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APPENDIX 1

OFFSHORE AA SCREENING



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1. INTRODUCTION

Background

MKO, Xodus and Cork Ecology have been appointed to provide the information necessary to allow the competent authority to conduct an Article 6(3) Appropriate Assessment under the Habitats Directive of both the Offshore Site and Onshore Site of the proposed Sceirde Rocks Offshore Wind Farm, hereafter referred to as the 'the Project'.

The current Project is not directly connected with, or necessary for, the management of any European Site and as such, Screening for Appropriate Assessment is required under Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive). Screening for Appropriate Assessment and Appropriate Assessment (NIS) is completed pursuant to the Part XAB Planning and Development Act 2000, as amended. A screening for appropriate assessment of a Project is carried out by the competent authority to assess, in view of best scientific knowledge, if the Project, individually or in combination with another Project is likely to have a significant effect on a European site. Where a plan or a project has a likely significant effect (LSE) on a qualifying interest (QI) of a European Site, the plan or proposal shall be subject to an Appropriate Assessment of its implications for the site in view of the site's conservation objectives. The legal test for AA Screening is as follows:

A screening for appropriate assessment of a Project is carried out by the competent authority to assess, in view of best scientific knowledge and in light of the conservation objectives of the European site, if the Project, individually or in combination with another Project, is likely to have a significant effect on the European site.

If having carried out a Screening for Appropriate Assessment, it cannot be concluded that there is no likely significant effect from the Project on a European Site, Appropriate Assessment is required. The Appropriate Assessment is carried out by the competent authority, in this case An Bord Pleanála, before planning permission for the Project can be granted. The Appropriate Assessment assesses whether, based on objective scientific information, a project or plan, either alone or in combination with other projects or plans, would have an adverse effect on the integrity of a European Site/Natura 2000 Site.

The Natura 2000 network in Ireland is made up of European Sites which include:

- > Special Areas of Conservation (SAC);
- > Special Protection Areas (SPA);
- Candidate Special Areas of Conservation (cSAC); and
- > Proposed Special Protection Areas (pSPA).

This Appropriate Assessment Screening Report has been prepared in accordance with the European Commission's Assessment of Plans and Projects Significantly affecting Natura 2000 Sites: Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (EC, 2021) and Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (EC, 2018) as well as the Department of the Environment's Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (DoEHLG, 2010) and the Appropriate Assessment Screening for Development Management, Office of the Planning Regulator, Dublin 7, Ireland OPR (2021).

In addition to the guidelines referenced above, the following relevant documents were also considered in the preparation of this report:



- Council of the European Commission (1992) Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. Official Journal of the European Communities. Series L 20, pp. 7-49.
- 2. EC (2007) Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence. Opinion of the commission.
- 3. EC (2013) Interpretation Manual of European Union Habitats. Version EUR 28. European Commission.

1.2 Scope of the Document

Where the 'Project' is referred to, this encompasses the entirety of the project for the purposes of this document and includes both the 'Offshore Site' and 'Onshore Site'. The Project is fully described in detail in Appendix 1: Project Description of this Appropriate Assessment Screening Report.

For the purpose of this document, the Offshore Site refers to the Offshore Array Area (OAA), Offshore Substation (OSS), as well as the Offshore Export Cable (OEC), the Offshore Export Cable Corridor (OECC), and the Landfall. The description of the Offshore Site is set out and described in further detail in Section 2.1 and Figure 2-1 below.

This Appropriate Assessment Screening Report will focus on the Offshore Site and Natura 2000 sites relevant to the Offshore Site. Details and assessment of the onshore part of the Project and associated elements and impacts on European Sites are detailed in the Onshore Appropriate Assessment Screening Report [Offshore NIS Appendix 1].

1.3 Statement of Authority

The production of this Appropriate Assessment Screening Report was overseen and reviews carried out by Ewan Edwards, Louise Davis and Anni Mäkelä. Ewan Edwards is an Environmental Specialist at Xodus. He has 16 years of professional experience investigating human impacts on marine species, with a particular interest in marine mammals and seabirds. Prior to joining Xodus, Ewan was the lead renewables science adviser within Scottish Government's Marine Directorate, with a key advisory role on a range of offshore wind projects. He led the delivery of environmental advice to the marine industries regulator and routinely advised on Habitats Regulations Appraisal/Assessment (HRA) related to the Habitats Directive, including Hornsea Three Wind Farm Site Integrity Plan, Culzean Offshore Wind Turbine HRA Screening and Report to Inform Appropriate Assessment, West of Orkney Wind Farm Report to Inform Appropriate Assessment, and Cenos Offshore Windfarm Report to Inform Appropriate Assessment.

Louise Davis is an Environmental and Renewables Specialist at Xodus. She has 17 years professional experience in the environmental and renewables sectors and is a Practitioner member of the Institute of Environmental Management and Assessment (PIEMA) and a qualified ISO9001 internal quality auditor. Louise has had a lead role in over 7 gigawatts (GW) of renewable energy projects, applying her project management and technical knowledge of onshore and offshore consents, including preparation of Habitat Regulations Appraisal reports.

Anni Mäkelä is a Principal Environmental Consultant as Xodus. She has 13 years of experience in marine research, government, and consultancy roles. Prior to joining Xodus, she worked at Scottish Government's Marine Directorate – Licensing Operations Team as a Marine Licensing Group Leader, leading a team responsible for determining marine licence applications on behalf of the Scottish Ministers, including overseeing the preparation of Appropriate Assessments by the regulator.



Colin Barton of Cork Ecology has worked as an independent consultant for offshore wind projects since 2001, specialising in all aspects of ornithology. He has provided ornithological support and advice for several offshore wind projects in Irish and UK waters, with key inputs including the writing of EIAR ornithology chapters, ornithological input into HRA/NIS documents, advising on all aspects of survey design and post-construction monitoring. Colin graduated from the University of Aberdeen in 1992, with a BSc. Honours degree in Biology (Ecology) in 1992.

1.3.1 Appropriate Assessment Screening Report Technical Authorship

The assessment for European Sites designated for Annex I habitats and (diadromous) fish and freshwater pearl mussel has been prepared by Darcy Brady. Darcy is an Environmental Consultant with Xodus Group with around three years of industry experience. Holding a BSc (Hons) in Ocean Science and Marine Conservation from the University of Plymouth, and an MSc (Distinction) in Marine Conservation from the same institution, Darcy has contributed to various offshore environmental impact assessments related to offshore wind projects, electrification, and submarine cable scopes. Primarily involved in the pre-consent stages of EIA for offshore wind development, focusing on round 3, 4, and ScotWind projects, Darcy has key technical skills and experience in evaluating impacts on benthic subtidal and intertidal ecology and fish and shellfish ecology. Darcy has extensive experience in authoring and reviewing a variety of EIA and HRA documents, with particular expertise in gathering and analysing relevant datasets to establish technical baselines and conduct precise impact assessments.

The assessment for European Sites designated for marine mammal features has been prepared by Monika Kosecka. Monika, Lead Environmental Consultant at Xodus Group, is a marine mammal and underwater noise specialist with 14 years of professional experience, including marine mammal and fish acoustic studies, policy and commercial advisory roles. She is a co-author of several peer reviewed publications on marine mammals, underwater noise and its impacts on marine life and specialises in marine mammal ecology within Xodus. She holds MSc in Oceanography.

The assessment for European Sites designated for ornithological features has been authored by Colin Barton (Colin Barton of Cork Ecology has worked as an independent consultant for offshore wind projects since 2001, specialising in all aspects of ornithology. He has provided ornithological support and advice for several offshore wind projects in Irish and UK waters, with key inputs including the writing of EIAR ornithology chapters, ornithological input into HRA/NIS documents, advising on all aspects of survey design and post-construction monitoring. Colin graduated from the University of Aberdeen in 1992, with a BSc. Honours degree in Biology (Ecology) in 1992.

1.4 **Methodology**

1.4.1 Appropriate Assessment Screening

1.4.1.1 **Zone of Influence**

The first step of the Appropriate Assessment Screening process considered which European Sites (SPAs and SACs, including proposed and candidate sites) could have potential connectivity to the construction, operations and maintenance and decommissioning phases of the Project due to source-pathway-receptor model. A potential Zone of Influence (ZoI) for each QI was established and is described in detail in Section 3 of this report. The ZoI is measured from the boundary of the Offshore Site for the SACs A long list of SPAs and SACs in Ireland and beyond (for species with long migratory or foraging ranges like cetaceans and birds) was evaluated against the ZoI and any sites falling outside the ZoI were not considered for further analysis due to lack of connectivity to the Offshore Site. The assessment did, however, consider potential connectivity outside the ZoI where required, such as



terrestrial SACs with diadromous fish. QIs that are outside the diadromous fish ZoI but located so the fish might have to migrate through the Offshore Site ZoI when entering the sea. Given that the brook lamprey (*Lampetra planeri*) is a freshwater species that has no potential to be migrating through the marine environment there is considered to be no potential for LSE on this species.

A long list of SPA QIs was also considered, with distances measured from the centre of the OAA to the centre of SPAs as the likely impact pathways to bird species are through potential collision with the Wind Turbine Generators (WTG) located in the OAA, and displacement from the OAA due to the presence of WTGs. Any SPAs where all breeding seabird QIs were outside mean maximum foraging range as defined by Woodward *et al.*, (2019) were screened out from further consideration, due to lack of an established source-pathway-receptor connectivity. In addition, any SPAs with bird QIs with no lifecycle connectivity to the marine environment were also screened out from further consideration. Therefore, any SPAs with terrestrial bird QIs have been screened out in this Appropriate Assessment Screening Report due to lack of an established source-pathway-receptor connectivity. SPAs with QI species whose life cycle is connected to the marine environment where the SPA was within mean maximum foraging range (+1SD) were screened in and taken forward for further consideration within the AASR

Where seabird species were not recorded in the OAA over the duration of site-specific baseline surveys (24 months), it is considered objectively reasonable using expert judgement to exclude them from further assessment. Seabird species that were not recorded in the OAA on baseline surveys were considered extremely unlikely to use the OAA in numbers large enough to warrant further consideration due to lack of connectivity.

For migratory wildfowl and wader species which have the potential to collide with WTGs in the OAA in the spring and autumn migration periods, the ZoI has been derived from the Migratory Collision Risk Modelling (Appendix 10 - mCRM).

For European Sites with Annex I habitats as the QI, only the following habitats were considered to have connectivity with the Offshore Site: Mudflats and sandflats not covered by seawater at low tide, Coastal lagoons, Large shallow inlets and bays, Reefs, Atlantic salt meadows, Sandbanks which are slightly covered by sea water all the time, Mediterranean salt meadows and Estuaries. The Offshore Site is located so far from the coast that there is no pathway for impact on coastal processes such as coastal erosion caused by changes to wave action on any coastal QIs as a result of the Project. It was determined therefore that because of this lack of connectivity there was no potential for LSE on any other Annex I habitats. This includes Annex I habitats at the following SACs which are within 50 km of the Offshore Site but determined to have no potential for LSE with regards to Annex I habitats:

- Rosroe Bog SAC
- > Omey Island Machair SAC
- > Rusheenduff Lough SAC
- > Aughrusbeg Machair And Lake SAC
- Murvey Machair SAC
- > Dog's Bay SAC
- > Tully Mountain SAC
- > Cregduff Lough SAC
- > Tullaher Lough and Bog SAC

1.4.1.2 **Evaluation of Potential LSE**

European Sites with potential connectivity were considered further to determine if the Offshore Site construction, operations and maintenance and decommissioning could result in LSE on any of the QI of the site. If LSE was determined for any of the QIs, the site was screened in for assessment in the NIS.



Based on the assessment presented here, it is anticipated that a Regulation 54 (European Communities (Birds and Natural Habitats) Regulations 2011) derogation licence (to injure/disturb Annex IV species) will not be required. However, should the position change in the future, the requirement for a derogation licence will be reconsidered.

1.4.1.3 In-cumulation Assessment

Whilst this Appropriate Assessment Screening Report (AASR) provides an assessment of the potential for LSE on European Sites arising from the Offshore Site, the AASR also considers the potential for LSE on European Sites as a result of the cumulation of both the Onshore Site and Offshore Sites i.e. the Project.

1.4.1.4 In-combination Assessment

As well as considering effects from the Project alone, the Habitats Directive require a consideration of potential effects on European sites arising from the Project in combination with other plans or projects.

A search and review was conducted across various platforms, databases and portals to compile a list of other plans (National, Regional and local) and projects that may have the potential to result in incombination impacts on European Sites was conducted. This included a review of online Planning Registers, development plans and other available information and served to identify past and future plans and projects, their activities and their predicted environmental effects

The in-combination assessment will consider projects that are 'reasonably foreseeable' such as:

- > Existing projects either built or in construction;
- > Approved projects, awaiting implementation; and
- > Proposals awaiting determination within the planning process with design information in the public domain.

Other offshore activities and industries that will be considered include (but are not limited to):

- Marine renewables (offshore wind, wave and tidal);
- > Coastal projects, including but not limited to port and harbour projects;
- Marine aggregate extraction, dredging and licensed disposal sites;
- > Oil and gas activities;
- Carbon capture and storage; and
- > Subsea cables and pipelines.

If sufficient detail is not publicly available, it will not be possible to conduct a meaningful assessment of potential in-combination effects, and therefore, these projects cannot be considered within the incombination assessment.

A staged approach was undertaken to identify relevant in-combination projects, plans and activities for consideration within the Appropriate Assessment Screening Report.

Step 1: Compilation of the plans and project long-list:

First, a 'long list' of plans and projects (Appendix B – Long List of Offshore Projects) was collated, based on defined ZoI's for each QI. The ZoI's provide the maximum search areas for other projects to be screened into the in-combination project long list. Operational projects were only screened into the long list if there is considered to be the potential for an ongoing effect from that project type (e.g. bird collision risk). For most receptors, operational projects were considered to be part of the existing baseline, considered as part of the offshore / onshore project-specific effect assessment and are therefore not considered within the in-combination effect assessment.

> Step 2: Compilation of project short-list:



This long list was then be reduced to a short-list of relevant projects by taking potential pathways of effect (e.g. temporal and physical overlap of effects) into account. Additional information was gathered on each project within the project long list, to understand the activities, timescales and nature of the projects within the long list. This additional information was then reviewed to determine the potential channels for in-combination effect, taking into consideration potential effect pathways and / or the potential for physical or temporal overlap of effects from other project activities and those of the project. The most up-to-date publicly available information in relation to the relevant project parameters was used to inform the in-combination assessment.

1.5 Structure and Format of this Document

This Appropriate Assessment Screening Report will focus on the Natura 2000 sites relevant to the Offshore Site. Details on the onshore part of the Project and associated elements are detailed in the Onshore Appropriate Assessment Screening Report [NIS Volume 2 Onshore – Appendix 1]. The structure of the document is explained in Table 1-1 below.

Section Number	Section Title	Description
1	Introduction	Provides background on the Offshore Site and Onshore Site of the proposed Sceirde Rocks Offshore Wind Farm ('the Project') and the assessment methods and authorships of the Appropriate Assessment Screening Report.
2	Description of Proposed Project and Offshore Site	Provides a description of the Offshore Site, including site location, summary of the characteristics of the Offshore Site and the summary of the consultation responses received during the Scoping consultation that are relevant to the Appropriate Assessment Screening Report. The description of the Offshore Site is a summary and should be read in conjunction with Appendix 1: Project Description of this Appropriate Assessment Screening Report.
3	Identification of European sites	Describes the process taken to determine which European Sites have potential connectivity and LSE to the Offshore Site in light of its site conservation objectives in respect of the QI (based on established ZoIs). European Sites with connectivity are taken forward to NIS Volume 1 – Offshore. Appropriate Assessment Screening also considers whether the Project is directly connected to or necessary for the management of a European Site. As the Project is not directly connected to or necessary for the management of a European Site, this test is not met and Appropriate Assessment by the competent authority is required where LSE is identified.
4	Article 6(3) appropriate assessment screening statement and conclusions	The findings of this Screening Assessment are stated in accordance with the required legislation and guidance.

Table 1-1 Structure and format of this document

2. DESCRIPTION OF PROPOSED OFFSHORE SITE

2.1 **Offshore Site Location**

The Offshore Site is located seaward of the High-Water Mark (HWM) and the Onshore Site, landward of the Low Water Mark (LWM). The OAA is approximately 37.2 kilometre2 (km²) in area and is located between 5 – 11.5 km from the coastline of County Galway. The OECC is approximately 62km in length and 1 km wide. The OEC has a total length of approximately 63.5 km (from OSS to the Transition Joint Bay (TJB)), the majority of which lies within the OECC in addition to short sections within the OAA and within the drilled landfall duct. The Offshore Site is shown in Figure 2-1.

The OEC will make Landfall at the townland of Killard. County Clare and will subsequently be connected to the national electricity grid via a substation at Moneypoint Power Station. Details on the onshore part of the Project and associated elements are detailed in the Onshore Appropriate Assessment Screening Report [Onshore NIS Appendix 1].

2.2 Environmental Baseline

Although the Offshore Site lies in generally coastal waters between Co. Galway and Co. Clare, the Offshore Site is highly exposed to the prevailing wind from the west and southwest. Depths range from exposed rocks within the OAA, to ca. 90 metres where the OECC passes close to Inis Mor.

