# Screening for Appropriate Assessment for Maritime Usage Licence Application

## LIC230028

## From Iarnród Éireann

For Geotechnical and Geophysical Site Investigations in Support of the East Coast Rail Infrastructure Protection Projects

| Document control | | | | |
|---|---|---|---|---|
| **Rev** | **Prepared by** | **Date** | **Reviewed by** | **Date** |
| **N/A** | [redacted] | **01/08/2024** | [redacted] | **08/08/2024** |

**Step 1 - Description of Project/Proposal and local site characteristics**

Brief description of the project

Iarnród Éireann (IÉ) are proposing to conduct geotechnical and geophysical 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 will include rotary cores, cable percussive with rotary follow-on, window samples, sediment samples, percussion boreholes, foundation inspection pits (vacuum X or hand dug), dynamic probes, slit trenches and a geophysical survey. Groundwater monitoring will also be undertaken at 33 borehole locations.

The applicant has stated that the works will take approximately 3 months to complete and have requested a licence duration of 1 year. 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.

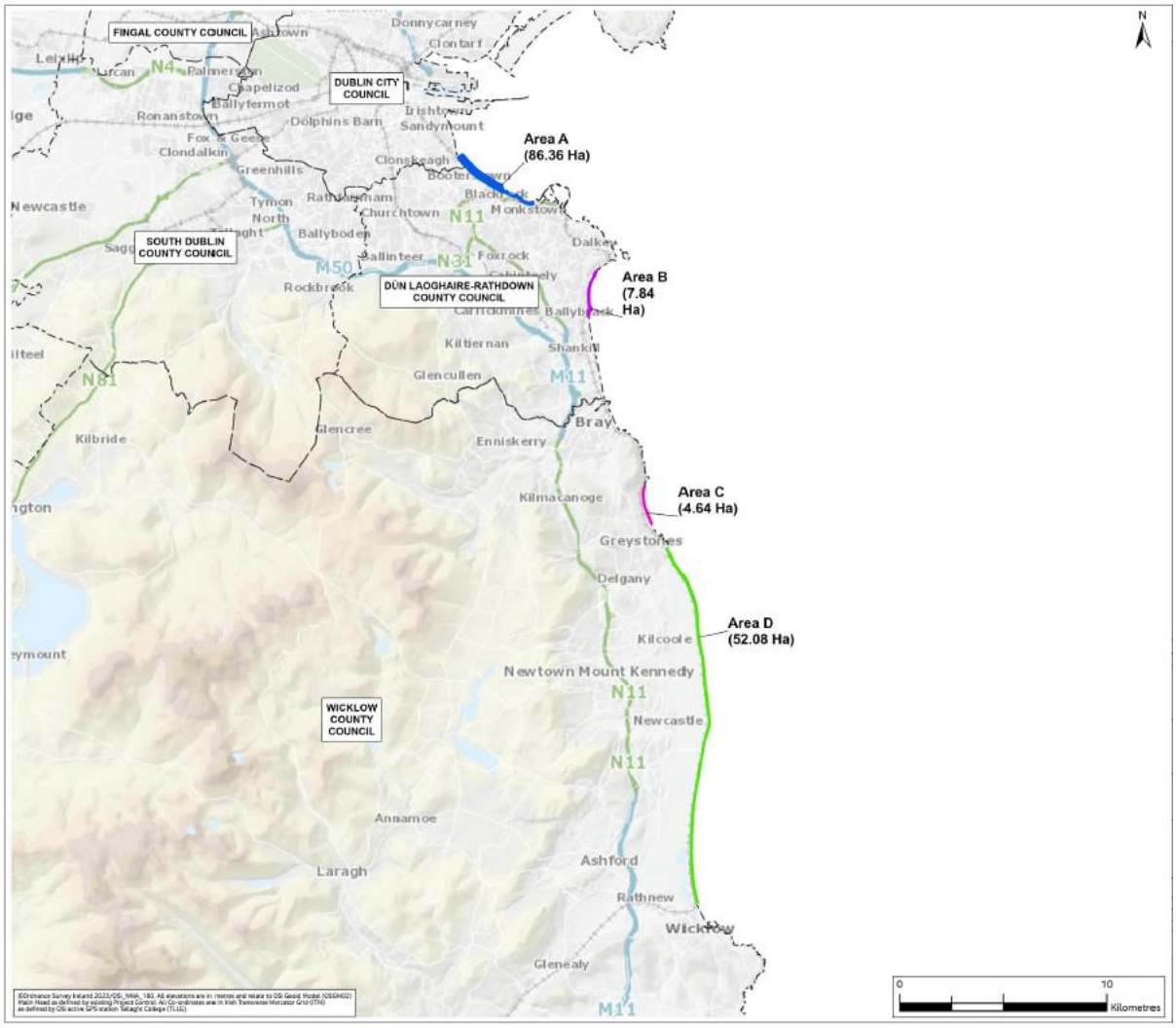

Figure 1: Maritime usage licence Areas A to D

Brief description of the site characteristics

The proposed maritime usage area runs adjacent to the coastline of counties Dublin and Wicklow. It is comprised of a number of marine habitats. 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.

**Step 2 - Identification of relevant Natura 2000 sites using Source-Pathway-Receptor Model and compilation of information on qualifying interests and conservation objectives.**

This assessment has been undertaken using the Source-Pathway-Receptor model (OPR 2021). As these works are being partially undertaken in the marine environment, or directly adjacent to the marine environment, using the Source-Pathway-Receptor model, marine and coastal Natura 2000 sites were considered in this screening process (Table 1). Distances are measured as straight-line distances, or along-shore coastal distances, depending on the site and QI's/SCI's being considered.

