

Screening for Appropriate Assessment
 Maritime Usage Licence Application
 Site investigations surveys - Microsoft Portmarnock

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

File Reference No	LIC230018
Brief Description of the Project	<p>Microsoft Ireland Operations Ltd have applied to MARA for a Maritime Usage Licence (MUL) to carry out site investigation surveys. The proposed surveys will consist of geophysical, geotechnical, environmental (benthic sampling), an archaeological survey and intertidal landfall surveys (including bar probes and 3 Trial Pits).</p> <p>These surveys are proposed to investigate the feasibility of constructing a new subsea telecoms cable system, linking Wales to Ireland, from a landfall on the northwest coast of Wales to a landfall Portmarnock, County Dublin on the east coast of Ireland.</p> <p>The licence survey corridor is approximately 64.5 km in length and is a total area of 3211 hectares within the Irish EEZ. A cable route corridor of approximately 500m width will be surveyed within the licence application area (see Figure 1).</p> <p>The principal objective of the Marine Survey & Site Investigations is to ascertain a feasible and safe route for cable system design, deployment, survivability, and subsequent maintenance with due regard for environmental and ecological considerations.</p> <p>The geophysical survey consists of inshore and offshore surveys using different vessels. The inshore marine survey will be carried out using a small craft or unmanned survey vessel equipped with multibeam echosounder, side-scan sonar, marine magnetometer and sub-bottom profile equipment.</p> <p>The offshore marine survey will be carried out by the primary survey vessel using multibeam echosounder, side-scan sonar, marine magnetometer and sub-bottom profiler equipment. The geotechnical surveys consist of up to 15 cone penetration tests (2m to 3m), up to 12 gravity core/vibrocores (3m) and up to 11 grab samples.</p> <p>The site investigation works are planned to commence as soon as feasible, following licence award, are anticipated to take less than 6 weeks in total and will be completed over a 6 month period.</p>
Brief Description of the Site Characteristics	<p>The sediments in the MUL area are largely that of sand, sandy mud and coarse substrate.</p> <p>The area provides foraging habitat for seabirds and is a diverse range of marine mammals utilise this area also.</p> <p>Water depths in the survey area range from the intertidal to approximately 90m depth at the extent of the Irish EEZ.</p>

Step 2 - Identification of relevant Natura 2000 sites using Source-Pathway Receptor Model and compilation of information on Qualifying Interests and Conservation Objectives.

Please note:

- The Qualifying Interests (QI's) highlighted in **bold text** are screened in for Stage 2 Appropriate Assessment.
- As these works are being undertaken in the marine environment, and assessment is using the Source-Pathway-Receptor model (OPR 2021), only marine and coastal Natura 2000 sites were considered in this screening process.
- Distances are measured as straight line distances in open water, or along-shore coastal distances, depending on the site and QI's being considered.
- For international Natura sites, only Qualifying Interest species that are screened in for Stage 2 Appropriate Assessment have been listed in the table below.
- Also included in this assessment are candidate Qualifying Interest (QI) species for a number of SAC sites which are currently open for public consultation.

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
Malahide estuary SAC (Site Code IE 000205)	Within site boundary	Mudflats and sandflats not covered by seawater at low tide [1140] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	No	No	No
Rockabill to Dalkey SAC (Site Code IE003000)	Within site boundary	Reefs [1170]	No	No	Yes

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		Phocoena phocoena (Harbour Porpoise) [1351]	Yes -within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	
Baldoyle Bay SAC (Site Code IE000199)	1.2	Mudflats and sandflats not covered by seawater at low tide [1140] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410]	No	No	No
Ireland's Eye SAC (Site Code IE002193)	2.2	Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]	No	No	No
Lambay Island SAC (Site Code IE000204)	3	Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Halichoerus grypus (Grey Seal) [1364]	No	No	Yes
		Phocoena phocoena (Harbour Porpoise) [1351] Phoca vitulina (Harbour Seal) [1365]	Yes -within foraging ranges of up to 273km for Harbour Seal (Carter et al, 2022) ² and Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	
North Dublin Bay SAC (Site Code IE000206)	4.5	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] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]	No	No	No