The Offshore Site has been designed so as to avoid overlapping any European Site. However, there are numerous European sites in the vicinity of the Offshore Site. These include SACs for the protection of Annex I seabed habitats; SACs for the protection of marine mammals, and SPAs for the conservation of seabirds, waders and migratory/wintering birds. This includes several Qualifying Interests (QI) which are considered to be highly mobile, such as birds and marine mammals, where connectivity has been determined (e.g. due to the breeding season foraging range of seabirds, or the wide-ranging behaviour of marine mammals).

The Project undertook baseline characterisation surveys, including digital aerial surveys for birds and mammals. The bird surveys took place over a period of 24 months, giving a good representation of the species present. These surveys indicated the presence of several bird and mammal species that are qualifying interests of European Sites with connectivity with the Offshore Site (see Section 2.3).

As no SACs for benthic qualifying interests overlap with the Offshore Site, no site-specific surveys were undertaken within those SACs, although the previous marine surveys of the Kilkieran Bay, Skerd Rocks and Aran Islands by Sides et al. (1994) indicate a range of littoral, infralittoral and sublittoral habitat types ranging from bedrock to soft sediments, with a composition generally representative of the range of species and habitats west of Ireland, including algae, reefs with encrusting epifauna, sediments with associated infauna and demersal mobile invertebrates such as crustaceans. No site-specific surveys were carried out as the SACs are already well mapped and characterised and none of the benthic QI overlap with the Offshore Site.

Diadromous fish, specifically Atlantic salmon, spawn and live in several rivers around the wider Galway Bay region. Salmon migrate to sea as smolts around 4-5 years old before returning after one or more winters at sea, as breeding adults. Some salmon could pass through the Offshore Site en route to/from marine feeding grounds. The at-sea movements of salmon (and other diadromous fish) are poorly understood, nevertheless it is possible that there is connectivity between salmon SACs in Co. Galway



and Co. Clare and the Offshore Site and that has been taken into account when establishing the ZoI and carrying out the screening exercise.

2.3 Site Surveys

Site surveys were carried out across the Offshore Site to inform the baseline characterisation for benthic, fish and shellfish, marine mammals and ornithology receptors. A geophysical survey was carried out by EGS International Limited in mid-2022, followed by a benthic characterisation survey undertaken by Ocean Ecology Limited in October 2023. The benthic characterisation survey included both sediment and water sampling to inform macrofaunal analyses, chemical analyses and particle size distribution. Additionally, environmental DNA (eDNA) sampling was undertaken as part of the benthic survey. HiDef Aerial Surveying Limited completed two-years of monthly Digital Aerial Surveys (DAS) spanning October 2021 to September 2023 which was used to inform the baseline for marine mammals and marine ornithological receptors. Digital aerial surveys are one of the recommended survey methods in the DCCAE Guidance, as they can cover a large area over a short period (DCCAE, 2018a&b), and have been demonstrated to be highly effective at detecting birds and marine mammals (Thompson *et al.*, 2012; Williamson, 2016; Mendel *et al.*, 2018).





2.4 **Characteristics of the Project**

The proposed Sceirde Rocks Offshore Wind Farm comprises both an Offshore and Onshore component, as described below. These are collectively referred to as 'the Project'. A full description of the Project is detailed in Annex 1.

The Project will consist of the provision of the following:

Offshore Development

- I. 30 no. offshore Wind Turbine Generators (WTGs) with gravity based fixed-bottom foundations with the following details:
 - > Tip height of 324.9m above Lowest Astronomical Tide (LAT),
 - > Rotor diameter of 292m;
 - > Hub height of 178.9m above LAT;
- II. 1 no. 220kV offshore substation (OSS) of 55 m in height above LAT (including crane and communications mast) with a gravity based fixed bottom foundation. The OSS consists of an offshore electrical substation platform with multiple decks accommodating the electrical and communications plant and equipment, ancillary components and welfare facilities;
- III. A network of inter-array electrical and communication cables, of approximately 73 km in length, connecting the 30 WTGs to the OSS;
- IV. A 220kV offshore export cable complete with communication lines, of approximately 63.5 km in length, laid in and on the seabed from the OSS to landfall in the townland of Killard, Co. Clare;
- V. Seabed preparation for WTG, OSS and cable installation including rock placement, dredging and disposal;
- VI. Cable protection including trenching and burial, rock berms, and concrete mattresses.

Onshore Development:

- I. An underground Transition Joint Bay (TJB) at the landfall point in the townland of Killard, Co. Clare connecting the offshore export cable to the onshore grid connection cable. The TJB consists of an underground concrete chamber (20m x 5m wide, with a depth of 2.5m), where the proposed offshore export cable will be connected to the onshore grid connection cable;
- II. 220kV onshore grid connection and communications cables laid underground, primarily in the public road corridor with small sections in third party lands, for approximately 19.3 km between the TJB in the townland of Killard, Co. Clare and the new 220kV Onshore Compensation Compound (OCC) in the townland of Ballymacrinan, Co. Clare;
- III. 220kV onshore grid connection and communication cables laid underground, primarily in the public road corridor with small sections in third party lands, for approximately 3 km between the new 220kV OCC in the townland of Ballymacrinan, Co. Clare and the existing Moneypoint 220kV substation in the townland of Carrowdotia South, Co. Clare;
- IV. 43 no. joint bays complete with communication chambers and link box chambers along the onshore grid connection route between the TJB in the townland of Killard, Co. Clare to the existing 220kV Moneypoint substation in the townland of Carrowdotia South, Co. Clare;
- V. A 220kV Onshore Compensation Compound located in the townland of Ballymacrinan, Co. Clare. The 220kV onshore compensation compound consists of:
 - Eirgrid 220kV GIS Building (49m x 18.5m, with a total height of 16.7m above Finished Floor Level (FFL);
 - **ESB** 220kV GIS Building (49m x 18.5m, with a total height of 16.7m above FFL);
 - Customer SCADA and MV power building (18.4m x 8.7m, with a total height of 6.15m above FFL);
 - Statcom building (30.5m x 22m, with a total height of 7.59m above FFL);
 - > Upgrade of existing entrance onto the L-6150 including the removal of a small portion of existing stone wall and hedgerow;



- All associated electrical and communications plant and equipment, welfare facilities, 3 no. foul water holding tanks, 3 no. bored wells, 3 no. attenuation tanks, access roads, car parking, security fencing and gates, rail and post fencing, telecommunications pole, lightning masts, signage, safety bollards, landscaping, drainage infrastructure and all other ancillary works and associated site development works;
- VI. 3 no. temporary construction compounds along the onshore grid connection cable route:
 - I no. temporary construction compound at the landfall point in the townland of Killard Co. Clare;
 - > 1 no. temporary construction compound at the Kilrush Golf Club in the townland of Parknamoney, Co. Clare;
 - > 1 no. temporary construction compound at the new 220kV OCC in the townland of Ballymacrinan, Co. Clare;
- VII. Reinstatement of the road or track surface above the proposed onshore grid connection cable trench along existing roads and tracks;
- VIII. New and upgraded access tracks above the proposed onshore grid connection cable trench in third party lands;
 - IX. Temporary entrances from public roads to facilitate construction of the onshore grid connection for construction phase only;
 - X. Provision of 3 no. passing bays and the widening of the L-6150 road in the townland of Ballymacrinan to facilitate the delivery of abnormal loads for the construction of the proposed OCC;
- XI. All works associated with spoil management;
- XII. All associated site works and ancillary development above and below ground including hard and soft landscaping, habitat enhancement and drainage infrastructure.

This application seeks a ten-year planning permission and a 38-year operational life from the date of commissioning of the Project.

Note, this Appropriate Assessment Screening Report pertains only to the Offshore Site, but an overview of the Onshore Site is provided for context of the overall Project in Appendix 1 of this document.

3.

IDENTIFICATION OF RELEVANT EUROPEAN SITES

3.1 Establishing the Zol

The first step of the Appropriate Assessment Screening is to establish whether there is connectivity between the Offshore Site and the QIs of marine European sites. The potential for connectivity has been assessed by establishing a receptor-specific ZoI which has been derived based on consideration of the maximum distance in which a potential impact pathway may exist (e.g. maximum tidal excursion extent or maximum underwater noise disturbance). Table 3-1 provides the ZoI which applies to the qualifying interests of European sites as well as the justification for the selection of the ZoI. Figures 3-1 and 3-2 highlight the SACs within the defined ZoIs. The varying ZoIs established for breeding and non-breeding bird species are outlined in text in Table 3-1.

If a European site has qualifying interests (e.g. species/habitats) that fall within the ZoI, then there is considered to be connectivity and the European site is considered for further assessment (see Section 3.2).



Table 3-1 The ZoI as distance from the Offshore Site (km) as applicable to the qualifying interests of European Sites

Qualifying Interest	Species / Habitat	ZoI	Justification
Annex I Habitats	 Marine, coastal and halophytic habitats; Coastal sand dunes and continental dunes; and Rocky habitats and caves. More specifically the following QIs: Coastal lagoons Large shallow inlets and bays Reefs Atlantic salt meadows Mediterranean salt meadows Sandbanks which are slightly covered by sea water all the time 	15 km	The identification of marine European sites which have connectivity with the Offshore Site is informed by the maximum tidal excursion distance, which informs how far sediment plumes may travel during construction, operation and maintenance, and decommissioning activities. The 15 km buffer is considered appropriate in order to capture the effects associated with pathways for tidal advection of sediment plumes from seabed disturbance activities (e.g. cable trenching), which may have implications on Annex I habitats due to sedimentation processes. This also includes consideration of coastal habitats.
Diadromous fish and freshwater pearl mussel	Atlantic salmon (<i>Salmo salar</i>); Freshwater pearl mussel (<i>Margaritifera margaritifera</i>); Sea Lamprey (<i>Petromyzon marinus</i>); and River lamprey (<i>Lampetra fluviatilis</i>)	50 km	Diadromous fish and associated qualifying features have potential connectivity to the Offshore Site due to potential migration routes passing through the site. The maximum spatial extent associated with the potential impact pathways, and therefore maximum ZoI, is 50 km based on underwater noise from UXO clearance. Fish species with a swim bladder not involved in hearing (such as Atlantic salmon) are deemed to be of low vulnerability and high recoverability when exposed to underwater noise. However, given the limited data on migration routes for diadromous fish through Irish waters, any sites located within the 50 km impact range for underwater noise this impact cannot be ruled out.
			A distance greater than 50 km is considered to protect migratory fish species the creation of barrier effects at river mouths as a result of the proposed activities. Rather, individuals will disperse in the marine environment to varying degrees as they adapt to environmental pressures such as predation and increased



			metabolic requirements during their marine migration. In view of the behavioural and movement patterns of the protected fish species under consideration, it is anticipated that these species are highly unlikely to utilise the Offshore Site or use will be in extremely low densities of fish. 50 km ZoI is therefore considered appropriate.
			The potential impact pathways to freshwater pearl mussel are indirect impacts through potential effects on Atlantic salmon. The freshwater pearl mussel attach to the gills of Atlantic salmon during their larval stages and any impact affecting the host salmon can also affect the mussels. No direct effects to freshwater pearl mussel from the Project are anticipated beyond those assessed in the Onshore Appropriate Assessment Screening Report (e.g. impacts on freshwater pearl mussel riverine habitat).
Cetaceans	Bottlenose dolphin (<i>Tursiops truncatus</i>)	Management Units (MUs): West Coast of Ireland MU; and Shannon Estuary MU.	Cetacean species are highly mobile in nature. As such the foraging and migratory behaviour of marine mammals presents a potential impact pathways to European Sites which both directly overlap with the Offshore Site, and which are located within the maximum foraging range of a marine mammal species. For cetaceans the ZoI is considered to be the relevant MU for the selected species.
	Harbour porpoise (<i>Phocoena phocoena</i>)	Celtic and Irish Seas MU.	





Pinnipeds	Grey seal (<i>Halichoerus grypus</i>)	200 km (at-sea distance)	 Grey seals may forage up to 200 km from haul-outs (e.g., McConnell et al., 1999) and mainly on the seabed at depths of up to 100 m (SCOS, 2020). However, after breeding, most grey seals disperse away from their haul-out si making it very difficult outside of the breeding season to assign any individua a particular SAC. Grey seal usage of a particular SAC is therefore very time a location specific. On this basis and considering available data on grey seal movements (e.g. Cronin et al., 2011; SMRU Ltd, 2011; Russell and McConne 2014), there may be potential for interactions between grey seals and projects within a 200 km radius around SAC boundaries. The proposed site operation locations are located within 200 km of the boundary of SACs designated for grey seals. Therefore, the potential for a likely significant effect needs to be considered further and the SACs along the Irish coast within 200km of the Offshore Site with grey seals as a QI. 	
	Harbour seal (<i>Phoca vitulina</i>)	75 km (at-sea distance)	While harbour seals normally forage within $40 - 50$ km around their haul-out sites (SCOS, 2020), the search area has been extended to 75 km from haul-out to consider any effects associated with unexploded ordnance (UXO) detonation. Therefore, the potential for likely significant effect needs to be considered for SACs with a harbour seal qualifying feature along the west coast of Ireland, within 75 km of the Offshore Site.	
Eurasian otters	Eurasian otter (<i>Lutra lutra</i>)	0 km (limited to any direct overlap with the boundary of a SAC)	Eurasian otter diet is diverse, with prey available locally throughout the coastal and inland habitats they inhabit. As such it is anticipated that Eurasian otters afforded protection by SACs designated along the west coast of Ireland will mostly forage close to their dens within the designated areas. For this reason, the boundary of an SAC represents the maximum foraging range. As the Offshore Site does not directly interact with any SAC designated for the conservation of Eurasian otter it is considered that any works associated with the construction, operation and maintenance and decommissioning of the Offshore Site will not present a pathway of connectivity to otters. The nearest SAC with an otter QI is Kilkieran Bay and Islands SAC, located > 1 km away from the Offshore Site.	



	Razorbill (<i>Alca torda</i>)	164.6 km	For SPAs with breeding seabird QIs the mean maximum foraging range + one standard deviation of the mean (1SD) for the individual bird species was considered the ZoI with potential connectivity to the OAA as calculated by
	Atlantic puffin (Fratercula arctica)	265.4 km	Woodward et al. (2019). SPAs where their location in relation to the OAA were considered to have potential for migratory breeding species e.g. terns to pass through the OAA on
	Northern fulmar (<i>Fulmarus glacialis</i>)	1200.2 km.	spring and autumn migration were also included in the ZoI. Further details on species distribution in the OAA can be found in Appendix 5.
	European storm petrel (<i>Hydrobates pelagicus</i>)	336 km	For non-breeding and wintering diver species and common scoter which have the potential to interact with the OAA, the ZoI has been derived from current
Seabirds	Herring gull (<i>Larus argentatus</i>)	85.6 km	displacement guidance (SNCBs, 2022a&b).
	Common gull (Larus canus)	50 km	
	Lesser black-backed gull (<i>Larus fuscus</i>)	236 km	
	Great black-backed gull (<i>Larus marinus</i>)	73 km	
	Black-headed gull (Chroicocephalus ridibundus)	18.5 km	
	Northern gannet (<i>Morus bassanus</i>)	509.4 km	
	Leach's Petrel (Hydrobates <i>leucorhoa</i>)	657 km	

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European shag (<i>Gulosus aristotelis</i>)	23.7 km	
Great cormorant (<i>Phalacrocorax carbo</i>)	33.9 km	
Manx shearwater (<i>Puffinus puffinus</i>)	2365.5 km	
Kittiwake (<i>Rissa tridactyla</i>)	300.6 km	
Great skua (<i>Stercorarius skua</i>)	931.2 km	
Little tern (<i>Sternula albifrons</i>)	5 km	
Arctic tern (Sterna paradisaea)	40.5 km	
Sandwich tern (<i>Thalasseus sandvicensis</i>)	57.5 km	
Common tern (Sterna hirundo)	26.9 km	
Guillemot (<i>Uria aalge</i>);	153.7 km	
Eider (Somateria mollissima)	21.5 km	
Red-throated diver (<i>Gavia stellata</i>)	10 km (SNCBs, 2022a&b). Nearest SPA is Blacksod Bay/Broadhav en Bay SPA (126.8 km)	



	Great northern diver (<i>Gavia immer</i>)	4 km (SNCBs, 2022a&b). Nearest SPA is Inner Galway Bay SPA (56.5 km)	
	Common Scoter (Melanitta nigra)	4 km (SNCBs, 2022a&b) Nearest SPA is Blacksod Bay/Broadhav en Bay SPA (126.8 km)	
Migratory wildfowl and wader species	Greenland white-fronted goose (<i>Anser albifrons flavirostris</i>)		
and made species	Barnacle goose (<i>Branta leucopsis</i>)		For migratory wildfowl and wader species which have the potential to interact with the OAA in the spring and autumn migration periods, the ZoI has been
	Shelduck (Tadorna tadorna)		derived from the Migratory Collision Risk Modelling (Appendix 10).
	Mallard (Anas platyrhynchos)		
	Teal (<i>Anas crecca</i>)		
	Wigeon (<i>Mareca penelope</i>)		
	Black-tailed Godwit (<i>Limosa limosa</i>)		
	Dunlin (<i>Calidris alpina</i>)		







3.2 Identification of European sites with potential for connectivity

A search of all European sites within the ZoIs (Table 3-1) has been undertaken to determine the potential for connectivity with the Offshore Site. The results of this search are presented in Table 3-2 which presents a list of all European sites which have qualifying interests within the relevant ZoIs (see text in bold). It should be noted that the European sites which were determined to not have connectivity through the source-pathway-receptor model and are outside the ZoI are not presented in Table 3-2 and have not been taken forward for further assessment. Thus, the European sites within Table 3-2 will be taken forward for further assessment to determine whether there is potential for LSE, as described in Section 3.3.