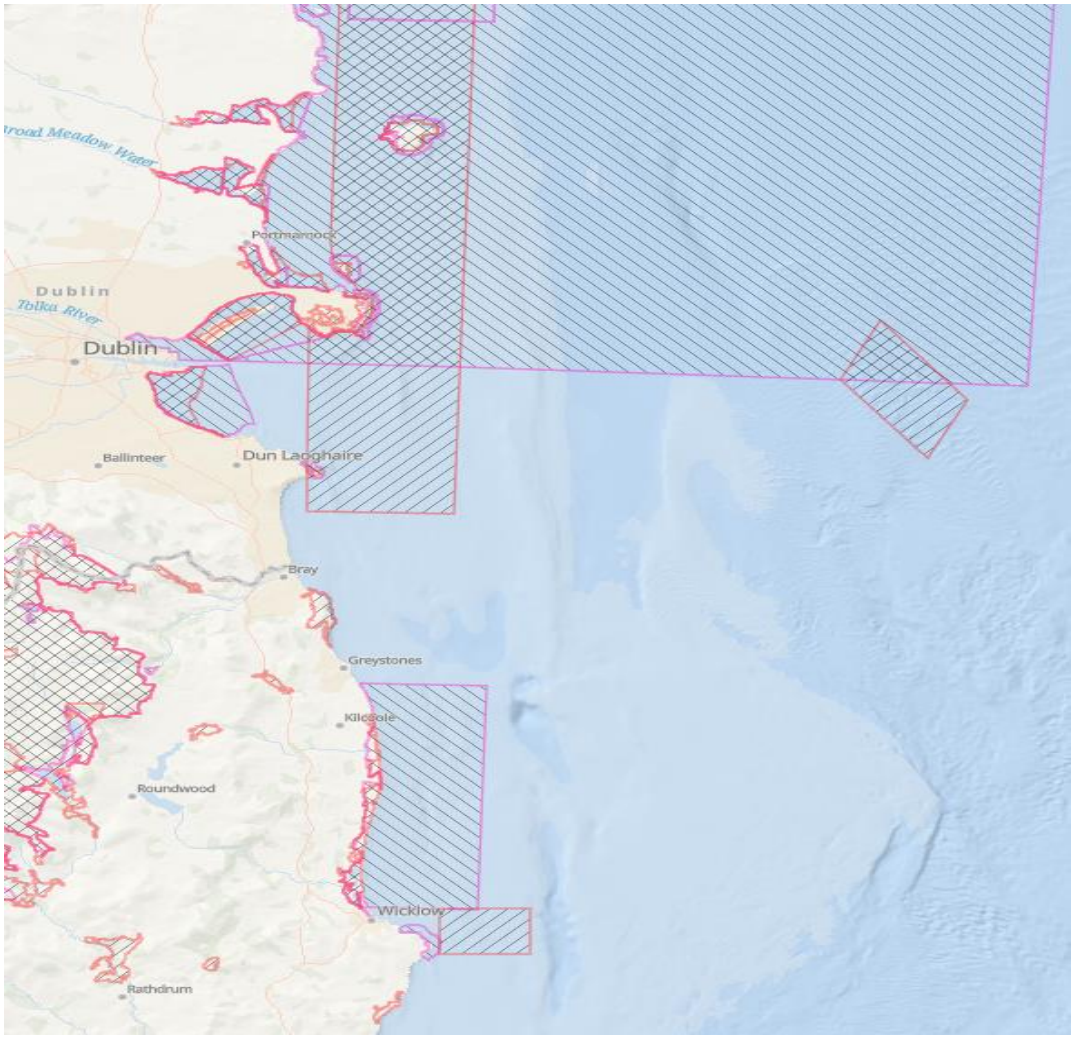


Figure 2 showing locations of Natura 2000 sites in the vicinity of the planned works.

| European Site Code | Distance from the Proposed Development (km) | List of Qualifying Interests | Connections (Source-Pathway Receptors) | Qualifying Interests considered further in Screening Y/N | European Site Screened In for stage 2 Appropriate Assessment |
|---|---|---|---|---|---|
| South Dublin Bay SAC (Site Code IE000210) | Within site boundary | Mudflats and sandflats not covered by sea-water at low tide [1140]<br>Annual vegetation of drift lines [1210]<br>Salicornia and other annuals colonising mud and sand [1310]<br>Embryonic shifting dunes [2110] | **No** | No | No – no works will be carried out within QI habitat |
| Bray Head SAC ( Site Code IE 000714) | Within site boundary | Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]<br>European dry heaths [4030] | No | No | No – no works will be carried out within QI habitat |
| The Murrough Wetlands SAC (Site Code IE 002249 | Within site boundary | Annual vegetation of drift lines [1210]<br>Perennial vegetation of stony banks [1220]<br>Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]<br>Mediterranean salt meadows (Juncetalia maritimi) [1410]<br>Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210]<br>Alkaline fens [7230] | No | No | No – no works will be carried out within QI habitat |
| Wicklow Reef SAC | 4 km | Reefs [1170] | No | No | No |
| Rockabill to Dalkey SAC (Site Code IE003000 ) | 0.5 | Reefs [1170]<br>Phocoena phocoena (Harbour Porpoise) [1351] | No | No | No |

