasket Islands SAC [Site code IE002172] were used
Rivière Leguer, forêts de Beffou, Coat an Noz et Coat an Hay [Site code FR5300008]	>100km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	There are no specific conservation objectives relating to these species in this SAC, so the conservation objectives from Blasket Islands SAC [Site code IE002172] were used

Estuaire de la Rance [Site code FR53000061]	>100km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	There are no specific conservation objectives relating to these species in this SAC, so the conservation objectives from Blasket Islands SAC [Site code IE002172] were used
Chaussée de Sein [Site code FR5302007]	>100km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	There are no specific conservation objectives relating to these species in this SAC, so the conservation objectives from Blasket Islands SAC [Site code IE002172] were used
Récifs du talus du golfe de Gascogne [Site code FR5302016]	>100km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Disturbance from above ground/water and underwater noise	There are no specific conservation objectives relating to these species in this SAC, so the conservation objectives from Blasket Islands SAC [Site code IE002172] were used
South Dublin Bay and River Tolka SPA (Site IE004024)	Within site boundary	Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] Oystercatcher (<i>Haematopus ostralegus</i>) [A130] Ringed Plover (<i>Charadrius hiaticula</i>) [A137] Grey Plover (<i>Pluvialis squatarola</i>) [A141] Knot (<i>Calidris canutus</i>) [A143] Sanderling (<i>Calidris alba</i>) [A144] Dunlin (<i>Calidris alpina</i>) [A149] Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] Redshank (<i>Tringa totanus</i>) [A162] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Roseate Tern (<i>Sterna dougallii</i>) [A192] Common Tern (<i>Sterna hirundo</i>) [A193] Arctic Tern (<i>Sterna paradisaea</i>) [A194] Wetland and Waterbirds [A999]	Disturbance from above ground/water and underwater noise Intertidal disturbance	NPWS (2015) Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

The Murrough SPA (Site Code IE004186)	Within site boundary	Red-throated Diver (<i>Gavia stellata</i>) [A001] Greylag Goose (<i>Anser anser</i>) [A043] Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] Wigeon (<i>Anas penelope</i>) [A050] Teal (<i>Anas crecca</i>) [A052] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Herring Gull (<i>Larus argentatus</i>) [A184] Little Tern (<i>Sterna albifrons</i>) [A195] Wetland and Waterbirds [A999]	Disturbance from above ground/water and underwater noise Intertidal disturbance	NPWS (2024) Conservation Objectives: The Murrough SPA 004186. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
Dalkey Island SPA (Site Code IE004172)	Approx 1km	Roseate Tern (<i>Sterna dougallii</i>) [A192] Common Tern (<i>Sterna hirundo</i>) [A193] Arctic Tern (<i>Sterna paradisaea</i>) [A194]	Disturbance from above ground/water and underwater noise Intertidal disturbance	NPWS (2024) Conservation Objectives: Dalkey Islands SPA 004172. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
Wicklow Head SPA (Site Code 004127)	Approx 2km	Kittiwake (<i>Rissa tridactyla</i>) [A188]	Disturbance from above ground/water and underwater noise Intertidal disturbance	NPWS (2024) Conservation Objectives: Wicklow Head SPA 004127. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
Wicklow Mountains SPA (Site Code 004040)	Approx 25km	Merlin (<i>Falco columbarius</i>) [A098], Peregrine (<i>Falco peregrinus</i>) [A103]	Possible intertidal disturbance	NPWS (2024) Conservation Objectives: Wicklow Mountains SPA 004040. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
North Bull Island SPA (Site Code IE004006)	Approx 7km	Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] Shelduck (<i>Tadorna tadorna</i>) [A048] Teal (<i>Anas crecca</i>) [A052]	Disturbance from above ground/water and underwater noise	NPWS (2015) Conservation Objectives: North Bull Island SPA 004006. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht

