

Assessment, Research and Data Unit

Appropriate Assessment Screening and Determination Report

To:	Maritime Authorisations Unit	From:	Dr Ciar O'Toole Senior Marine Advisor
Date:	28/10/2025	Maritime Usage Licence Application No:	MUL250010
Applicant:	Gas Networks Ireland, Gasworks Road, Cork, Ireland		
Type of maritime usage activity in accordance with Schedule 7 of the Maritime Area Planning Act 2021:	<i>Schedule 7 (3): Marine environmental surveys for the purposes of site investigation or in support of an application under Part XXI of the Act of 2000.</i>		
Location of proposed maritime usage:	The surrounds of Foynes Island, Shannon Estuary adjacent to the townlands of Shannakea Beg, Cahiracon, Foynes Island, Leahys and Corrig.		
Licence application received:	28/07/2025		

1. Background

In March 2025, the Government of Ireland gave approval to proceed with the development of a State-led strategic gas emergency reserve. The delivery of a temporary gas reserve is deemed critical to Ireland's energy security as we continue to transition to indigenous, clean renewable energy.

GNI (the applicant) has therefore applied to the Maritime Area Regulatory Authority (MARA) for a Maritime Usage Licence (MUL) to undertake marine environmental surveys for the purposes of site investigation, falling under Schedule 7(3) of the Maritime Area Planning Act 2021 (the MAP Act) to conduct marine Site Investigations (SI) and environmental surveys within the Shannon Estuary. The proposed maritime usage is required to provide baseline data that can contribute to a reliable basis for site selection and any subsequent design and environmental reports for any planning application made for the Strategic Gas Emergency Reserve Project.

2. Description of maritime usage and local site characteristics

2.1 Brief description of the maritime usage

The proposed maritime usage area covers an area of approx. 11.19km² and extends from the townland of Shannakea Beg along the Clare coast to Cahiracon across the Shannon Estuary to Shannon Foynes Island and along the Limerick coast to the townland of Leahys and Corgrig (Figure 1). Table 1 shows the proposed usages and estimated duration. The proposed maritime usage, as applied for is proposed to occur in two phases, Phase One taking up to 16 weeks and Phase Two taking a similar amount of time at a later date. The applicant has applied for a licence duration of five years to allow for delays in carrying out the two phases.

Table 1: Proposed maritime usage activities, with duration, number of samples and maximum footprint

Maximum Survey Activity	Total time for activity	Maximum number of samples	Maximum total footprint per intrusive activity (km ²)
Geophysical survey – all types	Up to 4 months	<u>Side Scan Sonar (SSS), Magnetometer, Sub Bottom Profilers (Parametric, Boomer and Chirper):</u> 20 m spacing of main lines and 100 m spacing of cross lines with 25% overlap onto neighbouring lines <u>Multibeam Echo Sounder (MBES):</u> 5 -20 m line spacing	Area up to 2.155
Marine Refraction-Seismic	Up to 4 months	20 m line spacing	Area up to 2.155

Marine Electrical Resistivity Tomography (ERT)	Up to 4 months	20 maximum ERT lines	0.0000063
Marine Environmental and Ecological Surveys	Up to 4 months	Habitat surveys including drop down camera/drone surveys 120 subtidal (30 no. grab locations with max 4 samples taken at each location) 120 intertidal (30 no. grab locations with max 4 samples taken at each location)	0.000024
Archaeological	Up to 4 months	Intertidal walkover with metal detector. Drop down camera and dive surveys	
Geotechnical: Drop down video	Up to 4 months	30 transects of up to 30 metres	0.0009
Geotechnical: Boreholes	Up to 4 months	80 boreholes of diameter of 300mm, up to 50m below bed level	0.00000568
Cone Penetration Tests (CPTs)	Up to 4 months	80 CPTs of up to 20m below bed level	0.0000001216
Jack-up barge use	Up to 4 months	640 leg locations (80x borehole and 80 x CPT locations x 4 legs)	0.00064
Geotechnical: Grab samples	Up to 4 months	50 grabs of 0.1m ²	0.000005
6 x Metocean monitoring buoys	Maximum of 24 months (2 years)	12 anchors (2 per buoy)	0.000048