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| North Dublin Bay SAC (Site Code IE000206) | 5 | Mudflats and sandflats not covered by seawater at low tide [1140]<br>Annual vegetation of drift lines [1210]<br>Salicornia and other annuals colonising mud and sand [1310]<br>Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]<br>Mediterranean salt meadows (Juncetalia maritimi) [1410]<br>Embryonic shifting dunes [2110]<br>Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120]<br>Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]<br>Humid dune slacks [2190]<br>Petalophyllum ralfsii (Petalwort) [1395] | No | No | No |
| Ireland's Eye SAC ( Site Code IE002193) | 13.2 | Perennial vegetation of stony banks [1220]<br>Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] | No | No | No |
| Rogerstown Estuary SAC (Site code IE000208) | 14.3 | Estuaries [1130]<br>Mudflats and sandflats not covered by seawater at low tide [1140]<br>Salicornia and other annuals colonising mud and sand [1310]<br>Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]<br>Mediterranean salt meadows (Juncetalia maritimi) [1410]<br>Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120]<br>Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] | No | No | No |
| Howth Head SAC (Site Code IE000202) | 14.7 | Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]<br>European dry heaths [4030] | No | No | No |
| Malahide estuary SAC (Site Code IE 000205) | 18 | Mudflats and sandflats not covered by seawater at low tide [1140]<br>Salicornia and other annuals colonising mud and sand [1310]<br>Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]<br>Mediterranean salt meadows (Juncetalia maritimi) [1410]<br>Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] | No | No | No |