		Pintail (<i>Anas acuta</i>) [A054] Shoveler (<i>Anas clypeata</i>) [A056] Oystercatcher (<i>Haematopus ostralegus</i>) [A130] Golden Plover (<i>Pluvialis apricaria</i>) [A140] Grey Plover (<i>Pluvialis squatarola</i>) [A141] Knot (<i>Calidris canutus</i>) [A143] Sanderling (<i>Calidris alba</i>) [A144] 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] Turnstone (<i>Arenaria interpres</i>) [A169] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Wetland and Waterbirds [A999]	Intertidal disturbance	
Northwest Irish Sea SPA (Site Code IE004236)	Approx 10-15km	Red-throated Diver (<i>Gavia stellata</i>) [A001] Great Northern Diver (<i>Gavia immer</i>) [A003] Fulmar (<i>Fulmarus glacialis</i>) [A009] Manx Shearwater (<i>Puffinus puffinus</i>) [A013] Cormorant (<i>Phalacrocorax carbo</i>) [A017] Shag (<i>Phalacrocorax aristotelis</i>) [A018] Common Scoter (<i>Melanitta nigra</i>) [A065] Little Gull (<i>Larus minutus</i>) [A177]	Disturbance from above ground/water and underwater noise Intertidal disturbance	NPWS (2023) Conservation Objectives: North-west Irish Sea SPA 004236. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

		Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Common Gull (<i>Larus canus</i>) [A182] Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183] Herring Gull (<i>Larus argentatus</i>) [A184] Great Black-backed Gull (<i>Larus marinus</i>) [A187] Kittiwake (<i>Rissa tridactyla</i>) [A188] Roseate Tern (<i>Sterna dougallii</i>) [A192] Common Tern (<i>Sterna hirundo</i>) [A193] Arctic Tern (<i>Sterna paradisaea</i>) [A194] Little Tern (<i>Sterna albifrons</i>) [A195] Guillemot (<i>Uria aalge</i>) [A199] Razorbill (<i>Alca torda</i>) [A200] Puffin (<i>Fratercula arctica</i>) [A204]		
Baldoyle Bay SPA (Site Code IE004016)	Approx 20km	Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]	Disturbance from above ground/water and underwater noise Intertidal disturbance	NPWS (2013) Conservation Objectives: Baldoyle Bay SPA 004016. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
Malahide Estuary SPA (Site Code IE004025)	Approx 20km	Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]	Disturbance from above ground/water and underwater noise Intertidal disturbance	NPWS (2013) Conservation Objectives: Malahide Estuary SPA 004025. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
Rogerstown Estuary SPA (Site Code IE004015)	Approx 20-25 km	Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]	Disturbance from above ground/water and underwater noise	NPWS (2013) Conservation Objectives: Rogerstown Estuary SPA 004015. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

			Intertidal disturbance	
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4 Assessment and Mitigation

4.1 Assessment of Likely/Possible Impacts on European Sites

The impacts that have been identified that have the potential to cause significant impacts on European sites and their designated species or habitats are habitat disturbance, loss of habitat area; habitat degradation; disturbance of species from underwater noise; disturbance of species from above water noise, and the introduction of invasive species for a number of Qualifying Interests and Special Conservation Interests at various SAC and SPA sites (Table 4). 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 Loss of habitat area, habitat degradation, habitat disturbance

The proposed site investigation activities, as shown in Figure 1, will take place within three SACs: South Dublin Bay SAC, Bray Head SAC and the Murrough Wetlands SAC. Within these SACs, the activities proposed under the proposed maritime usage application include geotechnical and geophysical survey activities, benthic surveys, ecological surveys and metal detector surveys as shown in Table 1. These activities will occur in the subtidal and intertidal and will also cross over into the terrestrial for some works.