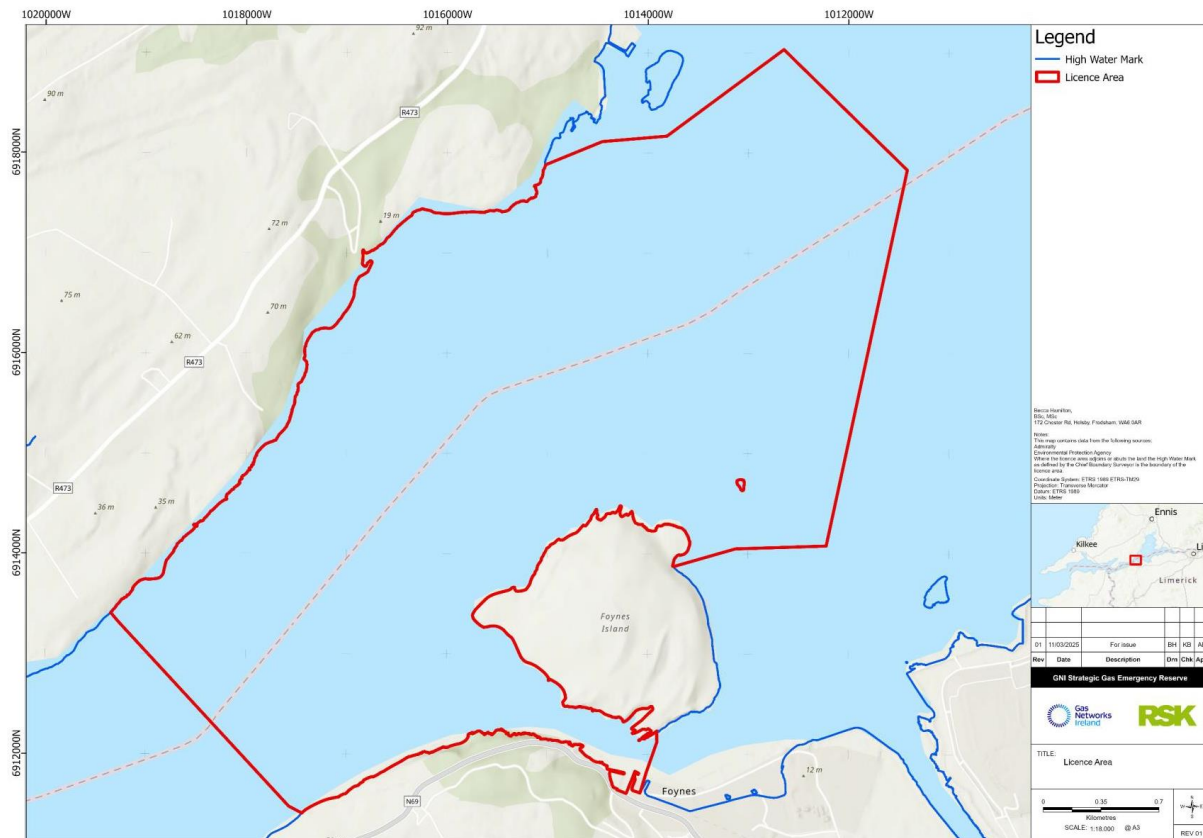


Figure 1: Proposed maritime usage area outlined in red.

2.2 Brief description of the site characteristics

The estuary is characterised by large areas of intertidal mudflats and fringing saltmarsh. The sediment in the area is largely coarse sand, with benthic faunal biodiversity increasing in more sheltered areas. The area has sheltered conditions and water depths ranging from the intertidal to around 50m below chart datum. The proposed MUL application area overlaps with qualifying interests in the Lower River Shannon SAC. The Shannon Estuary is also a busy commercial channel, with Shannon Foynes Port, Aughinish Alumina and Limerick Port. The proposed Maritime Usage area includes part of Shannon Foynes Port.