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| | | Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] | | | |
| Baldoyle Bay SAC (Site Code IE000199) | 19.2 | Mudflats and sandflats not covered by seawater at low tide [1140]<br>Salicornia and other annuals colonising mud and sand [1310]<br>Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]<br>Mediterranean salt meadows (Juncetalia maritimi) [1410] | No | No | No |
| Lambay Island SAC (Site Code IE000204) | 21 | Reefs [1170]<br>Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]<br>**Halichoerus grypus (Grey Seal) [1364]**<br>**Phoca vitulina (Harbour Seal) [1365]**<br>Phocoena phocoena (Harbour Porpoise) [1351] | Yes | Yes – possible visual & above water noise disturbance | Yes |
| South Dublin Bay and River Tolka SPA (Site IE004024) | Within site boundary | **Light-bellied Brent Goose (Branta bernicla hrota) [A046]**<br>**Oystercatcher (Haematopus ostralegus) [A130]**<br>**Ringed Plover (Charadrius hiaticula) [A137]**<br>**Grey Plover (Pluvialis squatarola) [A141]**<br>**Knot (Calidris canutus) [A143]**<br>**Sanderling (Calidris alba) [A144]**<br>**Dunlin (Calidris alpina) [A149]**<br>**Bar-tailed Godwit (Limosa lapponica) [A157]**<br>**Redshank (Tringa totanus) [A162]**<br>**Black-headed Gull (Chroicocephalus ridibundus) [A179]**<br>**Roseate Tern (Sterna dougallii) [A192]**<br>**Common Tern (Sterna hirundo) [A193]**<br>**Arctic Tern (Sterna paradisaea) [A194]**<br>**Wetland and Waterbirds [A999]** | Yes | Yes – possible visual & above water noise disturbance | Yes |
| The Murrough SPA (Site Code IE004186 | Within site boundary | **Red-throated Diver (Gavia stellata) [A001]**<br>**Greylag Goose (Anser anser) [A043]**<br>**Light-bellied Brent Goose (Branta bernicla hrota) [A046]**<br>**Wigeon (Anas penelope) [A050]**<br>**Teal (Anas crecca) [A052]**<br>**Black-headed Gull (Chroicocephalus ridibundus) [A179]** | Yes – within site boundary | Yes possible visual and above water noise disturbance | Yes |

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| | | **Herring Gull (Larus argentatus) [A184]**<br>**Little Tern (Sterna albifrons) [A195]**<br>**Wetland and Waterbirds [A999]** | | | |
| Dalkey Island SPA (Site Code IE004172) | 0.75 | Roseate Tern (Sterna dougallii) [A192]<br>Common Tern (Sterna hirundo) [A193]<br>Arctic Tern (Sterna paradisaea) [A194] | No | No | No |
| Wicklow Head SPA ( Site Code 004127) | 2.3 | Kittiwake (Rissa tridactyla) [A188] | No | No | No |
| North Bull Island SPA (Site Code IE004006) | 6.8 | **Light-bellied Brent Goose (Branta bernicla hrota) [A046]**<br>Shelduck (Tadorna tadorna) [A048]<br>Teal (Anas crecca) [A052]<br>Pintail (Anas acuta) [A054]<br>Shoveler (Anas clypeata) [A056]<br>Oystercatcher (Haematopus ostralegus) [A130]<br>Golden Plover (Pluvialis apricaria) [A140]<br>Grey Plover (Pluvialis squatarola) [A141]<br>Knot (Calidris canutus) [A143]<br>Sanderling (Calidris alba) [A144]<br>Dunlin (Calidris alpina) [A149]<br>Black-tailed Godwit (Limosa limosa) [A156]<br>Bar-tailed Godwit (Limosa lapponica) [A157]<br>Curlew (Numenius arquata) [A160]<br>Redshank (Tringa totanus) [A162]<br>Turnstone (Arenaria interpres) [A169]<br>Black-headed Gull (Chroicocephalus ridibundus) [A179]<br>Wetland and Waterbirds [A999] | Yes | Yes – possible visual & above water noise disturbance | Yes |
| North West Irish Sea SPA ( Site Code IE004236) | 12.2 | Red-throated Diver (Gavia stellata) [A001]<br>Great Northern Diver (Gavia immer) [A003]<br>Fulmar (Fulmarus glacialis) [A009]<br>Manx Shearwater (Puffinus puffinus) [A013] | No | No | No |