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		Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Humid dune slacks [2190] <i>Petalophyllum ralfsii</i> (Petalwort) [1395]			
Rogerstown Estuary SAC (Site code IE000208)	4.7	Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	No	No	No
Howth Head SAC (Site Code IE000202)	4.8	Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] European dry heaths [4030]	No	No	No
South Dublin Bay SAC (Site Code IE000210)	10.3	Mudflats and sandflats not covered by sea-water at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Embryonic shifting dunes [2110]	No	No	No
Codling Fault Zone SAC (Site code IE003015)	17	Submarine structures made by leaking gases [1180]	No	No	Yes

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		Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	
Slaney River Valley SAC [SitecodeIE000781]	54	Estuaries[1130] Mudflats and sandflats not covered by seawater at low tide[1140] Atlantic salt meadows (Glauco-Puccinellietalia maritimae)[1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation[3260] Old sessile oakwoods with Ilex and Blechnum in the BritishIsles[91A0] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnionincanae, Salicionalbae)[91E0] Margaritifera margaritifera (Freshwater Pearl Mussel) [1029] Petromyzon marinus (Sea Lamprey) [1095] Lampetra planeri (Brook Lamprey) [1096] Lampetra fluviatilis (River Lamprey) [1099] Alosa fallax fallax (Twaiite Shad) [1103] Salmo salar(Salmon) [1106] Lutra lutra(Otter) [1355]	No	No	Yes
		Phoca vitulina (Harbour Seal) [1365]	Yes - foraging ranges of up to 273km for Harbour Seal (Carter et al, 2022) ²	Yes – possible disturbance from underwater noise	

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Boyne Coast and Estuary [Site code IE001957]	57	Estuaries[1130] Mudflats and sandflats not covered by seawater at low tide[1140] Annual vegetation of driftlines [1210] Salicornia and other annuals colonising mud and sand[1310] Atlantic salt meadows (Glauco-Puccinellietalia maritimae)[1330] Embryonic shifting dunes[2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes)[2120] Fixed coastal dunes with herbaceous vegetation (grey dunes)[2130]	No	No	No
River Boyne and River Blackwater SAC [Site code IE002299]	62	Alkaline fens [7230] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0] Lampetra fluviatilis (River Lamprey) [1099] Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355]	No	No	No
Saltee Islands SAC [Site code IE0007071]	141	Mudflats and sandflats not covered by seawater at low tide[1140] Large shallow inlets and bays[1160] Reefs[1170] Vegetated sea cliffs of the Atlantic and Baltic coasts[1230] Submerged or partially submerged sea caves[8330]	No	No	Yes
		Halichoerus grypus (Grey Seal) [1364]	Yes - foraging ranges of up to 448km for Grey Seal (Carter et al, 2022) ¹	Yes – possible disturbance from underwater noise	

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Roaringwater Bay and Islands SAC [Site code IE000101]	Within Management Unit for Harbour porpoise	Large shallow inlets and bays [1160] Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] European dry heaths [4030] Submerged or partially submerged sea caves [8330] Lutra lutra (Otter) [1355] Halichoerus grypus (Grey Seal) [1364]	No	No	Yes
		Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	
Basket Islands SAC [Site code IE002172]	Within Management Unit for Harbour porpoise	Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] European dry heaths [4030] Submerged or partially submerged sea caves [8330] Halichoerus grypus (Grey Seal) [1364]	No	No	Yes
		Phocoena phocoena (Harbour Porpoise) [1351]	Within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	
Blackwater Bank SAC [Site code IE002953]	Within Management Unit for	Sandbanks which are slightly covered by sea water all the time [1110]	No	No	Yes

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	Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	
Carnsore Point SAC [Site code IE002269]	128	Mudflats and sandflats not covered by seawater at low tide [1140] Reefs [1170]	No	No	No
		Phocoena phocoena (Harbour Porpoise) [1351]	Yes -within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	
Hook Head SAC [Site code IE000764]	Within Management Unit for Harbour porpoise & Bottlenose Dolphin	Large shallow inlets and bays [1160] Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]	No	No	Yes
		Tursiops truncatus (Common Bottlenose Dolphin) [1349] Phocoena phocoena (Harbour Porpoise) [1351]	Yes -within Harbour Porpoise & Bottlenose Dolphin Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	
The Maidens [Site code UK0030384]	150	Halichoerus grypus (Grey Seal) [1364]	Yes - foraging ranges of up to 448km for Grey Seal (Carter et al, 2022) ²	Yes – possible disturbance from underwater noise	Yes