Where any of the QIs of a European Site are considered to have potential for LSE due to it being within the ZoI of the Offshore Site, the European Site has been screened into further consideration in the NIS.

For SPAs and Offshore Ornithology, distance measured is "round the coast as the seabird flies" between the centre of the SPA and the centre of the OAA at the nearest point, not straight-line distance between the SPA and the OAA. Further details are provided in Appendix 7. Appendix 7 – Offshore Ornithology Connectivity and Apportioning report examines the potential connectivity between the offshore site and specific bird species during the breeding season. It also details in a range of figures the specific bird species colonies within the mean maximum foraging range.

The conservation objectives of the European sites were reviewed to ensure the consideration of potential LSE took the objectives into account for all the sites and their QI. The site synopses listing the QIs and conservation objectives of the European Sites were identified using National Parks and Wildlife Service (NPWS) protected sites website (https://www.npws.ie/protected-sites) and were consulted and reviewed at the time of preparing this report 10/12/2024. Each relevant site along with the relevant site conservation objectives that were taken account of are detailed in Table 3.2 below along with a link to the relevant site information. For UK SPAs, QIs and conservation objectives were identified using the Joint Nature Conservation Committee (JNCC) online SPA list (https://jncc.gov.uk/our-work/list-of-spas/). Links to the site-specific conservation objectives are provided in Table 3-2. For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest European Site with the same QI that has conservation objectives, and for cetaceans, which are located within the same MU.

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European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/ No)
Inishmore Island SAC	< 1 (adjacent with no overlap)	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO000213.pdf	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 Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Dunes with Salix repens ssp. argentea (<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 (Festuco-Brometalia) (* important orchid sites) [6210] Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510] Limestone pavements [8240] Submerged or partially submerged sea caves [8330] Vertigo angustior (Narrow-mouthed Whorl Snail) [1014] Phocoena phocoena (Harbour Porpoise) [1351]	Annex I Habitats – Considered further as this SAC is within the ZoI of 15 km; and Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise.	Yes
Mid-Clare Coast SPA	60.6	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004182.pdf	Cormorant (Phalacrocorax carbo) [A017] Barnacle Goose (Branta leucopsis) [A045] Ringed Plover (Charadrius hiaticula) [A137] Sanderling (Calidris alba) [A144] Purple Sandpiper (Calidris maritima) [A148] Dunlin (Calidris alpina) [A149] Turnstone (Arenaria interpres) [A169] Wetland and Waterbirds [A999]	Cormorant – No potential for LSE as this SPA is outside foraging range of 33.9 km; and Barnacle Goose - Considered further based on potential for collision on migration Wader species are considered further based on potential for collision on migration, and Wetland and Waterbirds – Considered further based on potential for surface water pollution.	Yes
Carrowmore Point to Spanish Point and Islands SAC	1.2	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO001021.pdf	Coastal lagoons [1150] Reefs [1170] Perennial vegetation of stony banks [1220] Petrifying springs with tufa formation (Cratoneurion) [7220]	Annex I Habitats – Considered further as this SAC is within the ZoI of 15 km.	Yes
Inishmore SPA	16	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004152.pdf	Kittiwake (Rissa tridactyla) [A188] Arctic Tern (Sterna paradisaea) [A194] Little Tern (Sternula albifrons) [A195] Guillemot (Uria aalge) [A199]	 Kittiwake – Considered further as within foraging range of 300.6 km; Arctic tern - Considered further as within foraging range of 40.5 km; Little tern – Considered further as potential to pass through OAA on migration. Guillemot - Considered further as within foraging range of 153.7 km. 	Yes

Table 3-2 European sites taken forward for further assessment based the ZoIs established for different receptors as shown in Table 3-1. Where text is bold, features are within the ZoI.



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/ No)
Kilkieran Bay and Islands SAC	1.4	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO002111.pdf	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 (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] Machairs (* in Ireland) [21A0] Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea [3130] Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510] Phocoena phocoena (Harbour Porpoise) [1351] Lutra lutra (Otter) [1355] Phoca vitulina (Harbour Seal) [1365] Najas flexilis (Slender Naiad) [1833]	 Annex I Habitats – Considered further as this SAC is within the ZoI of 15 km; Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise. Harbour seal – Considered further as this SAC is within the range for harbour seal (75 km); and Eurasian otter – No potential for LSE as the Offshore Site does not overlap with the boundary of the SAC. 	Yes
Carrowmore Dunes SAC	1.5	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO002250.pdf	Reefs [1170] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Vertigo angustior (Narrow-mouthed Whorl Snail) [1014]	Annex I Habitats – Considered further as this SAC is within the ZoI of 15 km.	Yes
Slyne Head to Ardmore Point Islands SPA	6.7	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004159.pdf	Barnacle Goose (Branta leucopsis) [A045] Sandwich Tern (Sterna sandvicensis) [A191] Arctic Tern (Sterna paradisaea) [A194] Little Tern (Sternula albifrons) [A195]	 Barnacle Goose – Considered further based on potential for collision on migration; Sandwich Tern – Considered further as potential to pass through OAA on migration; Arctic tern - Considered further as within foraging range of 40.5 km; and Little tern - Considered further as potential to pass through OAA on migration. 	Yes
Kilkee Reefs SAC	2.4	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO002264.pdf	Large shallow inlets and bays [1160] Reefs [1170] Submerged or partially submerged sea caves [8330]	Annex I Habitats – Considered further as this SAC is within the ZoI of 15 km.	Yes
Cruagh Island SPA	38.6	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004170.pdf	Manx Shearwater (Puffinus puffinus) [A013] Barnacle Goose (Branta leucopsis) [A045]	Manx Shearwater - Considered further as within foraging range of 2,365.5 km; and Barnacle Goose - Considered further based on potential for collision on migration	Yes
Connemara Bog Complex SAC	8.26	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004181.pdf	Coastal lagoons [1150] Reefs [1170] Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110]	 Annex I Habitats – Considered further as this SAC is within the ZoI of 15 km; Diadromous fish – Considered further as this SAC is within the ZoI of 50 km; and Eurasian otter – No potential for LSE as the Offshore Site does not overlap with the boundary of the SAC. 	Yes



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification fo screened in b
Lower River Shannon SAC	8.75 (direct distance, at sea connectivity 15+ km)	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO002165.pdf	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea [3130] Natural dystrophic lakes and ponds [3160] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] Northern Atlantic wet heaths with Erica tetralix [4010] European dry heaths [4030] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Blanket bogs (* if active bog) [7130] Transition mires and quaking bogs [7140] Depressions on peat substrates of the Rhynchosporion [7150] Alkaline fens [7230] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Euphydryas aurinia (Marsh Fritillary) [1065] Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355]1 Najas flexilis (Slender Naiad) [1833] Sandbanks which are slightly covered by sea water all the time [1110] Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Coastal lagoons [1150] Large shallow inlets and bays [1160] Reefs [1170] 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 (Juncetalia maritima) [1410] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-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] Margaritifera margaritifera (Freshwater Pead Mussel) [1029] Petromyzon marinus (Sea Lamprey) [1096] Lampetra fluviatilis (River Lamprey) [1099] Salmo salar (Salmon) [1106] Tursiops truncatus (Common Bottlenose Dolphin) [1349] Lutra lutra (Otter) [1355]	Annex I Hab distance is ou Diadromous and freshwate this SAC is w Bottlenose dc is within the I Eurasian otter Site does not

r why the European Site has been ised on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/ No)
tats – No potential for LSE as the at sea side the ZoI of 15 km; sh(Salmon, Sea and River Lamprey) repearl mussel – Considered further as thin the ZoI of 50 km; phin – Considered further as this SAC IU for bottlenose dolphin; and – No potential for LSE as the Offshore overlap with the boundary of the SAC.	Yes



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/ No)
River Shannon and River Fergus Estuaries SPA	104.6	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004077.pdf	Cormorant (Phalacrocorax carbo) [A017] Whooper Swan (Cygnus cygnus) [A038] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Shelduck (Tadorna tadorna) [A048] Wigeon (Mareca 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] Grey Plover (Pluvialis apricaria) [A140] Grey Plover (Pluvialis squatarola) [A141] Lapwing (Vanellus vanellus) [A142] Knot (Calidris canutus) [A143] Dunlin (Calidris alpina) [A149] Black-tailed Godwit (Limosa limosa) [A156] Bar-tailed Godwit (Limosa lapponica) [A157] Curlew (Numenius arquata) [A160] Redshank (Tringa totanus) [A162] Greenshank (Tringa nebularia) [A164] Black-headed Gull (Chroicocephalus ridibundus) [A179] Wetland and Waterbirds [A999]	Cormorant - No potential for LSE as this SPA is outside foraging range of 33.9 km; Whooper swan - Considered further based on potential for collision on migration; Light-bellied Brent Goose - Considered further based on potential for collision on migration; Wildfowl and wader species are considered further based on potential for collision on migration; Wetland and Waterbirds – Considered further based on potential for surface water pollution; and Black-headed gull - No potential for LSE as not recorded in OAA on baseline surveys;	Yes
Inishmaan Island SAC	13.1	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO000212.pdf	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 Ammophila arenaria (white dunes) [2120]Machairs (* in Ireland) [21A0]European dry heaths [4030]Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210]Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510]Limestone pavements [8240]	Annex I Habitats – Considered further as this SAC is within the ZoI of 15 km.	Yes
Slyne Head Peninsula SAC	13.9	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO002074.pdf	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]	Annex I Habitats – Considered further as this SAC is within the ZoI of 15 km; and Bottlenose dolphin – Considered further as this SAC is within the MU for bottlenose dolphin.	Yes



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/ No)
Cliffs of Moher SPA	42.2	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004005.pdf	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] 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] Tursiops truncatus (Common Bottlenose Dolphin) [1349] Petalophyllum ralfsii (Petalwort) [1395] Najas flexilis (Slender Naiad) [1833] Fulmar (Fulmarus glacialis) [A009] Kittiwake (Rissa tridactyla) [A188] Guillemot (Uria aalge) [A199]	Fulmar - Considered further as within foraging range of 1200.2 km; Kittiwake - Considered further as within foraging range of 300.6 km;	Yes
			Razorbill (Alca torda) [A200] Puffin (Fratercula arctica) [A204] Chough (Pyrrhocorax pyrrhocorax) [A346]	Guillemot – Considered further as within foraging range of 153.7 km; Razorbill - Considered further as within foraging range of 164.6 km; and Puffin - Considered further as within foraging range of 265.4 km. Chough - No potential for LSE as chough is a terrestrial species with no connectivity pathway. Barnacle Goose - Considered further based on	Yes
Illaunonearaun SPA	65.9	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004114.pdf	Barnacle Goose (Branta leucopsis) [A045]	potential for collision on migration.	
Inisheer Island SAC	15.9	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO001275.pdf	Coastal lagoons [1150] Reefs [1170] European dry heaths [4030] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210]	Annex I Habitats – No potential for LSE as this SAC is outside the ZoI of 15 km.	No



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/ No)
			Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510] Limestone pavements [8240]		
Slyne Head Islands SAC	17.4	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO000328.pdf	Reefs [1170] Tursiops truncatus (Common Bottlenose Dolphin) [1349] Halichoerus grypus (Grey Seal) [1364]	 Annex I Habitats – No potential for LSE as this SAC is outside the ZoI of 15 km; Bottlenose dolphin – Considered further as this SAC is within the MU for bottlenose dolphin; and Grey seal – Considered further as this SAC is within the range for grey seal (200 km). 	Yes
The Twelve Bens/Garraun Complex SAC	20.82	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO002031.pdf	Oligotrophic Waters containing very few minerals [3110] Oligotrophic to Mesotrophic Standing Waters [3130] Alpine and Subalpine Heaths [4060] Blanket Bogs (Active)* [7130] Rhynchosporion Vegetation [7150] Siliceous Scree [8110] Calcareous Rocky Slopes [8210] Siliceous Rocky Slopes [8220] Old Oak Woodlands [91A0] Freshwater Pearl Mussel (Margaritifera margaritifera) [1029] Atlantic Salmon (Salmo salar) [1106] Otter (Lutra lutra) [1355] Slender Naiad (Najas flexilis) [1833]	Annex I Habitats – No potential for LSE as this SAC is outside the ZoI of 15 km; Atlantic salmon and freshwater pearl mussel – Considered further as this SAC is within the ZoI of 50 km; and Eurasian otter – No potential for LSE as the Offshore Site does not overlap with the boundary of the SAC.	Yes
Inagh River Estuary SAC	21.2	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO000036.pdf	Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	Annex I Habitats – No potential for LSE as this SAC is outside the ZoI of 15 km.	No
Black Head-Poulsallagh Complex SAC	22.4	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO000020.pdf	Reefs [1170] Perennial vegetation of stony banks [1220] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] Alpine and Boreal heaths [4060] 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] Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510]	Annex I Habitats – No potential for LSE as this SAC is outside the ZoI of 15 km.	No



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/ No)
			Petrifying springs with tufa formation (Cratoneurion) [7220] Limestone pavements [8240] Submerged or partially submerged sea caves [8330] Petalophyllum ralfsii (Petalwort) [1395]		
West Connacht Coast SAC	22.7	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO002998.pdf	Tursiops truncatus (Common Bottlenose Dolphin) [1349] Phocoena phocoena (Harbour Porpoise) [1351]	Cetaceans – Considered further as this SAC is within the MU for bottlenose dolphin and harbour porpoise.	Yes
Maumturk Mountains SAC	23.8	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO002008.pdf	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Northern Atlantic wet heaths with Erica tetralix [4010] Alpine and Boreal heaths [4060] Blanket bogs (* if active bog) [7130] Depressions on peat substrates of the Rhynchosporion [7150] Siliceous rocky slopes with chasmophytic vegetation [8220] Salmo salar (Salmon) [1106] Najas flexilis (Slender Naiad) [1833]	Annex I Habitats – No potential for LSE as this SAC is outside the ZoI of 15 km; and Atlantic salmon – Considered further as this SAC is within the ZoI of 50 km.	Yes
Kingstown Bay SAC	25.5	https://www.npws.ie/protected-sites/sac/002265	Large shallow inlets and bays [1160]	Annex I Habitats – No potential for LSE as this SAC is outside the ZoI of 15 km.	No
Loop Head SPA	74.8	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004119.pdf	Kittiwake (Rissa tridactyla) [A188] Guillemot (Uria aalge) [A199]	Kittiwake - Considered further as within foraging range of 300.6 km; and Guillemot – Considered further as within foraging range of 153.7 km.	Yes
High Island, Inishshark and Duvillaun SPA	51.1	https://www.npws.ie/protected-sites/spa/004144	Fulmar (Fulmarus glacialis) [A009] Barnacle Goose (Branta leucopsis) [A045] Arctic Tern (Sterna paradisaea) [A194]	 Fulmar – Considered further, within foraging range of 1200.2 km; Barnacle Goose – Considered further based on potential for collision on migration; and Arctic tern - Considered further as potential to pass through OAA on migration. 	Yes
Lough Corrib SAC	35.94	https://www.npws.ie/protected-sites/sac/000297	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] Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] 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] Active raised bogs [7110]	Annex I Habitats – No potential for LSE as this SAC is outside the ZoI of 15 km; Atlantic salmon, sea lamprey and freshwater pearl mussel – Considered further as this SAC is within the ZoI of 50 km; and Eurasian otter – No potential for LSE as the Offshore Site does not overlap with the boundary of the SAC.	Yes



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification fo screened in b
			Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150] Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210] Petrifying springs with tufa formation (Cratoneurion) [7220] Alkaline fens [7230] Limestone pavements [8240] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Bog woodland [91D0] Margaritifera margaritifera (Freshwater Pearl Mussel) [1029] Austropotamobius pallipes (White-clawed Crayfish) [1092] Petromyzon marinus (Sea Lamprey) [1095] Lampetra planeri (Brook Lamprey) [1096] Salmo salar (Salmon) [1106] Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303] Lutra lutra (Otter) [1355] Najas flexilis (Slender Naiad) [1833] Hamatocaulis vernicosus (Slender Green Feather-moss) [6216]"	
Mweelrea/Sheeffry/Erriff Complex SAC	36.54	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO001932.pdf	Coastal lagoons [1150] Annual vegetation of drift lines [1210] 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] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Atlantic decalcified fixed dunes (Calluno-Ulicetea) [2150] Dunes with Salix repens ssp. argentea (Salicion arenariae) [2170] Humid dune slacks [2190] 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 Littorelleta uniflorae and/or Isoeto-Nanojuncetea [3130] Natural dystrophic lakes and ponds [3160] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] Northern Atlantic wet heaths with Erica tetralix [4010] European dry heaths [4030] Alpine and Boreal heaths [4060] Juniperus communis formations on heaths or calcareous grasslands [5130] Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]	Annex I Hab is outside the Atlantic salm Considered fi 50 km; and Eurasian otter Site does not

r why the European Site has been used on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/ No)
tats – No potential for LSE as this SAC ZoI of 15 km; n and freshwater pearl mussel – rther as this SAC is within the ZoI of – No potential for LSE as the Offshore overlap with the boundary of the SAC.	Yes