For intrusive geotechnical works, the proposed maritime usage application proposes only to carry these out in the intertidal of Area A, which falls within the South Dublin Bay SAC. Relevant habitats are Mudflats and sandflats not covered by seawater at low tide, Annual vegetation of drift lines, Salicornia and other annuals colonizing mud and sand and Embryonic shifting dunes. The total affected areas of habitat in Area A will be small and represent a small proportion of the total areas of the relevant Annex I habitats. Most activity will occur on the mudflats and sandflats habitats and this disturbance does not reflect a permanent loss, as the habitat type will allow for the refilling of the boreholes, sediment samples, day grabs and cone penetration tests after the activity has ceased. Intertidal trial pits and trenches will cause temporary disturbance to habitats, as will cone penetrometer tests and intertidal sediment sampling. One site is proposed on embryonic dune habitat, resulting in temporary disturbance due to the proposed activity, but the limited area in use means there will be no significant impacts.

It is possible that the proposed equipment accessing and using the intertidal area could cause some habitat disturbance or habitat degradation. Therefore, mitigation measures are required to offset potential negative impacts on the various qualifying habitat types, primarily by ensuring all equipment only uses existing established access routes to gain access to the intertidal area. It is also recommended to include a condition in any licence granted to ensure that an ecologist is present onsite during all intertidal surveys carried out in order to minimise disturbance and ensure site integrity is maintained. These mitigations will be outlined in Section 4.6 below.

For Areas B-D, grab samples and sediment samples are the only physically intrusive activities proposed which will have minimal and temporary impacts and do not require the use of large pieces of machinery in the intertidal and upper shore. Therefore, these activities will not result in habitat loss. There may be some temporary habitat disturbance, but this is not considered significant, and no specific mitigation is required as a result.

4.1.2 Disturbance from underwater noise

The proposed maritime usage plans to carry out geophysical survey work in the subtidal and intertidal in Area A only. The appropriate assessment screening report and determination issued by MARA identified the potential for underwater sound sources from survey activities to have the potential to be at a level and duration that would cause a significant negative impact on the QIs (marine mammals, and birds) at a number of European sites (see Table 4).

Marine mammals

A number of European sites were screened in due to the potential for underwater noise to impact on Harbour porpoise, Bottlenose dolphin, Grey seal and Harbour seal which are QI species from these sites (see Table 4). It is possible that Harbour porpoise, Bottlenose dolphin, Grey seal or Harbour seal from the other European sites would forage within the MUL application area and may be indirectly impacted.

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 close range or temporary hearing impairment (or Temporary Threshold Shift – TTS) and disturbance at further distances from the noise source.

In light of the above, mitigation measures are therefore required for all boat-based geophysical surveys, in order to minimise adverse impacts on marine mammals and avoid impacting their populations from the European sites listed on Table 4.

For intertidal geophysical and geotechnical activities, there is no recognised pathway for noise disturbance underwater, therefore, no specific mitigation for underwater noise in relation to these activities is required in Area A.

Birds

Fourteen SPAs were screened in for AA. A number of these SPAs include seabirds that feed using diving behaviour. Diving birds can be sensitive to disturbance from underwater noise and fatalities can occur at close distance. Disturbance could be a significant impact if the underwater noise was at an intensity, frequency and duration that affected bird populations at those SPAs.

Flushing disturbance can be expected to displace these 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 a noise generating operation is low due to the surface activity associated with such operations disturbing the birds prior to commencement of the underwater noise. There is a low likelihood of interaction between the sound source and diving birds due to the relatively short exposure time when they dive. 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 4. Therefore, no mitigation is required in relation to diving birds and underwater noise from boat-based surveys.

4.1.3 Disturbance and displacement from above water noise

A number of boat-based survey types are planned as part of the proposed maritime usage. These have the potential to disturb a number of QI species of European sites.

Birds

The planned activities could cause temporary disturbance to birds foraging in the intertidal and coastal areas, and to nesting bird species. A number of bird species listed as SCI's could potentially be temporarily disturbed and displaced by the proposed works as they are all either breeding or feeding in the area at various times of year.