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Kenmare River SAC [Site code IE002158]	Within Management Unit for Harbour porpoise	Large shallow inlets and bays [1160] Reefs [1170] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] European dry heaths [4030] <i>Juniperus communis</i> formations on heaths or calcareous grasslands [5130] Calaminarian grasslands of the <i>Violetalia calaminariae</i> [6130] Submerged or partially submerged sea caves [8330] <i>Vertigo angustior</i> (Narrow-mouthed Whorl Snail) [1014] <i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat) [1303] <i>Lutra lutra</i> (Otter) [1355] <i>Phoca vitulina</i> (Harbour Seal) [1365]	No	No	
		Phocoena phocoena (Harbour Porpoise) [1351]	Yes - Within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes
Belgica Mound Province SAC [Site code IE002327]	Within Management Unit for	Reefs [1170] <i>Tursiops truncatus</i> (Common Bottlenose Dolphin) [1349]	No	No	

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	Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes -within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes
Inishmore Island SAC [Site code IE000213]	Within Management Unit for Harbour porpoise	Coastal lagoons [1150] Reefs [1170] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>) [2170] Humid dune slacks [2190] Machairs (* in Ireland) [21A0] European dry heaths [4030] Alpine and Boreal heaths [4060] Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>) [6510] Limestone pavements [8240] Submerged or partially submerged sea caves [8330] <i>Vertigo angustior</i> (Narrow-mouthed Whorl Snail) [1014]	No	No	Yes
		Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	

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Kilkieran Bay and Islands SAC [Site code IE002111]	Within Management Unit for Harbour porpoise	Mudflats and sandflats not covered by seawater at low tide [1140] Coastal lagoons [1150] Large shallow inlets and bays [1160] Reefs [1170] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] Machairs (* in Ireland) [21A0] Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i> [3130] Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>) [6510] <i>Lutra lutra</i> (Otter) [1355] <i>Phoca vitulina</i> (Harbour Seal) [1365] <i>Najas flexilis</i> (Slender Naiad) [1833]	No	No	Yes
		Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	
West Connacht Coast SAC [Site code IE002998]	Within Management Unit for Harbour porpoise	<i>Tursiops truncatus</i> (Common Bottlenose Dolphin) [1349]	No	No	Yes
		Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	

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Bunduff Lough and Machair/Trawalua/Mullaghmore SAC [000625]	Within Management Unit for Harbour porpoise	Mudflats and sandflats not covered by seawater at low tide [1140] Large shallow inlets and bays [1160] Reefs [1170] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Humid dune slacks [2190] Machairs (* in Ireland) [21A0] Juniperus communis formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Alkaline fens [7230] Euphydryas aurinia (Marsh Fritillary) [1065] Petalophyllum ralfsii (Petalwort) [1395]	No	No	
		Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes
Lleyn Peninsula and the Sarnau SAC [Site code UK0013117]	Within Management Unit for Bottlenose Dolphin	Tursiops truncatus (Common Bottlenose Dolphin) [1349]	Yes - within Bottlenose Dolphin Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes

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Cardigan Bay SAC [Site code UK0012712]	Within Management Unit for Bottlenose Dolphin	Tursiops truncatus (Common Bottlenose Dolphin) [1349]	Yes - within Bottlenose Dolphin Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes
North Anglesey Marine SAC [Site code UK0030398]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes
West Wales Marine SAC [Site code UK0030397]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes
Bristol Channel Approaches SAC [Site code UK003039]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes
hRécifs et landes de la Hague SAC [Site code FR2500084]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes

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Anse de Vauville SAC [Site code FR2502019]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes
Banc et récifs de Surtainville SAC [Site code FR2502018]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes
Chausey [Site code FR2500079]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes
Baie du Mont Saint-Michel [Site code FR2500077]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes
Estuaire de la Rance SAC [Site code FR5300061]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes

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Baie de Lancieux, Baie de l'Arguenon, Archipel de Saint Malo et Dinard [Site code FR5300012]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes
Cap d'Erquy-Cap Fréhel [Site code FR5300011]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes
Baie de Saint-hBrieuc [Site code FR5300066]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes
Tregor Goëlo [Site code FR5310070]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes
Côte de Granit rose-Sept-Iles [Site code FR5300009]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes

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Nord Bretagne DH [Site code FR2502022]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes
Baie de Morlaix SAC [Site code FR5300015]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes
Abers - Côte des légendes [Site code FR5300017]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes
Ouessant-Molène [Site code FR5300018]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes
Côtes de Crozon [Site code FR5302006]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes

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Mers Celtiques – Talus du golfe de Gascogne [Site code FR5302015]	Within management unit for harbour porpoise	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes
Rivière Leguer, forêts de Beffou, Coat an Noz et Coat an Hay [Site code FR5300008]	Within management unit for harbour porpoise	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes
Estuaire de la Rance [Site code FR53000061]	Within management unit for harbour porpoise	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes
Chaussée de Sein [Site code FR5302007]	Within management unit for harbour porpoise	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes
Récifs du talus du golfe de Gascogne [Site code FR5302016]	Within management unit for harbour porpoise	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ³	Yes – possible disturbance from underwater noise	Yes

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
North West Irish Sea SPA (Site Code IE004236)	Within site boundary	<p>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] 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]</p>	Yes – within site boundary	Yes – possible visual & above water noise disturbance	Yes
Malahide Estuary SPA (Site Code IE004025)	Within site boundary	<p>Great Crested Grebe (<i>Podiceps cristatus</i>) [A005] Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] Shelduck (<i>Tadorna tadorna</i>) [A048] Pintail (<i>Anas acuta</i>) [A054] Goldeneye (<i>Bucephala clangula</i>) [A067] 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]</p>	Yes – within site boundary	Yes – possible visual & above water noise disturbance	Yes

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
		Knot (Calidris canutus) [A143] Dunlin (Calidris alpina) [A149] Black-tailed Godwit (Limosa limosa) [A156] Bar-tailed Godwit (Limosa lapponica) [A157] Redshank (Tringa totanus) [A162] Wetland and Waterbirds [A999]			
Baldoyle Bay SPA (Site Code IE	1.2	Light-bellied Brent Goose (Branta bernicla hrota) [A046] Shelduck (Tadorna tadorna) [A048] Ringed Plover (Charadrius hiaticula) [A137] Golden Plover (Pluvialis apricaria) [A140] Grey Plover (Pluvialis squatarola) [A141] Bar-tailed Godwit (Limosa lapponica) [A157] Wetland and Waterbirds [A999]	No	No	No
Ireland's Eye SPA (Site Code IE004117)	2.2	Herring Gull (Larus argentatus) [A184] Kittiwake (Rissa tridactyla) [A188] Cormorant (Phalacrocorax carbo) [A017] Guillemot (Uria aalge) [A199] Razorbill (Alca torda) [A200]	Yes	Yes - possible visual, above water noise & underwater noise disturbance	Yes
Lambay Island SPA (Site Code IE004069)	2.7	Cormorant (Phalacrocorax carbo) [A017] Shag (Phalacrocorax aristotelis) [A018] Guillemot (Uria aalge) [A199] Razorbill (Alca torda) [A200] Puffin (Fratercula arctica) [A204] Kittiwake (Rissa tridactyla) [A188] Fulmar (Fulmarus glacialis) [A009] Lesser Black-backed Gull (Larus fuscus) [A183] Herring Gull (Larus argentatus) [A184]	Yes	Yes - possible visual, above water noise & underwater noise disturbance	Yes

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
		Greylag Goose (<i>Anser anser</i>) [A043]			
Rogerstown Estuary SPA (Site Code IE004015)	4.3	Greylag Goose (<i>Anser anser</i>) [A043] Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] Shelduck (<i>Tadorna tadorna</i>) [A048] Shoveler (<i>Anas clypeata</i>) [A056] 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] Dunlin (<i>Calidris alpina</i>) [A149] Black-tailed Godwit (<i>Limosa limosa</i>) [A156] Redshank (<i>Tringa totanus</i>) [A162] Wetland and Waterbirds [A999]	No	No	No
North Bull Island SPA (Site Code IE004006)	4.5	Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] Shelduck (<i>Tadorna tadorna</i>) [A048] Teal (<i>Anas crecca</i>) [A052] 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]	Yes	Yes - possible visual & above water noise	Yes