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/ No)
			Blanket bogs (* if active bog) [7130] Transition mires and quaking bogs [7140] Depressions on peat substrates of the Rhynchosporion [7150] Petrifying springs with tufa formation (Cratoneurion) [7220] Alkaline fens [7230] Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110] Calcareous rocky slopes with chasmophytic vegetation [8210] Siliceous rocky slopes with chasmophytic vegetation [8220] Vertigo geyeri (Geyer's Whorl Snail) [1013] Vertigo angustior (Narrow-mouthed Whorl Snail) [1014] Margaritifera margaritifera (Freshwater Pearl Mussel) [1029] Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355] Petalophyllum ralfsii (Petalwort) [1395] Najas flexilis (Slender Naiad) [1833]		v
Inishbofin and Inishshark SAC	38.2	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO000278.pdf	Coastal lagoons [1150] Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Northern Atlantic wet heaths with Erica tetralix [4010] European dry heaths [4030] Halichoerus grypus (Grey Seal) [1364]	Annex I Habitats – No potential for LSE as this SAC is outside the ZoI of 15 km; Grey seal - Considered further as this SAC is within the range for grey seal (200 km).	Yes
Inner Galway Bay SPA	56.5	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004031.pdf	Black-throated Diver (Gavia arctica) [A002] Great Northern Diver (Gavia immer) [A003] Cormorant (Phalacrocorax carbo) [A017] Grey Heron (Ardea cinerea) [A028] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Wigeon (Anas penelope) [A050] Teal (Anas crecca) [A052] Red-breasted Merganser (Mergus serrator) [A069] Ringed Plover (Charadrius hiaticula) [A137] Golden Plover (Pluvialis apricaria) [A140] Lapwing (Vanellus vanellus) [A142] Dunlin (Calidris alpina) [A149] Bar-tailed Godwit (Limosa lapponica) [A157] Curlew (Numenius arquata) [A160] Redshank (Tringa totanus) [A162] Turnstone (Arenaria interpres) [A169] Black-headed Gull (Chroicocephalus ridibundus) [A179] Common Gull (Larus canus) [A182] Sandwich Tern (Sterna sandvicensis) [A191] Common Tern (Sterna hirundo) [A193] Wetland and Waterbirds [A999]	 Black-throated Diver - No potential for LSE as not recorded in OAA on baseline surveys; Great Northern Diver - Considered further based on distance to OAA; Cormorant - No potential for LSE as outside 33.9 km; Black headed gull - No potential for LSE as not recorded in OAA on baseline surveys; Common gull - Considered further as based on distance to OAA; Sandwich tern -Considered further as potential to pass through OAA on migration; Common tern - Considered further as potential to pass through OAA on migration; and Wildfowl and waders are considered further based on potential for collision on migration. Wetland and Waterbirds - Considered further based on potential for surface water pollution. 	Yes



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/No)
Galway Bay Complex SAC	43.2	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO000268.pdf	Mudflats and sandflats not covered by seawater at low tide [1140] Coastal lagoons [1150] Large shallow inlets and bays [1160] Reefs [1170] 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] Turloughs [3180] 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] Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210] Alkaline fens [7230] Limestone pavements [8240] Lutra lutra (Otter) [1355] Phoca vitulina (Harbour Seal) [1365]	Annex I Habitats – No potential for LSE as this SAC is outside the ZoI of 15 km; Harbour seal – Considered further as this SAC is within the range for harbour seal (75 km); and Eurasian otter – No potential for LSE as the Offshore Site does not overlap with the boundary of the SAC.	Yes
Akeragh, Banna and Barrow Harbour SAC	44	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO000332.pdf	Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] 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] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Humid dune slacks [2190] European dry heaths [4030]	Annex I Habitats – No potential for LSE as this SAC is outside the ZoI of 15 km.	No
Lough Cahasy, Lough Baun And Roonah Lough SAC	47	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO001529.pdf	Coastal lagoons [1150] Perennial vegetation of stony banks [1220] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Machairs (* in Ireland) [21A0]	Annex I Habitats – No potential for LSE as this SAC is outside the ZoI of 15 km.	No
Magharee Islands SAC	50	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO002261.pdf	Reefs [1170]	Annex I Habitats – No potential for LSE as this SAC is outside the ZoI of 15 km.	No



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Illaunnanoon SPA	50.5	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004221.pdf	Sandwich Tern (Sterna sandvicensis) [A191]	Sandwich tern – Considered further as potential to pass through OAA on migration.	Yes
Magharee Islands SPA	103.3	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004125.pdf	Storm Petrel (Hydrobates pelagicus) [A014] Shag (Phalacrocorax aristotelis) [A018] Barnacle Goose (Branta leucopsis) [A045] Common Gull (Larus canus) [A182] Common Tern (Sterna hirundo) [A193] Arctic Tern (Sterna paradisaea) [A194] Little Tern (Sterna albifrons) [A195]	 Storm Petrel - Considered further as within foraging range of 336 km; Shag - No potential for LSE as outside 23.7 km; Barnacle Goose - Considered further based on potential for collision on migration; Common gull - No potential for LSE as outside 50 km; Common tern - Considered further as potential to pass through OAA on migration; Arctic tern - Considered further as potential to pass through OAA on migration; and Little tern - Considered further as potential to pass through OAA on migration. 	Yes
Clare Island SPA	70.7	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004136.pdf	Fulmar (Fulmarus glacialis) [A009] Shag (Phalacrocorax aristotelis) [A018] Common Gull (Larus canus) [A182] Kittiwake (Rissa tridactyla) [A188] Guillemot (Uria aalge) [A199] Razorbill (Alca torda) [A200] Chough (Pyrrhocorax pyrrhocorax) [A346]	 Fulmar - Considered further as within foraging range of 1200.2 km; Shag - No potential for LSE as outside 23.7 km; Common gull - No potential for LSE as outside 50 km; Kittiwake - Considered further as within foraging range of 300.6 km; Guillemot - Considered further as within foraging range of 153.7 km; and Razorbill - Considered further as within foraging range of 164.6 km. Chough - No potential for LSE as chough is a terrestrial species with no connectivity pathway. 	Yes
Bills Rocks SPA	76.0	https://www.npws.ie/protected-sites/spa/004177	Storm Petrel (Hydrobates pelagicus) [A014] Puffin (Fratercula arctica) [A204]	Storm Petrel - Considered further as within foraging range of 336 km; and Puffin - Considered further as within foraging range of 265.4 km.	Yes
Dingle Peninsula SPA	119.3	https://www.npws.ie/protected-sites/spa/004153	Fulmar (Fulmarus glacialis) [A009] Peregrine (Falco peregrinus) [A103] Chough (Pyrrhocorax pyrrhocorax) [A346]	Fulmar - Considered further as within foraging range of 1200.2 km; and Peregrine and chough - No potential for LSE as these are terrestrial species with no connectivity pathway.	Yes
Blasket Islands SAC	90.1	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO002172.pdf	Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] European dry heaths [4030] Submerged or partially submerged sea caves [8330] Phocoena phocoena (Harbour Porpoise) [1351] Halichoerus grypus (Grey Seal) [1364]	Annex I Habitats – No potential for LSE as this SAC is greater than 15 km from the Offshore Site; Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise; and Grey seal - Considered further as this SAC is within the range for grey seal (200 km).	Yes



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/No)
Duvillaun Islands SAC	91.5	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO000495.pdf	Tursiops truncatus (Common Bottlenose Dolphin) [1349] Halichoerus grypus (Grey Seal) [1364]	Bottlenose dolphin – Considered further as this SAC is within the MU for bottlenose dolphin; and Grey seal – Considered further as this SAC is within the range for grey seal (200 km).	Yes
Duvillaun Islands SPA	104.5	https://www.npws.ie/protected-sites/spa/004111	Fulmar (Fulmarus glacialis) [A009] Storm Petrel (Hydrobates pelagicus) [A014] Barnacle Goose (Branta leucopsis) [A045]	 Fulmar - Considered further as within foraging range of 1200.2 km; Storm Petrel - Considered further as within foraging range of 336 km; and Barnacle goose - Considered further based on potential for collision on migration. 	Yes
Blasket Islands SPA	139.0	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004008.pdf	 Fulmar (Fulmarus glacialis) [A009] Manx Shearwater (Puffinus puffinus) [A013] Storm Petrel (Hydrobates pelagicus) [A014] Shag (Phalacrocorax aristotelis) [A018] Lesser Black-backed Gull (Larus fuscus) [A183] Herring Gull (Larus argentatus) [A184] Kittiwake (Rissa tridactyla) [A188] Arctic Tern (Sterna paradisaea) [A194] Razorbill (Alca torda) [A200] Puffin (Fratercula arctica) [A204] Chough (Pyrrhocorax pyrrhocorax) [A346] 	 Fulmar - Considered further as within foraging range of 1200.2 km; Manx Shearwater – Considered further as within foraging range of 2,365.5 km; Storm Petrel - Considered further as within foraging range of 336 km; Shag - No potential for LSE as outside 23.7 km; Lesser black backed gull - Considered further as within foraging range of 236 km; Herring gull - No potential for LSE as outside 85.6 km; Kittiwake - Considered further as within foraging range of 300.6 km; Arctic tern - No potential for LSE as outside 40.5 km; Razorbill - Considered further as within foraging range of 164.65 km; and Puffin - Considered further as within foraging range of 265.4 km. Chough - No potential for LSE as chough is a terrestrial species with no connectivity pathway. 	Yes
Inishglora and Inishkeeragh SPA	117.0	https://www.npws.ie/protected-sites/spa/004084	Storm Petrel (Hydrobates pelagicus) [A014] Cormorant (Phalacrocorax carbo) [A017] Shag (Phalacrocorax aristotelis) [A018] Barnacle Goose (Branta leucopsis) [A045] Lesser Black-backed Gull (Larus fuscus) [A183] Herring Gull (Larus argentatus) [A184] Arctic Tern (Sterna paradisaea) [A194]	 Storm Petrel - Considered further as within foraging range of 336 km; Cormorant - No potential for LSE as outside 33.9 km; Shag - No potential for LSE as outside 23.7 km; Barnacle Goose - Considered further based on potential for collision on migration; Lesser black backed gull - Considered further as within foraging range of 236 km; Herring gull - No potential for LSE as outside 85.6 km; and Arctic tern - Considered further as potential to pass through OAA on migration. 	Yes


European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/No)
Iveragh Peninsula SPA	171.1	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004154.pdf	Fulmar (Fulmarus glacialis) [A009] Peregrine (Falco peregrinus) [A103] Kittiwake (Rissa tridactyla) [A188] Guillemot (Uria aalge) [A199] Chough (Pyrrhocorax pyrrhocorax) [A346]	 Fulmar - Considered further as within foraging range of 1200.2 km; Kittiwake - Considered further as within foraging range of 300.6 km; and Guillemot - No potential for LSE as outside 153.7 km; and Peregrine and chough - No potential for LSE as these are terrestrial species with no connectivity pathway. 	Yes
Puffin Island SPA	167.5	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004003.pdf	Fulmar (Fulmarus glacialis) [A009] Manx Shearwater (Puffinus puffinus) [A013] Storm Petrel (Hydrobates pelagicus) [A014] Lesser Black-backed Gull (Larus fuscus) [A183] Razorbill (Alca torda) [A200] Puffin (Fratercula arctica) [A204]	 Fulmar - Considered further as within foraging range of 1200.2 km; Manx Shearwater - Considered further as within foraging range of 2,365.5 km; Storm Petrel - Considered further as within foraging range of 336 km; Lesser black backed gull - Considered further as within foraging range of 236 km; Razorbill – No potential for LSE as outside 164.6 km; and Puffin - Considered further as within foraging range of 265.4 km. 	Yes
Skelligs SPA	176.4	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004007.pdf	Fulmar (Fulmarus glacialis) [A009] Manx Shearwater (Puffinus puffinus) [A013] Storm Petrel (Hydrobates pelagicus) [A014] Gannet (Morus bassanus) [A016] Kittiwake (Rissa tridactyla) [A188] Guillemot (Uria aalge) [A199] Puffin (Fratercula arctica) [A204]	 Fulmar - Considered further as within foraging range of 1200.2 km; Manx Shearwater - Considered further as within foraging range of 2,365.5 km; Storm Petrel - Considered further as within foraging range of 336 km; Gannet - Considered further as within foraging range of 509.4 km; Kittiwake - Considered further as within foraging range of 300.6 km; Guillemot – No potential for LSE as outside 153.7 km; and Puffin - Considered further as within foraging range of 265.4 km. 	Yes
Stags of Broad Haven SPA	143.1	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004072.pdf	Storm Petrel (Hydrobates pelagicus) [A014] Leach's Petrel (Hydrobates leucorhoa) [A015]	Storm Petrel - Considered further as within foraging range of 336 km; and Leach's Petrel – No potential for LSE as not recorded on baseline surveys.	Yes
Kenmare River SAC	139.3	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO002158.pdf	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 (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410]	Annex I Habitats – No potential for LSE as outside 15 km; Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise; Harbour seal – No potential for LSE as outside range for harbour seal (75 km); and	Yes



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/No)
			Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] European dry heaths [4030] Juniperus communis formations on heaths or calcareous grasslands [5130] Calaminarian grasslands of the Violetalia calaminariae [6130] Submerged or partially submerged sea caves [8330] Vertigo angustior (Narrow-mouthed Whorl Snail) [1014] Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303] Phocoena phocoena (Harbour Porpoise) [1351] Lutra lutra (Otter) [1355] Phoca vitulina (Harbour Seal) [1365]	Eurasian otter – No potential for LSE as the Offshore Site does not overlap with the boundary of the SAC.	
Eirk Bog SPA	145	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004108.pdf	Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	Greenland White-fronted Goose – Considered further based on potential for collision on migration.	Yes
The Gearagh SPA	165	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004109.pdf	Wigeon (Mareca penelope) [A050] Teal (Anas crecca) [A052] Mallard (Anas platyrhynchos) [A053] Coot (Fulica atra) [A125] Wetland and Waterbirds [A999]	 Wigeon - Considered further based on potential for collision on migration. Teal - Considered further based on potential for collision on migration. Mallard - Considered further based on potential for collision on migration. Coot - Considered further based on potential for collision on migration; and Wetland and Waterbirds – Considered further based on potential for surface water pollution. 	Yes
Clonakilty Bay SPA	195	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004081.pdf	Shelduck (Tadorna tadorna) [A048] Dunlin (Calidris alpina) [A149] Black-tailed Godwit (Limosa limosa) [A156] Curlew (Numenius arquata) [A160] Wetland and Waterbirds [A999]	 Shelduck - Considered further based on potential for collision on migration. Dunlin - Considered further based on potential for collision on migration. Black-tailed Godwit - Considered further based on potential for collision on migration. Curlew - Considered further based on potential for collision on migration; and Wetland and Waterbirds – Considered further based on potential for surface water pollution. 	Yes
Deenish Island and Scariff Island SPA	190.1	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004175.pdf	Fulmar (Fulmarus glacialis) [A009] Manx Shearwater (Puffinus puffinus) [A013] Storm Petrel (Hydrobates pelagicus) [A014] Lesser Black-backed Gull (Larus fuscus) [A183] Arctic Tern (Sterna paradisaea) [A194]	 Fulmar - Considered further as within foraging range of 1200.2 km; Manx Shearwater - Considered further as within foraging range of 2,365.5 km; Storm Petrel - Considered further as within foraging range of 336 km; Lesser black backed gull - Considered further as within foraging range of 236 km; and Arctic tern - No potential for LSE as outside 40.5 km. 	Yes