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| | | Cormorant (Phalacrocorax carbo) [A017]<br>Shag (Phalacrocorax aristotelis) [A018]<br>Common Scoter (Melanitta nigra) [A065]<br>Little Gull (Larus minutus) [A177]<br>Black-headed Gull (Chroicocephalus ridibundus) [A179]<br>Common Gull (Larus canus) [A182]<br>Lesser Black-backed Gull (Larus fuscus) [A183]<br>Herring Gull (Larus argentatus) [A184]<br>Great Black-backed Gull (Larus marinus) [A187]<br>Kittiwake (Rissa tridactyla) [A188]<br>Roseate Tern (Sterna dougallii) [A192]<br>Common Tern (Sterna hirundo) [A193]<br>Arctic Tern (Sterna paradisaea) [A194]<br>Little Tern (Sterna albifrons) [A195]<br>Guillemot (Uria aalge) [A199]<br>Razorbill (Alca torda) [A200]<br>Puffin (Fratercula arctica) [A204] | | | |
| Howth Head Coast SPA (Site Code IE004113) | 14.7 | Kittiwake (Rissa tridactyla) [A188] | No | No | No |
| Ireland's Eye SPA (Site Code IE004117) | 13.2 | Herring Gull (Larus argentatus) [A184]<br>Kittiwake (Rissa tridactyla) [A188]<br>Cormorant (Phalacrocorax carbo) [A017]<br>Guillemot (Uria aalge) [A199]<br>Razorbill (Alca torda) [A200] | No | No | No |
| Baldoyle Bay SPA ( Site Code IE | 19.2 | **Light-bellied Brent Goose (Branta bernicla hrota) [A046]**<br>Shelduck (Tadorna tadorna) [A048]<br>Ringed Plover (Charadrius hiaticula) [A137]<br>Golden Plover (Pluvialis apricaria) [A140]<br>Grey Plover (Pluvialis squatarola) [A141]<br>Bar-tailed Godwit (Limosa lapponica) [A157]<br>Wetland and Waterbirds [A999] | Yes | Yes – possible visual & above water noise disturbance | Yes |

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| Lambay Island SPA (Site Code IE004069) | 21 | Fulmar (Fulmarus glacialis) [A009]<br>Greylag Goose (Anser anser) [A043]<br>Lesser Black-backed Gull (Larus fuscus) [A183]<br>Herring Gull (Larus argentatus) [A184]<br>Kittiwake (Rissa tridactyla) [A188]<br>Cormorant (Phalacrocorax carbo) [A017]<br>Shag (Phalacrocorax aristotelis) [A018]<br>Guillemot (Uria aalge) [A199]<br>Razorbill (Alca torda) [A200]<br>Puffin (Fratercula arctica) [A204] | No | No | No |
| Malahide Estuary SPA (Site Code IE004025) | 18 | Great Crested Grebe (Podiceps cristatus) [A005]<br>**Light-bellied Brent Goose (Branta bernicla hrota) [A046]**<br>Shelduck (Tadorna tadorna) [A048]<br>Pintail (Anas acuta) [A054]<br>Goldeneye (Bucephala clangula) [A067]<br>Red-breasted Merganser (Mergus serrator) [A069]<br>Oystercatcher (Haematopus ostralegus) [A130]<br>Golden Plover (Pluvialis apricaria) [A140]<br>Grey Plover (Pluvialis squatarola) [A141]<br>Knot (Calidris canutus) [A143]<br>Dunlin (Calidris alpina) [A149]<br>Black-tailed Godwit (Limosa limosa) [A156]<br>Bar-tailed Godwit (Limosa lapponica) [A157]<br>Redshank (Tringa totanus) [A162]<br>Wetland and Waterbirds [A999] | Yes | Yes – possible visual & above water noise disturbance | Yes |
| Rogerstown Estuary SPA (Site Code IE004015) | 22.3 | Greylag Goose (Anser anser) [A043]<br>**Light-bellied Brent Goose (Branta bernicla hrota) [A046]**<br>Shelduck (Tadorna tadorna) [A048]<br>Shoveler (Anas clypeata) [A056]<br>Oystercatcher (Haematopus ostralegus) [A130]<br>Ringed Plover (Charadrius hiaticula) [A137]<br>Grey Plover (Pluvialis squatarola) [A141]<br>Knot (Calidris canutus) [A143] | No | No | No |