Area A directly overlaps with the South Dublin Bay and River Tolka Estuary SPA, which is an important area for overwintering waterbirds and wader species who could be disturbed and displaced if the activities occurred in the winter months. This SPA is also an important breeding colony for Common tern. The breeding tern colony occurs in a specific site in Dublin Bay over a kilometre from the proposed maritime usage activity in Area A. The Common tern are known to respond to activities within 400metres of their location. Therefore, Area A is too far away to disturb this particular breeding colony. No other important breeding colonies have been identified nearby but it is intended to include a condition in any licence granted to have an ecologist present on site at all times during the planned works in all intertidal sites in order to minimise any potential disturbance and ensure site integrity is maintained. It is also recommended that the planned activities in Area A do not occur during the winter months. These mitigations will be outlined in Section 4.6 below.

Archeology surveys, benthic surveys and ecological surveys will occur in Areas B-D. These surveys are considerably less intrusive than the activities planned for Area A. However, there is the potential for disturbance to SCI species both within the Murrough SPA which overlaps with Area D, due to the presence of survey staff and equipment, along with Areas B and C which contain potential foraging habitat for a number of listed SCIs, especially during the

winter months. There are also a number of breeding species in all areas and in Area D in particular that could be disturbed by survey activities during the breeding season.

Therefore, it is proposed to include a condition in any licence granted to prohibit boat based surveys and intertidal survey work between the start of December and end of February to avoid the peak winter bird season in all sites and in Area D only between the end of April and start of August to avoid peak breeding season for tern species.

Marine mammals

Above water noise and visual disturbance and displacement was screened in for potential impacts on Grey seal and Harbour seal from various SAC sites. The noise from the planned survey activities, especially those in Area A, could temporarily disturb seals using nearby haul out sites for resting and moulting. However, there are no known haul out sites in close proximity to Area A. The nearest known haul out sites are at Dalkey Island and Sandy Cove, both at a distance of several kilometres, outside of the area of impact for the activities in Area A. The activities in Areas B-D are of a lower noise intensity and have less possibility of disturbing seal haul out sites. Given the distance from Area A to the haul out sites, the planned low level and short-term activities for Area B-D, their low potential for sustained disturbance, and the seals habituation to human presence in the area, it is not expected that above water noise and visual disturbance will negatively impact Grey seals or Harbour seal populations.

4.1.4 Introduction of Invasive Species

There is the potential for the introduction of Invasive Species from both equipment and surveyors during the proposed maritime usage activity at all proposed Areas (A-D) and also the potential for spread of invasive species between Areas. This includes both intertidal and boat-based work, both of which include a number of pieces of equipment and staff. The vessels themselves are also potential vectors. It is proposed to include a condition in any licence granted to ensure the spread of invasive species both in to and between the proposed maritime usage areas is controlled for. These are detailed 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 disturbance³. The CESS was defined at appropriate assessment screening stage as 10 km, based on geophysical survey equipment recommended Effective Deterrence Ranges⁴.

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 10-year licence duration and thus the Cumulative Effects Temporal Scope (CETS) is 10 years.

4.2.3 Impacts and Pathway Identification

Potential impacts	Possible significance of impacts (duration, magnitude, etc.)
Disturbance from above ground/water and underwater noise, intertidal disturbance	Possible temporary disturbance to birds foraging in the intertidal and coastal areas, and for nesting bird species. A number of bird species listed as SCI's could potentially be temporarily disturbed and displaced by the proposed works as they are all either breeding or feeding in the SAC at various times of year. Breeding Roseate tern and Little tern would be of particular concern. Potential disturbance to marine mammal species. Possible temporary disturbance and displacement for seal species potentially using area for haul out
Habitat disturbance	Temporary disturbance to habitats with SACs from proposed activities
Habitat loss	Temporary habitat loss
Habitat degradation	Temporary degradation of habitats
Introduction of invasive species	Introduction to the intertidal of staff and heavy machinery across multiple sites introduces a risk of introducing invasive species. Survey vessels also have a risk of introducing marine invasive species.