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
		Curlew (<i>Numenius arquata</i>) [A160] Redshank (<i>Tringa totanus</i>) [A162] Turnstone (<i>Arenaria interpres</i>) [A169] Wetland and Waterbirds [A999]			
Howth Head Coast SPA (Site Code IE004113)	4.9	Kittiwake (<i>Rissa tridactyla</i>) [A188]	Yes	Yes - possible visual & above water noise	Yes
Howth Head Coast SPA (Site Code IE004113)	4.9	Kittiwake (<i>Rissa tridactyla</i>) [A188]	Yes	Yes - possible visual & above water noise	Yes
Rockabill SPA (Site code:004014)	12	Roseate Tern (<i>Sterna dougallii</i>) [A192] Common Tern (<i>Sterna hirundo</i>) [A193] Arctic Tern (<i>Sterna paradisaea</i>) [A194] Purple Sandpiper (<i>Calidris maritima</i>) [A148]	Yes	Yes - possible visual & above water noise	Yes
Skerries Islands SPA (Site code: 004122)	15	Herring Gull (<i>Larus argentatus</i>) [A184] Cormorant (<i>Phalacrocorax carbo</i>) [A017] Shag (<i>Phalacrocorax aristotelis</i>) [A018] Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] Purple Sandpiper (<i>Calidris maritima</i>) [A148] Turnstone (<i>Arenaria interpres</i>) [A169]	Yes	Yes - possible visual & above water noise	Yes

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
River Nanny Estuary and Shore SPA (Site code: 004158)h	25	Herring Gull (<i>Larus argentatus</i>) [A184] Oystercatcher (<i>Haematopus ostralegus</i>) [A130] Ringed Plover (<i>Charadrius hiaticula</i>) [A137] Golden Plover (<i>Pluvialis apricaria</i>) [A140] Knot (<i>Calidris canutus</i>) [A143] Sanderling (<i>Calidris alba</i>) [A144] Wetland and Waterbirds [A999]	Yes	Yes - possible visual & above water noise	Yes
The Murrough SPA (Site code: 004186)	30	Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Herring Gull (<i>Larus argentatus</i>) [A184] 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] Little Tern (<i>Sterna albifrons</i>) [A195] Wetland and Waterbirds [A999]	Yes	Yes - possible visual & above water noise	Yes
Boyne Estuary SPA (Site code: 004080)	33	Shelduck (<i>Tadorna tadorna</i>) [A048] 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] Knot (<i>Calidris canutus</i>) [A143] Sanderling (<i>Calidris alba</i>) [A144] Black-tailed Godwit (<i>Limosa limosa</i>) [A156] Redshank (<i>Tringa totanus</i>) [A162]	No	No	No

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
		Turnstone (<i>Arenaria interpres</i>) [A169] Little Tern (<i>Sterna albifrons</i>) [A195] Wetland and Waterbirds [A999]			
Wickow Head SPA (Site code: 004127)	46	Kittiwake (<i>Rissa tridactyla</i>) [A188]	Yes	Yes – possible visual and above water noise disturbance	Yes
Dundalk Bay SPA (Site code: 004026)	49	Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Common Gull (<i>Larus canus</i>) [A182] Herring Gull (<i>Larus argentatus</i>) [A184] Great Crested Grebe (<i>Podiceps cristatus</i>) [A005] Greylag Goose (<i>Anser anser</i>) [A043] Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] Shelduck (<i>Tadorna tadorna</i>) [A048] Teal (<i>Anas crecca</i>) [A052] Mallard (<i>Anas platyrhynchos</i>) [A053] Pintail (<i>Anas acuta</i>) [A054] Common Scoter (<i>Melanitta nigra</i>) [A065] Red-breasted Merganser (<i>Mergus serrator</i>) [A069] Oystercatcher (<i>Haematopus ostralegus</i>) [A130] 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] Knot (<i>Calidris canutus</i>) [A143] Dunlin (<i>Calidris alpina</i>) [A149]	Yes	Yes - possible visual & above water noise	Yes

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
		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] 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	
Impacts	Possible Significance of Impacts (duration, magnitude etc.)
Disturbance from underwater noise	Possible temporal impacts on Marine Mammals and Birds.
Visual and above water noise disturbance	Possible temporal impacts on Birds.