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/ No)
Illanmaster SPA	226.2	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004074.pdf	Storm Petrel (Hydrobates pelagicus) [A014]	Storm Petrel - Considered further as within foraging range of 336 km.	Yes
The Bull and The Cow Rocks SPA	192.4	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004066.pdf	Storm Petrel (Hydrobates pelagicus) [A014] Gannet (Morus bassanus) [A016] Puffin (Fratercula arctica) [A204]	 Storm Petrel - Considered further as within foraging range of 336 km; Gannet - Considered further as within foraging range of 509.4 km; and Puffin - Considered further as within foraging range of 265.4 km. 	Yes
Beara Peninsula SPA	206.1	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004155.pdf	Fulmar (Fulmarus glacialis) [A009] Chough (Pyrrhocorax pyrrhocorax) [A346]	Fulmar - Considered further as within foraging range of 1200.2 km. Chough - No potential for LSE as chough is a terrestrial species with no connectivity pathway.	Yes
Hook Head SAC	189.1	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO000764.pdf	Large shallow inlets and bays [1160] Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Tursiops truncatus (Common Bottlenose Dolphin) [1349] Phocoena phocoena (Harbour Porpoise) [1351]	Annex I Habitats – No potential for LSE as outside 15 km; and Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise; and Bottlenose dolphin - no potential for LSE as this site lies outside of the MUs for bottlenose dolphin.	Yes
Belgica Mound Province SAC	197.9	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO002327.pdf	Reefs [1170] Tursiops truncatus (Common Bottlenose Dolphin) [1349] Phocoena phocoena (Harbour Porpoise) [1351]	Annex I Habitats – No potential for LSE as outside 15 km; and Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise; and Bottlenose dolphin – No potential for LSE as this SAC lies outside the MUs for bottlenose dolphin.	Yes
Roaringwater Bay and Islands SAC	198.3	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO000101.pdf	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] Phocoena phocoena (Harbour Porpoise) [1351] Lutra lutra (Otter) [1355] Halichoerus grypus (Grey Seal) [1364]	Annex I Habitats – No potential for LSE as this SAC is greater than 15 km from the Offshore Site; Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise; Grey seal - Considered further as this SAC is within the range for grey seal (200 km); and Eurasian otter – No potential for LSE as the Offshore Site does not overlap with the boundary of the SAC.	Yes
Aughris Head SPA	225.7	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004133.pdf	Kittiwake (Rissa tridactyla) [A188]	Kittiwake - Considered further as within foraging range of 300.6 km.	Yes
West Donegal Coast SPA	247.7	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004150.pdf	Fulmar (Fulmarus glacialis) [A009]Cormorant (Phalacrocorax carbo) [A017]Shag (Phalacrocorax aristotelis) [A018]Peregrine (Falco peregrinus) [A103]Herring Gull (Larus argentatus) [A184]Kittiwake (Rissa tridactyla) [A188]	Fulmar - Considered further as within foraging range of 1200.2 km; Cormorant - No potential for LSE as outside 33.9 km; Shag - No potential for LSE as outside 23.7 km; Herring gull - No potential for LSE as outside 85.6 km;	Yes



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/ No)
			Kazorbill (Alca torda) [A200] Chough (Pyrrhocorax pyrrhocorax) [A346]	Kittiwake - Considered further as within foraging range of 300.6 km; and Razorbill - No potential for LSE as outside 165.6 km; and Peregrine and chough - No potential for LSE as these are terrestrial species with no connectivity pathway.	
Gweedore Bay and Islands SAC	214.5	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO001141.pdf	Coastal lagoons [1150] Reefs [1170] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] 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] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Decalcified fixed dunes with Empetrum nigrum [2140] Atlantic decalcified fixed dunes (Calluno-Ulicetea) [2150] Dunes with Salix repens ssp. argentea (Salicion arenariae) [2170] Humid dune slacks [2190] Machairs (* in Ireland) [21A0] Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea [3130] European dry heaths [4030] Alpine and Boreal heaths [4060] Juniperus communis formations on heaths or calcareous grasslands [5130] Euphydryas aurinia (Marsh Fritillary) [1065] Phocoena phocoena (Harbour Porpoise) [1351] Lutra lutra (Otter) [1355] Petalophyllum ralfsii (Petalwort) [1395] Najas flexilis (Slender Naiad) [1833]	Annex I Habitats – No potential for LSE as outside 15 km; Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise; and Eurasian otter – No potential for LSE as the Offshore Site does not overlap with the boundary of the SAC.	Yes
Bunduff Lough and Machair/Trawalua/ Mullaghmore SAC	218.1	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO000625.pdf	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 Ammophila arenaria (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]	Annex I Habitats – No potential for LSE as outside 15 km; and Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise.	Yes



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/No)
			Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Alkaline fens [7230] Euphydryas aurinia (Marsh Fritillary) [1065] Phocoena phocoena (Harbour Porpoise) [1351] Petalophyllum ralfsii (Petalwort) [1395]		
St John's Point SAC	219.2	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO000191.pdf	Large shallow inlets and bays [1160] Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] 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] Alkaline fens [7230] Limestone pavements [8240] Submerged or partially submerged sea caves [8330] Euphydryas aurinia (Marsh Fritillary) [1065] Tursiops truncatus (Common Bottlenose Dolphin) [1349]	Annex I Habitats – No potential for LSE as outside 15 km; and Bottlenose dolphin – Considered further as this SAC is within the MU for bottlenose dolphin.	Yes
Carnsore Point SAC	220.9	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO002269.pdf	Mudflats and sandflats not covered by seawater at low tide [1140] Reefs [1170] Phocoena phocoena (Harbour Porpoise) [1351]	Annex I Habitats – No potential for LSE as outside 15 km; and Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise.	Yes
Blackwater Bank SAC	227.9	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO002953.pdf	Sandbanks which are slightly covered by sea water all the time [1110] Phocoena phocoena (Harbour Porpoise) [1351]	Annex I Habitats – No potential for LSE as outside 15 km; and Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise.	Yes
Lough Swilly SAC	235.7	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO002287.pdf	Estuaries [1130] Coastal lagoons [1150] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Phocoena phocoena (Harbour Porpoise) [1351] Lutra lutra (Otter) [1355]	Annex I Habitats – No potential for LSE as outside 15 km; Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise; and Eurasian otter – No potential for LSE as the Offshore Site does not overlap with the boundary of the SAC.	Yes
Codling Fault Zone SAC	267.5	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO003015.pdf	Submarine structures made by leaking gases [1180] Phocoena phocoena (Harbour Porpoise) [1351]	Annex I Habitats – No potential for LSE as outside 15 km; and Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise.	Yes
Tory Island SPA	290.4	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004073.pdf	Fulmar (Fulmarus glacialis) [A009] Corncrake (Crex crex) [A122] Razorbill (Alca torda) [A200]	Fulmar - Considered further as within foraging range of 1200.2 km; Razorbill – No potential for LSE as outside 164.6 km; and	Yes



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/ No)
			Puffin (Fratercula arctica) [A204]	Puffin – No potential for LSE as outside 265.4 km	27
Old Head of Kinsale SPA	392.5	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004021.pdf	Kittiwake (Rissa tridactyla) [A188] Guillemot (Uria aalge) [A199]	Kittiwake - No potential for LSE as outside 300.6 km; and Guillemot - No potential for LSE as outside 153.7 km.	Νο
Horn Head to Fanad Head SPA	305.6	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004194.pdf	Fulmar (Fulmarus glacialis) [A009] Cormorant (Phalacrocorax carbo) [A017] Shag (Phalacrocorax aristotelis) [A018] Barnacle Goose (Branta leucopsis) [A045] Peregrine (Falco peregrinus) [A103] Kittiwake (Rissa tridactyla) [A188] Guillemot (Uria aalge) [A199] Razorbill (Alca torda) [A200] Chough (Pyrrhocorax pyrrhocorax) [A346] Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	 Fulmar - Considered further as within foraging range of 1200.2 km; Cormorant - No potential for LSE as outside 33.9 km; Shag - No potential for LSE as outside 23.7 km; Barnacle Goose - Considered further based on potential for collision on migration ; Kittiwake – No potential for LSE as outside 300.6 km; Guillemot - No potential for LSE as outside 153.7 km; Razorbill - No potential for LSE as outside 164.6 km; Greenland White-fronted Goose - Considered further based on potential for collision on migration; and Peregrine and chough - No potential for LSE as these are terrestrial species with no connectivity pathway. 	Yes
Saltee Islands SPA	491.9	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004002.pdf	Fulmar (Fulmarus glacialis) [A009] Gannet (Morus bassanus) [A016] Cormorant (Phalacrocorax carbo) [A017] Shag (Phalacrocorax aristotelis) [A018] Lesser Black-backed Gull (Larus fuscus) [A183] Herring Gull (Larus argentatus) [A184] Kittiwake (Rissa tridactyla) [A188] Guillemot (Uria aalge) [A199] Razorbill (Alca torda) [A200] Puffin (Fratercula arctica) [A204]	 Fulmar - Considered further as within foraging range of 1200.2 km; Gannet - Considered further as within foraging range of 509.4 km; Cormorant - No potential for LSE as outside 33.9 km; Shag - No potential for LSE as outside 23.7 km; Lesser black backed gull - No potential for LSE as outside 236 km; Herring gull - No potential for LSE as outside 85.6 km; Kittiwake - No potential for LSE as outside 300.6 km; Guillemot - No potential for LSE as outside 153.7 km; Razorbill - No potential for LSE as outside 164.6 km; and Puffin - No potential for LSE as outside 265.4 km. 	Yes
Mingulay and Berneray SPA	421.4	https://www.nature.scot/sites/default/files/special-protection- area/8545/conservation-objectives.pdf	Fulmar (Fulmarus glacialis) Kittiwake (Rissa tridactyla) Guillemot (Uria aalge) Puffin (Fratercula arctica)	Fulmar - Considered further as within foraging range of 1200.2 km; Kittiwake - No potential for LSE as outside 300.6 km; Guillemot - No potential for LSE as outside 153.7 km; and Puffin - No potential for LSE as outside 265.4 km.	Yes
Skomer, Skokholm and the Seas off Pembrokeshire /	543.1	https://naturalresources.wales/media/675733/skomer-skokholm-and-seas- off-pembs-pspa-draft-conservation-objectives-final.pdf	Storm Petrel (Hydrobates pelagicus) Chough (Pyrrhocorax pyrrhocorax) Short-eared owl (Asio flammeus) Manx Shearwater (Puffinus puffinus)	Storm Petrel – No potential for LSE as outside foraging range of 336 km; Manx Shearwater - Considered further as within foraging range of 2,365.5 km; Puffin - No potential for LSE as outside 265.4 km;	Yes



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/No)
Sgomer, Sgogwm a Moroedd Penfro SPA			Puffin (Fratercula arctica) Lesser Black-backed Gull (Larus fuscus) Seabird assemblage	Lesser black backed gull - No potential for LSE as outside 236 km; and Chough and short-eared owl - No potential for LSE as these are terrestrial species with no connectivity pathway.	
North Channel SAC	450.8	https://data.jncc.gov.uk/data/be0492aa-f1d6-4197-be22- e9a695227bdb/NorthChannel-conservation-advice.pdf	Phocoena phocoena (Harbour Porpoise)	Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise.	Yes
Ailsa Craig SPA	517.5	https://www.nature.scot/sites/default/files/special-protection- area/8463/conservation-objectives.pdf	Herring Gull (Larus argentatus) Gannet (Morus bassanus) Kittiwake (Rissa tridactyla) Guillemot (Uria aalge)	Herring gull - No potential for LSE as outside 85.6 km; Gannet - No potential for LSE as outside 504.9 km; Kittiwake - No potential for LSE as outside 300.6 km; and Guillemot - No potential for LSE as outside 153.7 km.	No
West Wales Marine / Gorllewin Cymru Forol SAC	472.9	https://data.jncc.gov.uk/data/029e40f3-5f67-4168-b10d- 8730f2c40e0a/WWM-conservation-advice.pdf	Phocoena phocoena (Harbour Porpoise)	Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise.	Yes
Rum SPA	511	https://www.nature.scot/sites/default/files/special-protection- area/8574/draft-conservation-objectives.pdf	Golden eagle (Aquila chrysaetos) Manx Shearwater (Puffinus puffinus) Kittiwake (Rissa tridactyla) Guillemot (Uria aalge)	Manx Shearwater - Considered further as withinforaging range of 2,365.5 km;Kittiwake - No potential for LSE as outside 300.6 km;Guillemot - No potential for LSE as outside 153.7 km;andGolden eagle - No potential for LSE as golden eagleis a terrestrial species with no connectivity pathway.	Yes
Seas off St Kilda SPA	577.2	https://data.jncc.gov.uk/data/da761bd3-6968-429c-87a6- 835a966c34fc/seas-off-st-kilda-sas-conservation-objectives-reg-18.pdf	Puffin (Fratercula arctica) Fulmar (Fulmarus glacialis) Storm Petrel (Hydrobates pelagicus) Gannet (Morus bassanus) Guillemot (Uria aalge)	Guillemot - No potential for LSE as outside 153.7 km; Gannet - No potential for LSE as outside 504.9 km; Storm Petrel – No potential for LSE as outside foraging range of 336 km; Fulmar - Considered further as within foraging range of 1200.2 km; and Guillemot - No potential for LSE as outside 153.7 km.	Yes
Grassholm SPA	602.2	https://jncc.gov.uk/jncc-assets/SPA-N2K/UK9014041.pdf	Gannet (Morus bassanus)	Gannet - No potential for LSE as outside 509.4 km.	No
Bristol Channel Approaches / Dynesfeydd Môr Hafren SAC	497.0	https://data.jncc.gov.uk/data/505b3bab-a974-41e5-991c- c29ef3e01c0a/BCA-ConsAdvice.pdf	Phocoena phocoena (Harbour Porpoise)	Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise.	Yes
St Kilda SPA	551.7	https://www.nature.scot/sites/default/files/special-protection- area/8580/draft-conservation-objectives.pdf	Razorbill (Alca torda) Puffin (Fratercula arctica) Fulmar (Fulmarus glacialis) Storm Petrel (Hydrobates pelagicus)	Razorbill - No potential for LSE as outside 164.6 km; Puffin - No potential for LSE as outside 265.4 km; Fulmar - Considered further as within foraging range of 1200.2 km;	Yes



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/No)
			Gannet (Morus bassanus) Leach's Petrel (Hydrobates leucorhoa) Manx Shearwater (Puffinus puffinus) Kittiwake (Rissa tridactyla) Great skua (Stercorarius skua) Guillemot (Uria aalge) Seabird assemblage	Storm Petrel – No potential for LSE as outside 336 km; Gannet - No potential for LSE as outside 509.4 km; Leach's Petrel – No potential for LSE as not recorded on baseline surveys; Manx Shearwater - Considered further as within foraging range of 2,365.5 km; Kittiwake - No potential for LSE as outside 300.6 km; Great skua - No potential for LSE as not recorded on baseline surveys; and Guillemot - No potential for LSE as outside 153.7 km.	
Mers Celtiques - Talus du golfe de Gascogne Site of Community Interest (SCI) which is a Nature 2000 site.	518	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU. For reference see Blasket Islands SAC in Ireland for the conservation of objectives of these qualifying interests.	Phocoena phocoena (Harbour Porpoise) Tursiops truncatus (Common Bottlenose Dolphin)	Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise; and Bottlenose dolphin – No potential for LSE as outside the MUs for bottlenose dolphin.	Yes
Copeland Islands SPA	535.9	https://www.daera- ni.gov.uk/sites/default/files/publications/doe/copeland-islands-SPA- conservation-objectives-2015.pdf	Manx Shearwater (Puffinus puffinus) Arctic Tern (Sterna paradisaea	Manx Shearwater - Considered further as within foraging range of 2,365.5 km; and Arctic tern - No potential for LSE –as outside 40.5 km and not considered likely to pass through OAA on migration based on distance and location.	Yes
Glannau Aberdaron ac Ynys Enlli/ Aberdaron Coast and Bardsey Island SPA	547.4	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU.	Chough (Pyrrhocorax pyrrhocorax) Manx Shearwater (Puffinus puffinus)	Manx Shearwater - Considered further as within foraging range of 2,365.5 km; and Chough - No potential for LSE as chough is a terrestrial species with no connectivity pathway.	Yes
Rockabill to Dalkey Island SAC	555.3	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO003000.pdf	Reefs [1170] Phocoena phocoena (Harbour Porpoise) [1351]	Annex I Habitats – No potential for LSE as outside 15 km; and Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise.	Yes
Shiant Isles SPA	599	https://www.nature.scot/sites/default/files/special-protection- area/8575/conservation-objectives.pdf	Razorbill (Alca torda) Barnacle goose (Branta leucopsis) Puffin (Fratercula arctica) Fulmar (Fulmarus glacialis) Shag (Phalacrocorax aristotelis)	Razorbill - No potential for LSE as outside 164.6 km; Barnacle Goose - No potential for LSE as not considered likely to pass through OAA on migration based on distance and location of SPA; Puffin - No potential for LSE as outside 265.4 km;	Yes