4.2.4 Prediction:

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

Disturbance from above ground/water and underwater noise, intertidal disturbance

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

³ [JNCC Guidance on Assessing the Significance of Noise Disturbance against Harbour Porpoise SACs Conservation Objectives](#)

⁴ Effective Deterrence Range – the radius of a circular area assumed to be disturbed.

Habitat loss and habitat degradation

There is the potential for increased habitat loss and habitat degradation if other relevant projects were to take place in the vicinity of the proposed activities at the same time.

Invasive Species

There is the potential for increased habitat loss and habitat degradation 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 17/09/2025 of relevant databases (including EPA, Foreshore, MARA, planning authorities *etc.*) 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 4. The projects within the CESS and CETS have been considered for their potential to cause cumulative effects, in combination with the proposed activities being considered in this MUL application, on the QIs of those sites listed on Table 4.

Table 5: 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 reference no.	Project	Approximate Distance from MUL Area	Project Status	Cumulative Effects
FS007367	Greystones (OWL) Windfarm Ltd. proposing to develop windfarm off Dublin/Wicklow	Overlaps with IÉ proposed MUL application area	Proposed – application submitted 29/06/22	Possible temporal overlap in terms of disturbance and displacement
FS007162	Leinster Offshore Wind Array Site investigations for proposed offshore wind farm off Dublin.	Approx 10km from proposed MUL application area	Approved but not completed - licence granted 19/05/2022	Possible temporal overlap in terms of disturbance and displacement
FS007188	RWE Dublin Array Offshore Windfarm	Overlaps with IÉ MUL application area	Approved but not completed - licence granted 13/01/2023	Possible temporal overlap in terms of disturbance and displacement
FS007546	Codling Wind Park Ltd. Site Investigations for proposed Offshore Wind Farm, off counties Wicklow and Dublin	Overlaps with IÉ MUL application area	Approved but not completed - licence granted 19/05/2023	Possible temporal overlap in terms of disturbance and displacement

FS007588	Wicklow Sea Wind Ltd Cable site investigation off Wicklow Coast	Overlaps with IÉ MUL application area	Applied for but not approved. Applied for on 26/08/2022	Possible temporal overlap in terms of disturbance and displacement
2022-MAC- 006	Codling Offshore Windfarm	Overlaps with IÉ MUL application area	Proposed–MAC granted 23/12/2022, currently in consultation with An Comisiun Pleanala	Possible temporal overlap in terms of disturbance and displacement
MUL230034	Codling Offshore Windfarm	Overlaps with IÉ MUL application area	Proposed – MUL under assessment	Possible temporal overlap in terms of disturbance and displacement
MUL240010	Eirgrid	Overlaps with IÉ MUL application area	Proposed – MUL under assessment	Possible temporal overlap in terms of disturbance and displacement
2022-MAC- 003 and 004	Bray Offshore Windfarm and Kish Offshore Windfarm	Overlaps with IÉ MUL application area	Proposed–MAC granted 23/12/2022, currently in consultation with An Comisiun Pleanala	Possible temporal overlap in terms of disturbance and displacement

In addition, the in-combination assessment considers the potential cumulative impacts from minor development projects in the geographical area surrounding the proposed MUL application area.

The following plans, related to the development of the maritime environment were also identified:

The Climate Action Plan 2025,

- National Marine Planning Framework,
- The National Development Plan 2021–2030,
- The Water Action Plan 2024
- Dublin Port Masterplan 2040
- Dún Laoghaire-Rathdown County Development Plan 2022-2028
- Wicklow County Development Plan 2022-2028

These plans promote sustainable development and integrated management planning in the maritime environment. It is unlikely that any of these plans will result in a negative in-combination effect on the conservation objectives of the identified European sites.

4.2.6 In-Combination Effects Assessment conclusion

It is not possible to exclude the possibility of likely significant in-combination effects on the conservation objectives of the European sites considered in this assessment as a result of this proposed maritime usage activity and the projects identified in Table 6. Therefore, it is recommended that suitable mitigation measures be included in any Maritime Usage Licence granted in relation to this proposed maritime activity for the possibility of likely significant in-combination effects.