The applicant submitted a Supporting Information for Screening of Appropriate Assessment (SISAA) report in support of the application.

3. Identification of relevant European sites

The MUL application is subject to screening for appropriate assessment in accordance with Regulation 42 of the European Communities (Birds and Natural Habitats) Regulations 2011, as amended, to determine if it alone, or in-combination with other plans or projects, is likely

to have a significant effect on a European site, in view of best scientific knowledge and the conservation objectives of the sites.

The proposed maritime usage is not directly connected with or necessary to the management of any European site(s). The European sites (Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)) listed on Table 2 have been considered for appropriate assessment, given the nature, scale and Zone of Influence of the maritime usage, the conservation objectives of the European sites and using the Source-Pathway-Receptor model.

Table 2 - Identification of relevant European sites, their qualifying interests and site-specific conservation objectives. Those Qualifying Interests marked in bold have been screened in for Stage 2 appropriate assessment.

European Site Code	Distance from the Proposed Development (km)	List of Qualifying Interests/Special Conservation Interests	Connections (Source-pathway-receptor)	European Site Screened in	Site-specific conservation objectives
Lower River Shannon SAC [Site Code IE002165]	Within SAC boundary	Sandbanks which are slightly covered by sea water all the time [1110] Mudflats and sandflats not covered by seawater at low tide [1140] Coastal lagoons [1150] Large shallow inlets and bays [1160] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Salicornia and other annuals colonising mud and sand [1310] 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 Callitriche-Batrachion vegetation [3260] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	No	No	NPWS, 2012 Conservation Objectives: Lower River Shannon SAC 002165. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
		Estuaries [1130] Reefs [1170]	Yes – geotechnical surveys to	Yes – possible physical disturbance	

		Margaritifera margaritifera (Freshwater Pearl Mussel) [1029] Petromyzon marinus (Sea Lamprey) [1095] Lampetra planeri (Brook Lamprey) [1096] Lampetra fluviatilis (River Lamprey) [1099] Salmo salar (Salmon) [1106] Tursiops truncatus (Common Bottle-nose Dolphin) [1349] Lutra lutra (Otter) [1355]	take place within 1130 Estuaries and adjacent to 1170 Reefs Yes – geotechnical surveys to take place within SAC boundary Yes – geophysical surveys to take place within SAC boundary	and habitat loss Yes – possible increased suspended sediment concentrations Yes – possible disturbance from above and underwater noise, possible collision risk to cetaceans.	
Kerry Head Shoal SAC [Site code 002263]	62km	Reefs [1170]	No – no link between activity and SAC or QI's	No	NPWS (2013) Conservation Objectives: Kerry Head Shoal SAC 002263. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
Blasket Islands SAC	117km	Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] European dry heaths [4030]	No	No	NPWS (2014) Conservation Objectives: Blasket Islands SAC 002172. Version 1.

[Site code IE002172]		Submerged or partially submerged sea caves [8330]	Yes - within Harbour Porpoise foraging area	Yes – possible disturbance from underwater noise	National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
		Phocoena phocoena (Harbour Porpoise) [1351]			
Slyne Head Islands SAC [Site code IE000328]	167km	Reefs [1170]	No	No	NPWS (2024) Conservation Objectives: Slyne Head Islands SAC 000328. Version 2. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
		Tursiops truncatus (Common Bottlenose Dolphin) [1349]	Yes - within Bottlenose Dolphin foraging area	Yes – possible disturbance from underwater noise	
Slyne Head Peninsula SAC [Site code IE002074]	169kms	Coastal lagoons [1150] Large shallow inlets and bays [1160] Reefs [1170] Annual vegetation of drift lines [1210] Perennial vegetation of stony banks [1220] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Machairs (* in Ireland) [21A0] Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea [3130]	No	No	NPWS (2015) Conservation Objectives: Slyne Head Peninsula SAC 002074. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

		Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140] European dry heaths [4030] 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] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510] Alkaline fens [7230] Petalophyllum ralfsii (Petalwort) [1395] Najas flexilis (Slender Naiad) [1833] Tursiops truncatus (Common Bottlenose Dolphin) [1349]			
			Yes - within Bottlenose Dolphin foraging area	Yes – possible disturbance from underwater noise	
West Connacht Coast SAC [Site code IE002998]	170km	Tursiops truncatus (Common Bottlenose Dolphin) [1349] Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within species foraging area	Yes – possible disturbance from 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.