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/No)
North Anglesey Marine	569.2	https://cdn.cyfoethnaturiol.cymru/media/681291/n-anglesey-draft-	Kittiwake (Rissa tridactyla) Guillemot (Uria aalge) Phocoena phocoena (Harbour Porpoise)	 Fulmar - Considered further as within foraging range of 1200.2 km; Shag - No potential for LSE as outside 23.7 km; Kittiwake - No potential for LSE as outside 300.6 km; and Guillemot - No potential for LSE as outside 153.7 km. Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise. 	Yes
/ Gogledd Môn Forol SAC	692.4	objectives-advice.pdf?mode=pad&md=131625760749270000	Denorhill (Alex tende)	Razorbill - No potential for LSE as outside 164.6 km;	Yes
Flannan Isles SFA	023.4	area/8502/conservation-objectives.pdf	Puffin (Fratercula arctica) Fulmar (Fulmarus glacialis) Leach's Petrel (Hydrobates leucorhoa) Kittiwake (Rissa tridactyla) Guillemot (Uria aalge)	 Fultin - No potential for LSE as outside 205.4 km; Fulmar - Considered further as within foraging range of 1200.2 km; Leach's Petrel - No potential for LSE as not recorded in OAA on baseline surveys; Kittiwake - No potential for LSE as outside 300.6 km; and Guillemot - No potential for LSE as outside 153.7 km. 	
Lambay Island SPA	649	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO004069.pdf	Fulmar (Fulmarus glacialis) [A009] Cormorant (Phalacrocorax carbo) [A017] Shag (Phalacrocorax aristotelis) [A018] Greylag Goose (Anser anser) [A043] Lesser Black-backed Gull (Larus fuscus) [A183] Herring Gull (Larus argentatus) [A184] Kittiwake (Rissa tridactyla) [A188] Guillemot (Uria aalge) [A199] Razorbill (Alca torda) [A200] Puffin (Fratercula arctica) [A204]	 Fulmar - Considered further as within foraging range of 1200.2 km; Cormorant – No potential for LSE as outside 33.9 km; Shag - No potential for LSE as outside 23.7 km; Greylag Goose - No potential for LSE as not considered likely to pass through OAA on migration based on distance and location of SPA; Lesser black backed gull – No potential for LSE as outside 236 km; Herring gull - No potential for LSE as outside 85.6 km; Kittiwake - No potential for LSE as outside 300.6 km; Guillemot – No potential for LSE as outside 153.7 km; Razorbill - No potential for LSE as outside 164.6 km; and Puffin - No potential for LSE as outside 265.4 km. 	Yes
Lambay Island SAC	581.28	https://www.npws.ie/sites/default/files/protected- sites/conservation_objectives/CO000204.pdf	Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Phocoena phocoena (Harbour Porpoise) [1351] Halichoerus grypus (Grey Seal) [1364] Phoca vitulina (Harbour Seal) [1365]	Annex I Habitats – No potential for LSE as outside 15 km; Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise; and Harbour seal – No potential for LSE as outside range for harbour seal (75 km) and grey seal (200 km).	Yes



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/ No)
Nord Bretagne DH SAC	618.6	https://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=FR2502022	Phocoena phocoena (Harbour Porpoise) Tursiops truncatus (Common Bottlenose Dolphin)	Harbour porpoise– Considered further as this SAC is within the MU for harbour porpoise; and Bottlenose dolphin – No potential for LSE as outside the MUs for bottlenose dolphin.	Yes
Ouessant-Molène SAC	638.8	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU. For reference see Blasket Islands SAC in Ireland for the conservation of objectives of these qualifying interests.	Barbastelle Bat (Barbastella barbastellus) Greater horseshoe bat (Rhinolophus ferrumequinum) Grey seal (<i>Halichoerus gryphus</i>) Otter (<i>Lutra lutra</i>) Phocoena phocoena (Harbour Porpoise) Tursiops truncatus (Common Bottlenose Dolphin)	Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise; Bottlenose dolphin – No potential for LSE as outside the MUs for bottlenose dolphin; Grey seal - No potential for LSE as outside range for grey seal (200 km); and Eurasian otter – No potential for LSE as the Offshore Site does not overlap with the boundary of the SAC.	Yes
Ouessant-Molène SPA	727	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU For reference see the Saltee Islands SPA in Ireland for the conservation of objectives of these qualifying interests.	Fulmar (Fulmarus glacialis) Manx Shearwater (Puffinus puffinus) *All other species outside connectivity range	 Fulmar - Considered further as within foraging range of 1200.2 km; Manx Shearwater – Considered further as within foraging range of 2,365.5 km. 	Yes
Handa SPA	677.9	https://www.nature.scot/sites/default/files/special-protection- area/8511/conservation-objectives.pdf	Razorbill (Alca torda) Fulmar (Fulmarus glacialis) Kittiwake (Rissa tridactyla) Great skua (Stercorarius skua) Guillemot (Uria aalge)	 Razorbill - No potential for LSE as outside 164.6 km; Fulmar - Considered further as within foraging range of 1200.2 km; Kittiwake - No potential for LSE as outside 300.6 km; Great skua - No potential for LSE as not recorded in OAA on baseline surveys; Guillemot - No potential for LSE as outside 153.7 km. 	Yes
Abers - Côte des legends SAC	653.8	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU. For reference see Blasket Islands SAC in Ireland for the conservation of objectives of these qualifying interests.	Barbastelle Bat (Barbastella barbastellus) Grey seal (<i>Halichoerus gryphus</i>) Otter (<i>Lutra lutra</i>) Harbour seal (<i>Phoca vitulina</i>) Phocoena phocoena (Harbour Porpoise) Greater horseshoe bat (Rhinolophus ferrumequinum) Atlantic salmon (<i>Salmo salar</i>) Tursiops truncatus (Common Bottlenose Dolphin)	 Diadromous fish – No potential for LSE as outside 50 km; Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise; Bottlenose dolphin – No potential for LSE as outside the MUs for bottlenose dolphin; Pinnipeds – No potential for LSE as outside range for harbour seal (75 km) and grey seal (200 km); and Eurasian otter – No potential for LSE as the Offshore Site does not overlap with the boundary of the SAC. 	Yes
Chaussée de Sein SAC	664.6	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the	Halichoerus gryphus (Grey Seal) Phocoena phocoena (Harbour Porpoise) Tursiops truncatus (Common Bottlenose Dolphin)	Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise; Bottlenose dolphin – No potential for LSE as outside the MUs for bottlenose dolphin; and	Yes



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/ No)
		closest designated site with the same qualifying feature that has conservation objectives within the same MU. For reference see Blasket Islands SAC in Ireland for the conservation of objectives of these qualifying interests.		Grey seal – No potential for LSE as outside range for grey seal (200 km).	
Cape Wrath SPA	704.5	https://www.nature.scot/sites/default/files/special-protection- area/8481/conservation-objectives.pdf	Razorbill (Alca torda) Puffin (Fratercula arctica) Fulmar (Fulmarus glacialis) Kittiwake (Rissa tridactyla) Guillemot (Uria aalge)	 Razorbill - No potential for LSE as outside 164.6 km; Puffin - No potential for LSE as outside 265.4 km; Fulmar - Considered further as within foraging range of 1200.2 km; Kittiwake - No potential for LSE as outside 300.6 km; and Guillemot - No potential for LSE as outside 153.7 km. 	Yes
Cote de Granit Rose- Sept Iles SPA	779	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU. For reference see the Saltee Islands SPA in Ireland for the conservation of objectives of these qualifying interests	Fulmar (Fulmarus glacialis) Manx Shearwater (Puffinus puffinus) *All other species outside connectivity range	 Fulmar - Considered further as within foraging range of 1200.2 km; Manx Shearwater - Considered further as within foraging range of 2,365.5 km; 	Yes
Côte de Granit rose- Sept-Iles SAC	676.8	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU. For reference see Blasket Islands SAC in Ireland for the conservation of objectives of these qualifying interests.	Alosa alosa (Allis Shad) Alosa fallax (Shad) Halichoerus gryphus (Grey Seal) Petromyzon marinus (Sea Lamprey) Phoca vitulina (Harbour seal) Phocoena phocoena (Harbour Porpoise) Rhinolophus hipposideros (Lesser Horseshoe Bat) Rhinolophus ferrumequinum (Greater Horseshoe Bat) Salmo salar (Atlantic salmon) Tursiops truncatus (Common Bottlenose Dolphin)	Diadromous fish – No potential for LSE as outside 50 km; Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise; Bottlenose dolphin – No potential for LSE as outside the MUs for bottlenose dolphin; and Pinnipeds – No potential for LSE as outside range for grey seal (200 km) and harbour seal (75 km).	Yes
Baie de Morlaix SAC	679.2	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU. For reference see Blasket Islands SAC in Ireland for the conservation of objectives of these qualifying interests.	Alosa alosa (Allis Shad) Alosa fallax (Shad) Barbastelle Bat (Barbastella barbastellus) Halichoerus gryphus (Grey Seal) Lutra lutra (Eurasian otter) Petromyzon marinus (Sea Lamprey) Phocoena phocoena (Harbour Porpoise) Rhinolophus hipposideros (Lesser Horseshoe Bat) Rhinolophus ferrumequinum (Greater Horseshoe Bat) Salmo salar (Atlantic salmon)	Diadromous fish – No potential for LSE as outside 50 km; Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise; Grey seal – No potential for LSE as outside range for grey seal (200 km); Eurasian otter – No potential for LSE as the Offshore Site does not overlap with the boundary of the SAC.	Yes



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/No)
Côtes de Crozon SAC	683.7	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU. For reference see Blasket Islands SAC in Ireland for the conservation of objectives of these qualifying interests.	Halichoerus gryphus (Grey Seal) Lutra lutra (Eurasian otter) Phocoena phocoena (Harbour Porpoise) Rhinolophus ferrumequinum (Greater Horseshoe Bat) Tursiops truncatus (Common Bottlenose Dolphin)	Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise; Bottlenose dolphin – No potential for LSE as outside the MUs for bottlenose dolphin; Grey seal – No potential for LSE as outside range for grey seal (200 km); and Eurasian otter – No potential for LSE as the Offshore Site does not overlap with the boundary of the SAC.	Yes
Camaret SPA	701	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU For reference see the Saltee Islands SPA in Ireland for the conservation of objectives of these qualifying interests.	Fulmar (Fulmarus glacialis) *All other species outside connectivity range	Fulmar - Considered further as within foraging range of 1200.2 km.	Yes
North Rona and Sula Sgeir SPA	689.1	https://www.nature.scot/sites/default/files/special-protection- area/8558/conservation-objectives.pdf	Razorbill (Alca torda) Puffin (Fratercula arctica) Fulmar (Fulmarus glacialis) Storm Petrel (Hydrobates pelagicus) Great black-backed gull (Larus marinus) Gannet (Morus bassanus) Leach's Petrel (Hydrobates leucorhoa) Kittiwake (Rissa tridactyla) Guillemot (Uria aalge)	Razorbill - No potential for LSE as outside 164.6 km; Puffin - No potential for LSE as outside 265.4 km; Fulmar - Considered further as within foraging range of 1200.2 km; Storm Petrel - No potential for LSE as outside 336 km; Great black-backed gull - No potential for LSE as outside 73 km; Gannet - No potential for LSE as outside 509.4 km; Leach's Petrel - No potential for LSE not recorded in OAA on baseline surveys; Kittiwake - No potential for LSE as outside 300.6 km; and Guillemot - No potential for LSE as outside 153.7 km.	Yes
North Caithness Cliffs SPA	771	https://www.nature.scot/sites/default/files/special-protection- area/8554/conservation-objectives.pdf	Razorbill (Alca torda) Peregrine (Falco peregrinus) Puffin (Fratercula arctica) Fulmar (Fulmarus glacialis) Kittiwake (Rissa tridactyla) Guillemot (Uria aalge)	Razorbill - No potential for LSE as outside 164.6 km; Puffin - No potential for LSE as outside 265.4 km; Fulmar - Considered further as within foraging range of 1200.2 km; Kittiwake - No potential for LSE as outside 300.6 km; Guillemot - No potential for LSE as outside 153.7 km; and Peregrine - No potential for LSE as peregrine is a terrestrial species with no connectivity pathway.	Yes



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/ No)
Hoy SPA	810.2	https://www.nature.scot/sites/default/files/special-protection- area/8513/conservation-objectives.pdf	Great skua (Stercorarius skua) Peregrine (Falco peregrinus) Puffin (Fratercula arctica) Fulmar (Fulmarus glacialis) Red-throated diver (Gavia stellata) Great black-backed gull (Larus marinus) Kittiwake (Rissa tridactyla) Arctic skua (Stercorarius parasiticus) Guillemot (Uria aalge) Seabird assemblage	Great skua - No potential for LSE as not recorded in OAA on baseline surveys; Puffin - No potential for LSE as outside 265.4 km; Fulmar - Considered further as within foraging range of 1200.2 km; Red-throated diver - No potential for LSE as not recorded in OAA on baseline surveys; Great black-backed gull - No potential for LSE as outside 73 km; Kittiwake - No potential for LSE as outside 300.6 km; Arctic skua - No potential for LSE as not recorded in OAA on baseline surveys; Guillemot - No potential for LSE as outside 153.7 km; and Peregrine - No potential for LSE as peregrine is a terrestrial species with no connectivity pathway.	Yes
Récifs et landes de la Hague SAC	770.9	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU. For reference see Blasket Islands SAC in Ireland for the conservation of objectives of these qualifying interests.	Halichoerus gryphus (Grey Seal) Lutra lutra (Eurasian otter) Phoca vitulina (Harbour seal) Myotis bechsteinii (Bechstein's bat) Myotis emarginatus (Geoffroy's bat) Myotis myotis (Greater mouse-eared bat) Phocoena phocoena (Harbour Porpoise) Rhinolophus ferrumequinum (Greater Horseshoe Bat) Tursiops truncatus (Common Bottlenose Dolphin)	Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise; Bottlenose dolphin – No potential for LSE as outside the MUs for bottlenose dolphin; Pinnipeds – No potential for LSE as outside range for harbour seal (75 km) and grey seal (200 km); and Eurasian otter – No potential for LSE as the Offshore Site does not overlap with the boundary of the SAC.	Yes
Cap d'Erquy-Cap Fréhel SPA	855	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU. For reference see the Saltee Islands SPA in Ireland for the conservation of objectives of these qualifying interests	Fulmar (Fulmarus glacialis) *All other species outside connectivity range	Fulmar - Considered further as within foraging range of 1200.2 km	Yes
Anse de Vauville SAC	771.6	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU.	Halichoerus gryphus (Grey Seal) Phoca vitulina (Harbour seal) Phocoena phocoena (Harbour Porpoise) Tursiops truncatus (Common Bottlenose Dolphin)	Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise; Bottlenose dolphin – No potential for LSE as outside the MUs for bottlenose dolphin; and Pinnipeds – No potential for LSE as outside range for harbour seal (75 km) and grey seal (200 km).	Yes



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/ No)
		For reference see Blasket Islands SAC in Ireland for the conservation of objectives of these qualifying interests.			
Banc et récifs de Surtainville SAC	772.9	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU. For reference see Blasket Islands SAC in Ireland for the conservation of objectives of these qualifying interests.	Halichoerus gryphus (Grey Seal) Phoca vitulina (Harbour seal) Phocoena phocoena (Harbour Porpoise) Tursiops truncatus (Common Bottlenose Dolphin)	Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise; Bottlenose dolphin – No potential for LSE as outside the MUs for bottlenose dolphin; and Pinnipeds – No potential for LSE as outside range for harbour seal (75 km) and grey seal (200 km).	Yes
Other SACs in France which overlap with the CIS MU for harbour porpoise: Baie du Mont Saint-Michel SAC Estuaire de la Rance SAC Baie de Lancieux, Baie de l'Arguenon , Archipel de Saint Malo et Dinard SAC Cap d'Erquy- Cap Fréhel SAC Baie de Saint- Brieuc SAC Tregor Goëlo Es SAC	ca. 700	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU. For reference see Blasket Islands SAC in Ireland for the conservation of objectives of these qualifying interests.	Phocoena phocoena (Harbour Porpoise) *All other species outside connectivity range	Harbour porpoise – Considered further as this SAC is within the MU for harbour porpoise	Yes
Rousay SPA	859.5	https://www.nature.scot/sites/default/files/special-protection- area/8573/conservation-objectives.pdf	Fulmar (Fulmarus glacialis) Kittiwake (Rissa tridactyla) Arctic skua (Stercorarius parasiticus) Arctic Tern (Sterna paradisaea) Guillemot (Uria aalge)	Fulmar - Considered further as within foraging range of 1200.2 km; Kittiwake - No potential for LSE as outside 300.6 km; Arctic skua - No potential for LSE as not recorded in OAA on baseline surveys;	Yes