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|---|---|---|---|---|---|
| | | Dunlin (Calidris alpina) [A149]<br>Black-tailed Godwit (Limosa limosa) [A156]<br>Redshank (Tringa totanus) [A162]<br>Wetland and Waterbirds [A999] | | | |

**Step 3 Assessment of likely significant effects**

(a) Identify all potential direct and indirect impacts that may have an effect on the conservation objectives of a European site, taking into account the size and scale of the project

| Site and Species | Impacts | Possible significance of impacts (duration, magnitude, etc.) |
|---|---|---|
| Lambay Island SAC (Site Code IE000204)<br><br>Halichoerus grypus (Grey Seal) [1364]<br>Phoca vitulina (Harbour Seal) [1365] | Disturbance from above ground/water noise | Possible temporary disturbance and displacement for seal species potentially using area for haul out. Lambay Island is 21km from the proposed works and both grey and Harbour seals are known to regularly travel several hundreds of kilometres. |
| South Dublin Bay and River Tolka SPA (Site IE004024)<br><br>All Bird species listed as Special Conservation Interests for this site | Disturbance from above ground/water noise | Possible temporary disturbance to birds foraging in the intertidal and for nesting bird species. All bird species listed as SCI's could potentially be temporarily be disturbed and displaced by the proposed works as they are all either breeding or feeding in the SAC at various times of year.<br>Breeding Roseate tern would be of particular concern |
| The Murrough SPA (Site Code IE004186)<br><br>All Bird species listed as Special Conservation Interests for this site | Disturbance from above ground/water noise | Possible temporary disturbance to birds foraging in the intertidal and for nesting bird species. All bird species listed as SCI's could potentially be temporarily be disturbed and displaced by the proposed works as they are all either breeding or feeding in the SAC at various times of year.<br>Breeding Little tern would be of particular concern |
| North Bull Island SPA (Site Code IE004006)<br><br>Light-bellied Brent Goose (Branta bernicla hrota) [A046] | Disturbance from site activity -noise | Possible temporary disturbance to birds foraging in the intertidal and coastal areas. Within foraging range of light bellied Brent goose when measured by straight-line distance. |
| Baldoyle Bay SPA (Site Code IE<br><br>Light-bellied Brent Goose (Branta bernicla hrota) [A046] | Disturbance from site activity -noise | Possible temporary disturbance to birds foraging in the intertidal and coastal areas. Within foraging range of light bellied Brent goose when measured by straight-line distance. |
| Rogerstown Estuary SPA (Site Code IE004015) | Disturbance from site activity -noise | Possible temporary disturbance to birds foraging in the intertidal and coastal areas. Within foraging range of |

| | | |
|---|---|---|
| Light-bellied Brent Goose (Branta bernicla hrota) [A046] | | light bellied Brent goose when measured by straight-line distance. |

In-combination effects

MARA has developed a stepwise approach for identifying other In-Combination plans and projects.

Using professional and scientific judgement, the key steps for assessing cumulative effects are as follows:

1. Defining the Cumulative Effects Spatial Scope (CESS)
2. Defining the Cumulative Effects Temporal Scope (CETS)
3. Impact identification
4. Pathway identification
5. Prediction
6. Identification of Plans or Projects that could act in combination
7. Screening Stage Cumulative Effects Assessment conclusion
8. Managing cumulative impacts - to be carried out as part of Stage 2 AA process

Given the type of works being undertaken and the location of these works, the CESS has been defined as 500 m and the CETS as 1 year. The CETS is the Maritime Usage Licence (MUL) period. Although the works applied for are planned to be complete in a three month period, a year is being considered in this assessment to assess potential impacts across all seasons, which allows for potential delays in the MUL activity being undertaken which may occur.