In-Combination Effects

MARA has developed a stepwise approach for identifying other In-Combination plans and projects (see description on MARA website).

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

The CESS has been defined as 5 km and the CETS as 2 years. The definition of the CESS is based on acoustic survey equipment effective deterrence ranges as per JNCC Guidance on Assessing the Significance of Noise Disturbance against Harbour Porpoise SACs Conservation Objectives (JNCC, 2020⁴). And the CETS is the Maritime Usage Licence period.

Using the above 8 step approach, and following a search of relevant databases undertaken on the 19th of April 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
FS007635	MaresConnect Electricity Interconnector Site Investigation	Overlaps with Microsoft Portmarnock MUL application area	Proposed – application submitted 03/03/23	Spatial overlap with Microsoft Dublin Port Maritime Usage Licence Area. Within the CESS. Possible temporal overlap
FS007151	Proposed Sunrise Offshore Wind Farm,	Overlaps with Microsoft Portmarnock	Proposed – application submitted 23/12/21	Spatial overlap with Microsoft Dublin Port Maritime Usage Licence Area.

	off Counties Dublin and Wicklow	MUL application area		Within the CESS. Possible temporal overlap
FS007188	Dublin Array Offshore Windfarm	Overlaps with Microsoft Portmarnock MUL application area	Proposed – application submitted 01/10/21	Spatial overlap with Microsoft Dublin Port Maritime Usage Licence Area. Within the CESS. Possible temporal overlap
F20A/0576	Robswall Cottage, Coast Road, Malahide, Co. Dublin - mixed residential and demolition of an existing building	0.2km	Permission granted 28/03/2023	No spatial overlap with Microsoft Dublin Port Maritime Usage Licence Area. Within the CESS. Possible temporal overlap
FS007605	Irish Water benthic Survey	0.8km	Approved but not completed - licence granted 24/08/2023	No spatial overlap with Microsoft Dublin Port Maritime Usage Licence Area. Within the CESS. Possible temporal overlap

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

- The Climate Action Plan 2023
- River Basin Management Plans (RBMP)
- Designated Maritime Area Plans (DMAPs)

These plans promote sustainable development in the maritime environment and particularly Ireland’s Climate Action Plan’s renewable electricity target of 80% of energy generated from renewable electricity sources by 2030.

Likely significant in-combination effects between this project and the above listed 5 projects and 3 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:	
Reduction or Fragmentation of habitat area	Not likely
Disturbance to QI species	Disturbance to Annex II Marine Mammal species and Birds cannot be excluded at this stage.
Changes in key indicators of conservation status value	Not likely
Changes to areas of sensitivity or threats to QI	Disturbance to Annex II Marine Mammal species and Birds 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

Step 4 Screening Determination Statement



The assessment of significant effects:

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

- The nature and scale of the proposed development
- The distance to the nearest European site
- The potential for in-combination effects with other plans and projects
- Possible disturbance from underwater noise
- Possible visual and above water noise disturbance

Having considered the legal framework applicable to Appropriate Assessment it was concluded that the proposal by Microsoft Ireland Operations Ltd to carry out a site investigation surveys will require Appropriate Assessment as it cannot be excluded on the basis of objective scientific information, following screening that the proposed activities, individually or in combination with other plans or projects, will have a significant effect on a European Site.

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	<input checked="" type="checkbox"/>	Proceed to Stage 2 Appropriate Assessment
(iii) Significant effects are likely		
Signature and Date of Recommending Officer	 24 th April 2024	
Signature and Date of Decision Maker	 24 th April 2024	

¹ OPR 2021, Office of the Planning Regulator, March 2021 OPR Practice Note PN01, <https://www.opr.ie/wp-content/uploads/2021/03/9729-Office-of-the-Planning-Regulator-Appropriate-Assessment-Screening-booklet-15.pdf>

² Carter et al, 2022 - Carter et al, 2022. Sympatric Seals, Satellite Tracking and Protected Areas: Habitat-Based Distribution Estimates for Conservation and Management, *Frontiers in Marine Science*, v9 2022.

³ JNCC 2023 - IAMMWG. 2023. Review of Management Unit boundaries for cetaceans in UK waters (2023). JNCC Report 734, JNCC, Peterborough, ISSN 0963-8091.