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/No)
				Arctic tern - No potential for LSE as outside 40.5 km ; and Guillemot - No potential for LSE as outside 154 km.	
West Westray SPA	864.5	https://www.nature.scot/sites/default/files/special-protection- area/8589/conservation-objectives.pdf	Razorbill (Alca torda) Fulmar (Fulmarus glacialis) Kittiwake (Rissa tridactyla) Arctic skua (Stercorarius parasiticus) Arctic Tern (Sterna paradisaea) Guillemot (Uria aalge)	Razorbill - No potential for LSE as outside 164.6 km; Fulmar - Considered further as within foraging range of 1200.2 km; Kittiwake - No potential for LSE as outside 300.6 km; Arctic skua - No potential for LSE as not recorded in OAA on baseline surveys; Arctic tern - No potential for LSE as outside 40.5 km; and Guillemot - No potential for LSE as outside 153.7 km.	Yes
Copinsay SPA	908.9	https://www.nature.scot/sites/default/files/special-protection- area/8485/conservation-objectives.pdf	Fulmar (Fulmarus glacialis) Great black-backed gull (Larus marinus) Kittiwake (Rissa tridactyla) Guillemot (Uria aalge) Seabird assemblage	Fulmar - Considered further as within foraging range of 1200.2 km; Great black-backed gull - No potential for LSE as outside 73 km; Kittiwake – No potential for LSE as outside 300.6 km; and Guillemot - No potential for LSE as outside 153.7 km.	Yes
East Caithness Cliffs SPA	871.1	https://www.nature.scot/sites/default/files/special-protection- area/8492/conservation-objectives.pdf	Razorbill (Alca torda) Peregrine (Falco peregrinus) Fulmar (Fulmarus glacialis) Herring Gull (Larus argentatus) Great black-backed gull (Larus marinus) Shag (Phalacrocorax aristotelis) Cormorant (Phalacrocorax carbo) Kittiwake (Rissa tridactyla) Guillemot (Uria aalge)	Razorbill - No potential for LSE as outside 164.6 km; Fulmar - Considered further as within foraging range of 1200.2 km; Herring gull - No potential for LSE as outside 85.6 km; Great black-backed gull - No potential for LSE as outside 73 km; Shag - No potential for LSE as outside 23.7 km; Cormorant - No potential for LSE as outside 33.9 km; Kittiwake - No potential for LSE as outside 300.6 km; Guillemot - No potential for LSE as outside 153.7 km; and Peregrine - No potential for LSE as peregrine is a terrestrial species with no connectivity pathway.	Yes
Calf of Eday SPA	869.3	https://www.nature.scot/sites/default/files/special-protection- area/8478/conservation-objectives.pdf	Fulmar (Fulmarus glacialis) Great black-backed gull (Larus marinus) Cormorant (Phalacrocorax carbo) Kittiwake (Rissa tridactyla) Guillemot (Uria aalge)	 Fulmar - Considered further as within foraging range of 1200.2 km; Great black-backed gull - No potential for LSE as outside 73 km; Cormorant - No potential for LSE as outside 33.9 km; Kittiwake - No potential for LSE as outside 300.6 km; and Guillemot - No potential for LSE as outside 153.7 km. 	Yes
Iles Houat-Hoedic SPA	879.9	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to	Manx Shearwater (Puffinus puffinus) *All other species outside connectivity range	Manx Shearwater - Considered further as within foraging range of 2,365.5 km.	Yes



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/ No)
		or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU. For reference see the Saltee Islands SPA in Ireland for the conservation of objectives of these qualifying interests			
Falaise du Bessin Occidental SPA	936.8	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU. For reference see the Saltee Islands SPA in Ireland for the conservation of objectives of these qualifying interests.	Fulmar (Fulmarus glacialis) *All other species outside connectivity range	Fulmar - Considered further as within foraging range of 1200.2 km.	Yes
Seas off Foula SPA	893.7	https://data.jncc.gov.uk/data/a4ddbc00-500a-4c4b-9250- ed180356db00/seas-off-foula-sas-conservation-objectives-reg-18.pdf	Puffin (Fratercula arctica) Fulmar (Fulmarus glacialis) Arctic skua (Stercorarius parasiticus) Great skua (Stercorarius skua) Guillemot (Uria aalge)	Fulmar - Considered further as within foraging range of 1200.2 km. Puffin - No potential for LSE as outside 265.4 km; Great skua - No potential for LSE as not recorded in OAA on baseline survey; Arctic skua - No potential for LSE as not recorded in OAA on baseline surveys; and Guillemot - No potential for LSE as outside 153.7 km.	Yes
Fair Isle SPA	975.9	https://www.nature.scot/sites/default/files/special-protection- area/8496/conservation-objectives.pdf	Razorbill (Alca torda) Puffin (Fratercula arctica) Fulmar (Fulmarus glacialis) Gannet (Morus bassanus) Shag (Phalacrocorax aristotelis) Kittiwake (Rissa tridactyla) Arctic skua (Stercorarius parasiticus) Great skua (Stercorarius skua) Arctic Tern (Sterna paradisaea) Fair Isle Wren (Troglodytes troglodytes fridariensis) Guillemot (Uria aalge)	Razorbill - No potential for LSE as outside 164.6 km; Puffin - No potential for LSE as outside 265.4 km; Fulmar - Considered further as within foraging range of 1200.2 km; Gannet - No potential for LSE as outside 509.4 km; Shag - No potential for LSE as outside 23.7 km; Kittiwake - No potential for LSE as outside 300.6 km; Arctic skua - No potential for LSE as not recorded in OAA on baseline surveys; Great skua - No potential for LSE as not recorded in OAA on baseline surveys; Arctic tern - No potential for LSE as outside 40.5 km; and Guillemot - No potential for LSE as outside 153.7 km.	Yes
Littoral seino-marin SPA	1,030.3	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The	Fulmar (Fulmarus glacialis) *All other species outside connectivity range or do not breed at the site	Fulmar - Considered further as within foraging range of 1200.2 km	Yes



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/ No)
		determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU. For reference see the Saltee Islands SPA in Ireland for the conservation of objectives of these qualifying interests.			
Troup, Pennan and Lion's Heads SPA	1,185.5	https://www.nature.scot/sites/default/files/special-protection- area/8587/conservation-objectives.pdf	Razorbill (Alca torda) Fulmar (Fulmarus glacialis) Herring Gull (Larus argentatus) Kittiwake (Rissa tridactyla) Guillemot (Uria aalge)	Razorbill - No potential for LSE as outside 164.6 km;Fulmar - Considered further as within foraging rangeof 1200.2 km;Herring gull - No potential for LSE as outside 85.6km;Kittiwake - No potential for LSE as outside 300.6 km;andGuillemot - No potential for LSE as outside 153.7 km.	Yes
Foula SPA	924.5	https://data.jncc.gov.uk/data/a4ddbc00-500a-4c4b-9250- ed180356db00/seas-off-foula-sas-conservation-objectives-reg-18.pdf	Razorbill (Alca torda) Puffin (Fratercula arctica) Fulmar (Fulmarus glacialis) Red-throated diver (Gavia stellata) Leach's Petrel (Hydrobates leucorhoa) Shag (Phalacrocorax aristotelis) Kittiwake (Rissa tridactyla) Arctic skua (Stercorarius parasiticus) Great skua (Stercorarius skua) Arctic Tern (Sterna paradisaea) Guillemot (Uria aalge)	Razorbill - No potential for LSE as outside 164.6 km; Puffin - No potential for LSE as outside 265.4 km; Fulmar - Considered further as within foraging range of 1200.2 km; Red-throated diver - No potential for LSE as not recorded in OAA on baseline surveys; Leach's Petrel – No potential for LSE as not recorded in OAA on baseline surveys; Shag - No potential for LSE as outside 23.7 km; Kittiwake - No potential for LSE as outside 300.6 km; Arctic skua - No potential for LSE as not recorded in OAA on baseline surveys; Great skua - No potential for LSE as not recorded in OAA on baseline surveys; Arctic tern - No potential for LSE as not recorded in OAA on baseline surveys; Arctic tern - No potential for LSE as outside 40.5 km; and Guillemot - No potential for LSE as outside 153.7 km.	Yes
Sumburgh Head SPA	963.7	https://www.nature.scot/sites/default/files/special-protection- area/8582/conservation-objectives.pdf	Fulmar (Fulmarus glacialis) Kittiwake (Rissa tridactyla) Arctic Tern (Sterna paradisaea) Guillemot (Uria aalge)	Fulmar - Considered further as within foraging range of 1200.2 km; Kittiwake - No potential for LSE as outside 300.6 km; Arctic tern - No potential for LSE as outside 40.5 km; and Guillemot - No potential for LSE as outside 153.7 km.	Yes
Buchan Ness to Collieston Coast SPA	1,032.1	https://www.nature.scot/sites/default/files/special-protection- area/8473/conservation-objectives.pdf	Fulmar (Fulmarus glacialis) Herring Gull (Larus argentatus) Shag (Phalacrocorax aristotelis) Kittiwake (Rissa tridactyla) Guillemot (Uria aalge)	Fulmar - Considered further as within foraging range of 1200.2 km;Herring gull - No potential for LSE as outside 85.6 km;Shag - No potential for LSE as outside 23.7 km;Kittiwake - No potential for LSE as outside 300.6 km;Guillemot - No potential for LSE as outside 153.7 km.	Yes



European site	Distance to Offshore Site for SACs and OAA for SPAs (km)	Site's conservation objectives	Qualifying Interest(s)	Justification for why the European Site has been screened in based on the ZoI for the relevant QI	Site screened in because they are considered to have potential for LSE? (Yes/No)
Noss SPA	976.5	https://www.nature.scot/sites/default/files/special-protection- area/8561/conservation-objectives.pdf	Puffin (Fratercula arctica) Fulmar (Fulmarus glacialis) Gannet (Morus bassanus) Kittiwake (Rissa tridactyla) Great skua (Stercorarius skua) Guillemot (Uria aalge)	Puffin - No potential for LSE as outside 265.4 km; Fulmar – Considered further as within 1200.2 km; Gannet - No potential for LSE as outside 509.4 km; Kittiwake - No potential for LSE as outside 300.6 km; Great skua - No potential for LSE not recorded in OAA on baseline surveys; and Guillemot - No potential for LSE as outside 153.7 km.	Yes
Hermaness, Saxa Vord and Valla Field SPA	1,044.5	https://www.nature.scot/sites/default/files/special-protection- area/8512/conservation-objectives.pdf	Great skua (Stercorarius skua) Puffin (Fratercula arctica) Fulmar (Fulmarus glacialis) Red-throated diver (Gavia stellata) Gannet (Morus bassanus) Shag (Phalacrocorax aristotelis) Kittiwake (Rissa tridactyla) Guillemot (Uria aalge)	Great skua - No potential for LSE as not recorded in OAA on baseline surveys; Puffin - No potential for LSE as outside 265.4 km; Fulmar - Considered further as within foraging range of 1200.2 km; Red-throated diver - No potential for LSE as not recorded in OAA on baselines surveys; Gannet - No potential for LSE as outside 509.4 km; Shag - No potential for LSE as outside 23.7 km; Kittiwake - No potential for LSE as outside 300.6 km; and Guillemot - No potential for LSE as outside 153.7 km.	Yes
Fowlsheugh SPA	1,266	https://www.nature.scot/sites/default/files/special-protection- area/8505/conservation-objectives.pdf	Razorbill (Alca torda) Fulmar (Fulmarus glacialis) Herring Gull (Larus argentatus) Kittiwake (Rissa tridactyla) Guillemot (Uria aalge)	Razorbill - No potential for LSE as outside 164.6 km; Fulmar - No potential for LSE as outside 1200.2 km; Herring gull - No potential for LSE as outside 85.6 km; Kittiwake - No potential for LSE as outside 300.6 km; and Guillemot - No potential for LSE as outside 153.7 km.	No
Fetlar SPA	993	https://www.nature.scot/sites/default/files/special-protection- area/8498/conservation-objectives.pdf	Dunlin (Calidris alpina schinzii) Fulmar (Fulmarus glacialis) Red-necked Phalarope (Phalaropus lobatus) Whimbrel (Numenius phaeopus) Arctic skua (Stercorarius parasiticus) Great skua (Stercorarius skua) Arctic Tern (Sterna paradisaea)	Fulmar - Considered further as within foraging range of 1200.2 km; Arctic skua - No potential for LSE as not recorded in OAA on baseline surveys; Great skua - No potential for LSE as not recorded in OAA on baseline surveys; Arctic tern - No potential for LSE as outside 40.5 km; and Whimbrel, dunlin and red-necked phalarope - No potential for LSE as these species are not likely to pass through the OAA on migration based on distance and location of SPA.	Yes



Determining the potential for LSE

As described in Section 3.2, the European sites listed within Table 3-2 are considered to have connectivity with the Offshore Site and thus have been taken forward for further assessment to determine the potential for LSE. The following Sections present the assessment to determine the potential for LSE, as broken down by receptor group. In adopting this approach which considers receptor groups with reference to the relevant European Sites, rather than on a European Site by site basis, there is no element, impact or potential LSE on any European Site, which has not been identified and assessed:

- Section 3.3.1 European sites designated for Annex I Habitats;
- Section 3.3.2 European sites designated for diadromous fish and freshwater pearl mussel;
- > Section 3.3.3 European sites designated for marine mammals; and
- > Section European sites designated for marine ornithological features.

Each Section provides a summary table detailing the receptor-specific impact pathways associated with each Project phase (e.g. pre-construction, construction and decommissioning (C&D) and operation and maintenance (O&M)) where required. Where it has been determined that there is a potential pathway for LSE, the applicable European sites and qualifying interests for which there may be LSE on are presented. These sites will then be taken forward for the NIS (see NIS Volume 1 Offshore).

3.3.1 European Sites Designated for Annex I Habitats

As presented in Table 3-2, the assessment of connectivity resulted in eight European sites (SACs) which have been 'Screened in' for connectivity. Marine and coastal QIs have been divided and are considered as follows:

Marine habitats - The assessment has considered potential impact pathways on the subtidal and intertidal Annex I habitats identified as qualifying interests of the European sites, including sandbanks which are slightly covered by seawater at all times, estuaries, Atlantic and Mediterranean salt meadows, mudflats and sandflats not covered by seawater at low tide, coastal lagoons, large shallow inlets and bays and reefs).

All other habitats – While there is a pathway between marine physical processes and intertidal habitats, e.g. from sedimentation, the potential for interaction with shore and terrestrial habitats (e.g. Perennial vegetation of stony banks, sand dunes, freshwater habitats, grasses and vegetation, bogs, etc.) has not been taken forward to the assessment as these features have no potential pathway for LSE with the Offshore Site of the Project. The potential impact pathways that could lead to LSE on the Annex I QI of European Sites have been summarised in Table 3-3.

Potential Effect	Description of potential impact pathways
Construction	
Temporary habitat or species loss / disturbance	There is potential for the temporary loss or damage to habitats or species as a result of the activities relating to construction of the Project.
Long term loss / damage to benthic habitats and species	There is the potential for the long-term loss or damage to benthic habitats or species as a result of infrastructure placed on the seabed during the construction of the Project. The effect will last through the operational phase.

Table 3-3 Potential impacts pathways on Annex I habitat QIs from the Offshore Site construction, operation and maintenance and decommissioning phases



Increased Suspended Sediment Concentrations (SSC) and associated deposition	Sediment disturbance resulting from construction activities will result in increased SSC and associated sediment deposition.
Increased risk of introduction and spread of Invasive and Non-Native Species (INNS)	Vessel movement and other activities (e.g. ballasting) during construction activities have the potential to introduce INNS. Furthermore, the potential temporary anchorage in the Shannon Estuary will present a risk of introduced INNS.
Operation and Maintenance	
Hydrodynamic changes leading to scour around subsea infrastructure	Localised movement of seabed as a result of infrastructure placements relating to the Project.
Temporary habitat or species loss / disturbance	There is the potential for the temporary loss or damage to habitats or species as a result of activities relating to the operation and maintenance of the Project.
Increased SSC and associated deposition	Sediment disturbance resulting from operation and maintenance activities will result in increased SSC and associated deposition.
Colonisation of hard structures	Artificial structures placed on the seabed (i.e. Gravity-Based Foundations (GBFs) and cable protection) will introduce the potential for colonisation by marine organisms, resulting in localised changes to biodiversity.
Effect of cable thermal load or Electromagnetic Fields (EMF) on benthic ecology	While the effect of thermal load or EMF are anticipated to be extremely localised (i.e. within centimetres (thermal) or metres (EMF) of cables), their effects will be assessed throughout the operation and maintenance phase of the Project.
Decommissioning	
Removal of hard substrate during	The removal of installed infrastructure during the decommissioning

Due to proximity of the SACs with Annex I QI to the Offshore Site, all of the sites have been taken forward for the NIS due to LSE. These are summarised in Table 3-4.

Table 3-4 European Sites with LSE on Annex I habitat QI as a result of the Offshore Site

European Site	QI
Kilkieran Bay and Islands SAC	Reefs
Inishmore Island SAC	
Inishmaan Island SAC	
Carrowmore Point to Spanish Point and	
Islands SAC	
Carrowmore Dunes SAC	
Connemara Bog Complex SAC	
Kilkee Reefs SAC	
Slyne Head Peninsula SAC	



Kilkieran Bay and Islands SAC	Mudflats and sandflats not covered by seawater at low tide
Kilkieran Bay and Islands SAC Inishmore Island SAC Carrowmore Point to Spanish Point and Islands SAC Connemara Bog SAC Slyne Head Peninsula SAC	Coastal Lagoons
Kilkieran Bay and Islands SAC Kilkee Reefs SAC Slyne Head Peninsula SAC	Large shallow inlets and bays
Kilkieran Bay and Islands SAC	Atlantic salt meadows
Kilkieran Bay and Islands SAC	Mediterranean salt meadows

3.3.2 European Sites Designated for Diadromous Fish and Freshwater Pearl Mussel

As presented in Table 3-2, the assessment of connectivity resulted in six European sites (SACs) for these QIs which have been 'Screened in' for connectivity. The potential impact pathways that could lead to LSE on the Annex I QI of European Sites have been summarised in Table 3-5.