Using the above 8 step approach, and following a search of relevant databases undertaken on 30 June 2024, and 1 August 2024 the below projects have been identified as potential in-combination projects:

| **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 MUL application area | Proposed – application submitted 29/06/22 | Possible temporal overlap in terms of disturbance and displacement |
| FS007546 | Codling Wind Park Ltd. Site Investigations for proposed Offshore Wind Farm, off counties | Overlaps with IÉ MUL application area | Approved but not completed - licence granted 19/05/2022 | Possible temporal overlap in terms of disturbance and displacement |

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| | Wicklow and Dublin | | | |
| FS007330 | Site Investigations off the coasts of Wicklow and Dublin | Overlaps with IÉ MUL application area | Proposed – application submitted 21/03/21 | Possible temporal overlap in terms of disturbance and displacement |
| FS007151 | Proposed Sunrise Offshore Wind Farm, off Counties Dublin and Wicklow | Overlaps with IÉ MUL application area | Proposed– Foreshore licence submitted 23/12/21 | Possible temporal overlap in terms of disturbance and displacement |
| FS007188 | RWE Dublin Array Offshore Windfarm | Overlaps with IÉ MUL application area | Proposed– Foreshore licence submitted 01/10/21 | Possible temporal overlap in terms of disturbance and displacement |
| 2022-MAC-006/ABP code | Codling Offshore Windfarm | Overlaps with IÉ MUL application area | Proposed– MAC granted 23/12/2022, currently in consultation with An Bord Pleanala | 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 Bord Pleanala | Possible temporal overlap in terms of disturbance and displacement |

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

- The Climate Action Plan 2023;
- River Basin Management Plan (RBMP);

Likely significant in-combination effects between this project and the above listed projects and plans on the conservation objectives of Natura 2000 sites considered in this report cannot be excluded at this stage.

(b) Describe any likely changes to the European site:

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|---|---|
| Reduction or Fragmentation of habitat area | Not likely |
| Disturbance to QI species | Disturbance to birds and seals cannot be excluded at this stage. |
| Changes in key indicators of conservation status value | Not likely |
| Changes to a reason of sensitivity or threats to QI | Disturbance to birds and seals cannot be excluded at this stage. |
| Interference with the key relationships that define the structure or ecological function of the site | Not likely |

**Were mitigation measures considered during the screening process?**
No.

The applicants SISAA incorrectly considered mitigations in relation to timings of works being undertaken and avoiding the breeding seasons of particular birds. This was not considered during this AA screening process.

**Step 4 Appropriate Assessment Screening Determination Statement**

On the basis of the information on file, and having regard to:

- The nature and scale of the proposed developments
- The overlap with and distance to Natura 2000 sites
- The potential for in-combination effects with other plans and projects
- Possible visual and above water noise disturbance to bird species and seal species
- And having considered the legal framework applicable to Appropriate Assessment, it is concluded that the proposed maritime usage by Iarnród Éireann, to conduct geotechnical and geophysical site investigations as part of the East Coast Railway Infrastructure Protection Project (ECRIPP) on the Dublin to Wexford railway line, **will require Stage 2 Appropriate Assessment.** It cannot be excluded on the basis of objective scientific information at this time, following screening that the proposed project, individually or in combination with other plans or projects, will not have a significant effect on a European Site.
- **Therefore it is determined that the applicant is required to submit a Natura Impact Statement.**

| **Conclusion** | | |
|---|---|---|
| | **Tick as appropriate** | **Recommendation** |
| (i) It is clear that there is no likelihood of significant/possible effects on a European site | | |
| (ii) It is uncertain whether the proposal will have a significant/possible effect on a European site | X | Proceed to Stage 2 Appropriate Assessment |
| (iii) Significant effects are likely | | |
| Signature and Date of Recommending Officer | [redacted]<br>01/08/2024<br>Marine Advisor | |