Duvillaun Islands SAC [Site code IE000495]	245km	Tursiops truncatus (Common Bottlenose Dolphin) [1349] Halichoerus grypus (Grey Seal) [1364]	Yes - within Bottlenose Dolphin foraging area	Yes – possible disturbance from underwater noise	NPWS (2024) Conservation Objectives: Duvillaun Islands SAC 000495. Version 2. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
Roaringwater Bay and Islands SAC [Site code IE000101]	245km	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	NPWS (2011) Conservation Objectives: Roaringwater Bay and Islands SAC IE000101. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
		Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise foraging area	Yes – possible disturbance from underwater noise	
River Shannon and River Foynes Estuaries SPA [Site code IE004077]	Within SPA boundary	Cormorant (Phalacrocorax carbo) [A017] Whooper Swan (Cygnus cygnus) [A038] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Shelduck (Tadorna tadorna) [A048] Wigeon (Anas penelope) [A050] Teal (Anas crecca) [A052] Pintail (Anas acuta) [A054] Shoveler (Anas clypeata) [A056] Scaup (Aythya marila) [A062] Ringed Plover (Charadrius hiaticula) [A137] Golden Plover (Pluvialis apricaria) [A140]	Yes - geophysical and geotechnical surveys to take place within SPA boundary	Yes - possible visual & above water noise disturbance and disturbance from underwater noise	NPWS (2012) Conservation Objectives: River Shannon and River Fergus Estuaries SPA 004077. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

		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] 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] Greenshank (<i>Tringa nebularia</i>) [A164] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Wetland and Waterbirds [A999]			
Loop Head SPA [Site code 004119]	56km	Kittiwake (<i>Rissa tridactyla</i>) [A188] Guillemot (<i>Uria aalge</i>) [A199]	No	No	NPWS (2025) Conservation Objectives: Loop Head SPA 004119. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
Kerry Head SPA [Site code 004182]	55km	Fulmar (<i>Fulmarus glacialis</i>) [A009] Chough (<i>Pyrrhocorax pyrrhocorax</i>) [A346]	No	No	NPWS (2025) Conservation Objectives: Kerry Head SPA 004189. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

4. Assessment of likely significant effects

Table 3 identification of potential direct and indirect impacts that may have an effect on the conservation objectives of European sites, taking into account the nature and scale of the proposed maritime usage.

Table 3: Potential Impacts

Potential Impacts	Possible significance of potential impacts (duration, magnitude, etc.)
Physical disturbance and habitat loss	Possible temporal impacts on habitats in terms of physical disturbance due to proposed MUL activities. Potential for habitat loss to reef habitats.
Increase in sedimentation	An increase in suspended sediments from survey activities could impact on migratory fish species, or their prey species of birds and marine mammals.
Disturbance from underwater noise	Potential for sound sources from survey activities to be at a level and duration that would cause a significant negative impact on marine mammals, fish and bird populations
Visual & above water noise, vibration, human presence disturbance	Potential for survey activities generating noise, vibration and increased human presence or vessel activity to be at an intensity and duration that would cause significant disturbance to bird populations, marine mammals and otter.
Collision risk	Potential for impact if collisions occur on resident Bottlenose dolphin population within Shannon estuary

In-combination effects

MARA has developed a stepwise approach for identifying other plans and projects that may impact on European sites in-Combination with the proposed maritime usage. 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 20km and the CETS as five years. The definition of the CESS is based on acoustic survey equipment effective deterrence ranges as per the updated JNCC Guidance on Assessing the Significance of Noise Disturbance against Harbour Porpoise SACs Conservation Objectives (2025). The CETS is the proposed MUL duration.