<https://data.jncc.gov.uk/data/b48b8332-349f-4358-b080-b4506384f4f7/jncc-report-734.pdf>

⁴ JNCC, 2020 - JNCC (2020). Guidance for assessing the significance of noise disturbance against Conservation Objectives of harbour porpoise SACs (England, Wales & Northern Ireland). JNCC Report No. 65.

Appendix 1

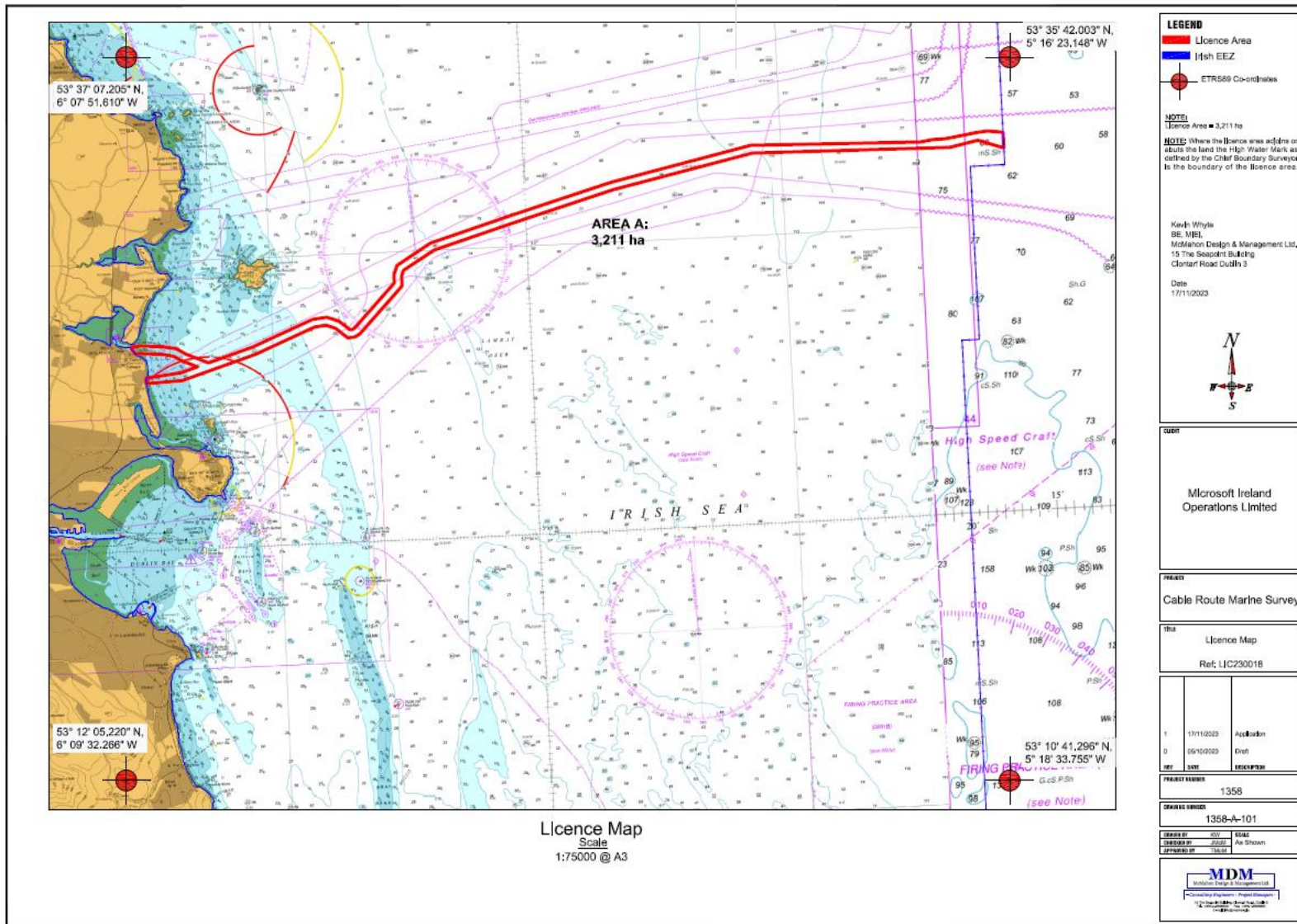


Figure 1 – Proposed Maritime Usage Licence Area