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 at 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 between 10/07/2025 15/08/2025 with the public invited to make observations. In addition to the public consultation, observations were invited from relevant public bodies. One submission was received on foot of the public consultation, while seven 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 produced 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 Physical Disturbance to Habitats and Habitat loss

Intertidal

- (i) The Holder shall ensure that an ecologist will be on site during all intertidal surveys carried out as part of this Permitted Maritime Usage in order to minimise disturbance and ensure site integrity is maintained.
- (ii) Access to the intertidal areas shall be exclusively through existing access routes.
- (iii) Disturbance of dune habitat and drift lines and vegetation shall be avoided by machinery and personnel.

- (iv) Any temporary access arrangements or structures that are put in place to allow machinery access to the shore area, shall be prepared or installed in consultation with the ecologist to ensure minimal disturbance and ensure site integrity. The site should be fully reinstated post works.

4.6.2 Disturbance due to underwater noise and vibration (marine mammals)

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 and 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.

4.6.3 Disturbance due to underwater noise (birds)

No mitigation is required for birds relating to survey disturbance due to underwater noise and vibration in the proposed Maritime Usage Area.

4.6.4 Disturbance due to above water noise (birds)

Mitigation is required to minimise the impact from above water noise on protected bird species in European sites. It is recommended conditions be included in any maritime usage licence in relation to this activity that may be granted as follows:

Birds

- (i) The Holder shall not undertake the Permitted Maritime Usage (with the exception of bird count surveys) between 1st December and 1st March annually, to ensure least disturbance to known bird overwintering areas.

- (ii) The Holder shall not undertake the Permitted Maritime Usage in the site identified as "Area D" between 30th April and 1st August annually to ensure least disturbance to known bird nesting areas

4.6.4 Disturbance due to above water noise (seals)

No mitigation is required for seal species relating to survey disturbance due to above water noise and disturbance in the proposed Maritime Usage Area.

4.6.5 Disturbance due to invasive species

Mitigation is required to minimise the risk of impacts as a result of potential introduction of invasive species. It is recommended a condition be included in any maritime usage licence in relation to this activity that may be granted as follows:

Invasive species

The Holder shall demonstrate all reasonable practical measures are taken to ensure that all vessels used in the Permitted Maritime Usage are free of invasive marine species on their hulls and in their ballast water and that all vehicles and equipment used in the Permitted Maritime Usage are free of invasive marine species.

4.6.4 In-combination mitigation

Mitigation is required to minimise the impacts of possible in-combination effects as a result of similar activities in the area occurring at the same time. It is recommended a condition be included in any maritime usage licence in relation to this activity that may be granted as follows:

In-combination effects

- (i) Prior to the commencement of the Permitted Maritime Usage, the Holder shall coordinate with other authorisation holders carrying out geophysical 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 co-ordinate 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

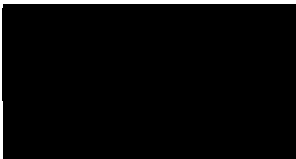
The appropriate assessment screening process identified likely/possible significant impacts due to habitat loss and habitat degradation, disturbance from underwater noise, visual and above water noise disturbance and invasive species. The applicant provided an NIS which detailed the potential impact 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. My assessment found that likely significant impacts from the proposed activities could not be ruled out, beyond reasonable scientific doubt, without mitigation. Additionally, I found that 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 qualifying interests and special conservation interests 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	 Dr. Ciar O'Toole Senior Marine Advisor Assessment, Research and Data 24/09/2025
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6 Appropriate Assessment Determination

Having considered this report, the documents submitted by Irish Rail, Engineering & New Works Building, Inchicore, Dublin 8, the observations received on foot of the public 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’ in Support of the East Coast Rail Infrastructure Protection Projects.** (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	 John Evans Director of Assessment, Research and Data 24/09/2025
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