A search of relevant databases was undertaken on the 21/10/2025. Relevant projects within the CESS and the CETS were considered. Particular attention was given to the projects shown on Table 4 which have the potential to act in-combination with the proposed maritime usage.

Table 4: List of projects which, in particular, were considered to have potential in-combination impacts on European sites

Application reference	Project description	Distance from proposed MUL area (km)	Project Status
Planning Permission application 18301561	Capacity Extension at Foynes Port	Overlaps	Approved but not completed. - Permission granted 12/12/2018
Planning Permission application 2360011	Shannon Foynes Port Development	Overlaps	Proposed - permission submitted January 2023
Planning Permission application 22742	Shannon Foynes Port Development	Overlaps	Proposed - permission submitted July 2022
Foreshore Licence application FS006975	Shannon Foynes Port Company maintenance dredging	Overlaps	Approved but not completed. - Permission granted 03/03/2023
MUL - LIC230014	Shannon Foynes Port Company	Overlaps	Granted October 2024
MUL - LIC230008	ESB Moneypoint – site investigations	15 km	Granted August 2024

MUL – MUL240034	Gas Networks Ireland Shannon Estuary – Site investigations	Overlap	Granted June 2025
Dumping at Sea S0009-03	Shannon Foynes Port Company Dumping at Sea Permit	1 km	Approved but not completed. - Permission granted 21/12/2020
MUL LIC230004	Aughinish Maintenance Dredging	3.5 km	Granted April 2025
PA91.312146 and 318302	Aughinish Alumina Bauxite Extension	3.5km	Approved. - Permission granted 31/08/22
MAC application MAC10230032	NetZero Energy Project 4 Limited	2 km	Proposed MAC submitted
MAC application MAC20240010	Uisce Eireann - WWTP	1 km	MAC applied for and under assessment

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

- The Climate Action Plan 2025.
- The Water Action Plan 2024
- National Biodiversity Action Plan (2023-2027)
- Limerick County Development Plan (2022-2028)
- Clare County Development Plan (2023-2029)
- Strategic Integrated Framework Plan for the Shannon Estuary (2013-2020)

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 Natura 2000 sites. Likely significant in-combination effects between this project and the plans listed here on the conservation objectives of the European sites considered in this report can be excluded.

Likely significant in-combination effects between this application and the projects in Table 4 on the conservation objectives of the European sites considered in this report cannot be excluded at this stage.

Were mitigation measures considered during the screening process?

No

5. Screening Determination Statement

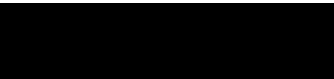
The assessment of significant effects:

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 sites
- The potential for in-combination effects with other projects
- Possible disturbance from underwater noise
- Possible visual and above water noise disturbance, vibration and increased human disturbance
- Collision risk
- Physical disturbance and habitat loss
- Possible increase in sedimentation

Having considered the legal framework applicable to appropriate assessment, it was concluded that the proposed maritime usage by Gas Networks Ireland Limited, Gasworks Road, Cork, Ireland. to carry out *Marine environmental surveys for the purposes of site investigation or in support of an application under Part XXI of the Act of 2000.* at the surrounds of Foynes Island, Shannon Estuary adjacent to the townlands of Shannakea Beg, Cahiracon, Foynes Island, Leahys and Corgrig. (MUL250010) will require Stage 2 Appropriate Assessment.

It cannot be excluded on the basis of objective scientific information, that the proposed project, either individually or in combination with other plans or projects, will have a significant effect on a European site.

Signature and Date of Recommending Officer	 Dr Ciar O'Toole Senior Marine Advisor/Marine Analyst	28/10/2025
Signature and Date of Decision Maker	 John Evans Director of Assessment, Research and Data Unit	28/10/2025