Table 3-5 Potential impacts pathways on diadromous fish and freshwater pearl mussel QIs from the Offshore Site construction, operation and maintenance and decommissioning phases

Potential effect	Description of potential impact pathways
Construction/decommissioning	
Disturbance or damage to diadromous fish and freshwater pearl mussel due to underwater noise generated from construction activities	Underwater noise disturbance to sensitive fish populations generated during construction, including disturbance to migratory fish and spawning fish species. The scale of these effects may depend on the construction methods required.
Temporary habitat loss or disturbance	The Offshore Site overlaps with the spawning and/or nursery grounds of fish species.
Long-term habitat loss of diadromous fish spawning and nursery grounds due to presence of foundations and cables on the seabed	The footprint of foundation impacts will be relatively small; however, the impacts of the OECC could have a larger impact on seabed habitats and associated fish and shellfish species.
Effects of increases in suspended sediment concentrations (SSC) and potential sedimentation / smothering on fish and shellfish during construction activities	Increased sedimentation associated with installation (e.g. jet trenching) may lead to smothering of slow moving or sessile species and also localised changes in sediment type which may potentially impact seabed dependent species.
Effects of accidental release of pollutants on fish and shellfish	Accidental releases of pollutants may arise as a result of accidental spills from vessels or other equipment and have detrimental effects on fish and shellfish.



Potential effect	Description of potential impact pathways
Operation and maintenance	
Habitat creation and fish aggregation	Artificial structures placed on the seabed (i.e. turbine foundations and/or cable protection) will introduce new structures for habitat creation and create artificial reef effects, with the potential for fish and predator aggregation as an indirect impact.
Effects of increases in SSC and potential sedimentation / smothering on fish and shellfish during operation and maintenance activities	Increased sedimentation associated with cable repair and reburial (e.g. jet trenching) may lead to smothering of slow moving or sessile species and also localised changes in sediment type which may potentially impact seabed dependent species.
Effects of electromagnetic fields (EMFs) from subsea cables on diadromous fish and freshwater pearl mussel	EMFs may impact sensitive species by impacting foraging behaviour. The level of exposure will depend on the cable burial and protection methods used.
Effects of thermal emissions from subsea cables on diadromous fish and freshwater pearl mussel	Heat dissipated from operational subsea cables may impact sensitive species. The potential impacts of thermal load and the level of exposure will depend on the cable burial and protection methods used.
Disturbance or damage to diadromous fish and freshwater pearl mussel due to underwater noise generated from operations	Operational noise originating from 30 Wind Turbine Generator (WTG) gearbox and generators has the potential to impact on sensitive fish and shellfish species.
Barrier effects on migratory diadromous fish from the presence of the fixed platforms and associated infrastructure	Depending on the location and scale of the development, the presence of offshore infrastructure may present a barrier to the movement of migratory fish species.
Effects of ghost fishing due to lost fishing gear becoming entangled in installed infrastructure	There is the potential for lost fishing gear to become entangled with infrastructure relating to the Offshore Site which has the potential to impact fish and shellfish species

Due to the proximity of the Offshore Site to these European Sites, there is LSE on the QI and all have been taken forward to the NIS. These European sites are summarised in Table 3-6.

Table 3-6 European Sites with LSE on diadromous fis	sh and freshwater shellfish QI as a result of the	e Offshore Site

European Site	QI	Distance to Offshore Site (km)
Connemara Bog Complex SAC	Atlantic salmon	8.26
Lower River Shannon SAC	Atlantic salmon, freshwater pearl mussel, sea lamprey, river lamprey & brook lamprey	8.8
Twelve Bens/Garraun Complex SAC	Atlantic salmon & freshwater pearl mussel	20.8



Maumturk Mountains SAC	Atlantic salmon	23.8
Lough Corrib SAC	Atlantic salmon, freshwater pearl mussel, sea lamprey, & brook lamprey	35.9
Mweelrea/Sheeffry/Erriff Complex SAC	Atlantic salmon & freshwater pearl mussel	36.5



3.3.3 European Sites Designated for Marine Mammal Features

As presented in Table 3-2, the assessment of connectivity resulted in 44 European sites (SACs) with marine mammal QIs which have been identified as having potential connectivity to the Offshore Site activities. To determine if the Project is likely to have an LSE on the sites, a further assessment of the QIs and the relevant impact pathways and sources was carried out using best scientific knowledge. This assessment considered the Project alone and in combination with another Plans or Projects. The potential marine mammal impact pathways have been summarised in Table 3-7.

Table 3-7 Potential impacts pathways on marine mammal	QIs from the	Offshore Site	construction,	operation and	l maintenance a	nd
decommissioning phases						

Potential effect	Description of potential impact pathways	Pathway to LSE (Yes/No)
Construction and decommission	ning	
Injury and disturbance due to underwater sound emissions associated with construction (including pre-construction)	Underwater sound associated with construction activities (including UXO clearance and geophysical survey sound emissions) can have an impact on marine mammal and megafauna receptors, including the risk of injury, and on habitat use and distribution due to barrier effects and displacement. Evidence suggests that potential impacts include short term or temporary displacement of mammals.	Yes
	The effects of underwater sound on protected species require further consideration and are considered a potential pathway to LSE. No drilling or piling will be carried out during the Offshore Site construction.	
Underwater construction sound effects on the prey species of marine mammals	Underwater sound generated during construction may cause disturbance to fish populations, including disturbance to migratory fish and spawning fish species, which might result in the change of prey availability to marine mammal species.	No
	Marine mammal QIs are considered to be highly mobile and wide ranging, and considering the availability of foraging habitat for these species, individuals are expected to be able to forage in alternative areas if prey species become unavailable. Marine mammal species considered in this assessment are generalist feeders, therefore can rely on other prey species rather than a single source.	
	Given the adaptability and mobility of marine mammals and megafauna to find alternative prey or locations, it is concluded that there is no potential pathway for LSE for all mammal species.	



Disturbance due to the physical presence of vessels	During the construction and decommissioning phases, there will be an increase in vessel traffic associated with the Offshore Site, which could result in an increased risk of disturbance from marine sound and barrier effects to marine mammals through avoidance and displacement, as well as potential behavioural changes. It is very difficult to separate disturbance caused by vessel presence from vessel sound as both impacts occur simultaneously, and many studies do not differentiate between these two effects (Erbe et al., 2019). As such, vessel sound will be considered with vessel presence. It is concluded that vessel presence presents a pathway to LSE and will be assessed further in the NIS.	Yes
Risk of injury resulting from collision of marine mammals and megafauna with installation/decommissioning vessels	During the construction and decommissioning phases, there will be an increase in vessel traffic associated with the Offshore Site, which could result in an increased risk of injury from collision. The occurrence of vessel collisions is hard to quantify, as these events can be unnoticed or unreported, particularly for smaller marine species (Peltier et al., 2019; Schoeman et al., 2020). Overall, the risk of injury from collision is expected to occur mostly around the OAA and OECC. The sensitivity of marine mammals to vessel collisions will be species dependent. More agile species, such as harbour porpoise, bottlenose	No
	 dolphin, grey seal, and harbour seal, have been observed to respond to vessel sound, and so will be more likely to detect and respond to nearby vessels and avoid collision (Erbe et al., 2019). Studies on seals show avoidance of vessel traffic without strong displacement effects, tending to remain beyond 20 m from vessels (Anderwald et al., 2013; Onoufriou et al., 2016). Therefore, harbour porpoise, dolphin species, and seal species are assessed to be of low sensitivity. Considering that this effect could lead to injury or mortality of marine mammals but is unlikely to occur, the magnitude of this effect is negligible. 	
	It is therefore concluded that there is no potential pathway for LSE for all mammal species from vessel collision.	
Impacts associated with effects upon marine water quality, particularly due to any disturbed sediments affecting turbidity	Sediment disturbed as a result of the construction activities has the potential to form a plume that would be extremely transient. The effect from increases in SSC from all Offshore Site activities is predicted to be of very local spatial extent, only of short-term in duration (less than 1 day), continuous throughout the duration of the activities but highly reversible, returning to baseline SSCs following cessation of activity, and therefore, is unlikely to materially alter water quality to an extent that would significantly impact marine mammals.	No
	The increased SSC can however result in reduced foraging success of visual predators due to decreased visibility. Marine mammal QIs are considered to be highly mobile and wide ranging and considering the availability of foraging habitat for these species, individuals are expected to be able to forage in alternative areas if prey species become unavailable. Due to their high mobility, these marine mammal species are also able to move away from any increased turbidity and are therefore tolerant to increased SSC.	



	Given the adaptability and mobility of marine mammals and megafauna to find alternative prey or locations, it is concluded that there is no potential pathway for LSE for all mammal species.	
Impacts associated with effects upon marine water quality due to any accidental release of pollutants	Accidental releases of pollutants may arise as a result of accidental spills from vessels or other equipment and have detrimental effects on marine mammals. The effect would be rare, intermittent, and highly unlikely over the construction phase (four years).	No
	Due to the high mobility of harbour porpoise, bottlenose dolphin, grey seal, and harbour seal, the species are able to move away from any potential spill sites. The species are also known to utilise wide areas for foraging.	
	Given the adaptability and mobility of marine mammals and megafauna to find alternative prey or locations, it is concluded that there is no potential pathway for LSE for all mammal species.	
Operation and maintenance		
Risk of injury due to collision of marine megafauna with WTG foundations	During the operation and maintenance phase, there is the potential of an increased risk of injury to marine mammals with WTG foundations within the OAA. The presence of these novel submersed structures may elevate the risk of collision and subsequently, injury or mortality. There is currently no evidence of marine mammal collision with offshore WTG, whether as floating or fixed-bottom infrastructure.	No
	Based on this, collision from a stationary foundation is highly unlikely to cause any significant or fatal injury to a marine mammal.	
	As this effect is highly localised to the OAA and very unlikely to occur, with a very low risk of injury from collision, it is concluded that there is no potential pathway for LSE for all mammal species.	
Disturbance or injury due to WTG operational sound	Underwater sound generated from the moving mechanical parts within the WTG may cause increase in underwater ambient sound levels, resulting in short term or temporary displacement or other behavioural effects on marine mammals. Operational sound is expected to be almost continuous apart from occasional maintenance or shutdowns due to extreme weather.	No
	However, in shallow-water environments, the relative sound of the WTG is usually dominated by ambient sound from shipping traffic or storms. When compared to other sources, WTG sound has been found to be significantly less than passing ships (Tougaard et al., 2020) and the overall relative sound from the windfarm, is unlikely to cause any significant disturbance to marine mammals.	
	Underwater sound modelling was undertaken by Subacoustech (2024) to estimate the sound levels generated by operational WTGs and determined the impact range that may injure marine mammals. The modelling showed that marine mammals would need to stay within 10 m of the WTG for 24 h for injury to occur. This is a highly precautionary and unlikely scenario.	



	It is concluded that there is no potential pathway for LSE for all mammal species.	
Displacement or barrier effects caused by the physical presence of WTG and associated infrastructure	During the operation and maintenance phase, the physical presence of the array infrastructure, including substructures and the foundations, has the potential to cause displacement or barrier effects on marine mammals. The presence of these structures may restrict access to key habitats used by marine mammals and effect movement patterns and/or behaviour of individuals or populations. Displacement refers to the spatial displacement or loss of access to the area occupied by the Project infrastructure during its 38-year operational lifespan.	No
	Studies at Dutch offshore wind farms (OWF) recorded increased harbour porpoise activity within the sites, suggesting that they may be attracted to increased food availability and the reduced vessel traffic within the OWF (Lindeboom et al., 2011; Scheidat et al., 2011). However, other studies have shown no effects of OWFs on harbour porpoise abundance throughout the operational phase of an OWF in the Irish Sea (Vallejo et al., 2017).	
	Monitoring studies of OWFs using GBS foundations in the UK show no long-term effect on bottlenose dolphins, and demonstrate an increase in harbour porpoise occurrence (Potlock et al., 2023). Other anthropogenic sea floor structures, such as cable routes (and associated cable protection), may also act as artificial reefs and provide habitat connectivity for prey species. Seals have been observed to repetitively forage around anthropogenic structures. Additionally, no significant barrier effects were observed from anthropogenic structures as seals continued to pass by structures during foraging trips (Arnould et al., 2015).	
	Due to this evidence, the Offshore Site is not considered a barrier or to cause displacement for the marine mammal species.	
	It is concluded that there is no potential pathway for LSE for all mammal species.	
Disturbance due to the physical presence of vessels	During the operation and maintenance phase, there will be periods of increased localised vessel traffic associated with the Offshore Site, which could result in an increased risk disturbance from marine sound and barrier effects to marine mammals and other megafauna through avoidance and displacement, as well as potential behavioural changes. As such vessel sound is included with physical presence as part of the assessment.	No
	Increased vessel traffic during operation and maintenance may increase the risk of disturbance to marine mammals. However, the Offshore Site experiences high level of vessel traffic and expected slight increase in traffic due to operation/maintenance (up to three vessels present at a site) will have an imperceptible effect on baseline conditions.	
	It is concluded that there is no potential pathway for LSE for all mammal species.	



No

Risk of injury resulting from collision of marine mammals with operation and maintenance vessels	Increased vessel traffic during operation and maintenance may increase collision risk with marine mammals. However, the Offshore Site experiences high level of vessel traffic and expected slight increase in traffic due to operation/maintenance (up to three vessels present at a site) will have an imperceptible effect on baseline conditions. All the marine mammal QIs are agile and able to avoid vessels to prevent collision. It is concluded that there is no potential pathway for LSE for all mammal species.	N
Risk associated with electromagnetic fields (EMFs) emissions associated with subsea cabling	Electrical cables in the marine environment, such as HVAC cables, will generate EMFs, which are comprised of an electric and a magnetic component. This may alter the behaviour and distribution of marine species that can detect them, particularly ones that rely on electric and/or magnetic signals for hunting and navigation (Gill & Desender, 2020). EMFs have both an electric component (E-field, measured in volts per metre (V/m)) and a magnetic component (B-fields, measured in micro Tesla (μ T)). Earth has its own natural geomagnetic field (GMF) with associated B and iE-fields, which marine organisms use for orientation, navigation, and prey location (Gill & Desender, 2020).	N
	Background GMF levels in the marine environment ranges from 25 to 65 μ T (Hutchison et al., 2018). Direct anthropogenic E-fields are blocked by the use of conductive sheathing within the cable, and hence are not further assessed. B-fields extend beyond the cable structure and are emitted into the marine environment, which results in an induced electric (iE)-field when relative motion is present between the B-field and a conductive medium (i.e. sea water passing over the cable). B-fields decay rapidly with distance from the cable, eventually reaching background GMF levels. EMFs emitted by HVAC cables result in a dynamic, low-frequency sinusoidal B-field (Gill & Desender, 2020).	
	Numerical studies show that EMFs decrease with distance from the cable core (Hutchison et al., 2021). Cable burial can increase the distance between the EMF source and the receptor, and where burial is not possible, rock placement or other protection can increase the distance. All cables will be either buried to a minimum target burial depth of 1 m or protected to a depth by a cast iron shell (CIS), therefore there will always be a degree of separation from marine mammal receptors and the source of EMF emissions, should any receptor be present directly at the seabed. In addition, design parameters and installation methods will conform to industry standard specifications which includes shielding technology to reduce the direct emission of EMFs. The EMFs will be highly localised to the vicinity of the cables and the strengths will dissipate quickly with increased distance from the cables. Exposure of marine mammals to EMF is therefore unlikely and the effects are highly localised and unlikely to impact highly mobile species.	
	It is concluded that there is no potential pathway for LSE for all mammal species.	



Impacts associated with effects upon marine water quality due to any accidental release of pollutants	Accidental releases of pollutants may arise as a result of accidental spills from vessels or other equipment and have detrimental effects on marine mammals and megafauna. Accidental release of pollutants can occur from pollutants contained within the WTGs. The accidental release of pollutants is limited to oils and fluids contained within the WTGs. These fluids have the potential to interact with marine mammals and megafauna and may have a detrimental physiological effect. Any spills are however considered rare, intermittent, and highly unlikely over the operational life of the Project.	No
	Due to the high mobility of harbour porpoise, bottlenose dolphin, grey seal, and harbour seal, the species are able to move away from any potential spill sites.	
	Given the adaptability and mobility of marine mammals and megafauna to find alternative prey or locations, it is concluded that there is no potential pathway for LSE for all mammal species.	
Habitat change, including the potential for change in foraging opportunities	The foundation structures of WTGs and the OSS, as well as scour protection and cable protection, will cause long-term habitat changes and loss for prey species of marine mammals. Long-term habitat change will cause changes in prey abundance and distribution, which can affect foraging success and losses in foraging opportunities for marine mammals. The presence of WTGs, the OSS, and scour protection can also generate artificial reef effects, where the presence of infrastructure can function as a fish aggregating device. The infrastructure provides new habitat that can be	No
	colonized by biofouling organisms, which in turn attracts higher trophic levels (Degraer et al., 2020).	
	The magnitude of the impact for prey species is considered to be low, but the presence of physical infrastructure can cause displacement and slight loss of habitat. However, there is the potential for habitat creation from reef effects, which can lead to a positive effect on marine mammals. This effect can have both a positive or adverse effect on marine mammals, depending on whether the prey species are able to recover and aggregate around the infrastructure.	
	Considering the small scale of this effect and the available foraging habitat, any impacts are considered negligible. it is concluded that there is no potential pathway for LSE for all mammal species.	

The impact source with the largest potential impact range on marine mammal QIs was the potential UXO clearance associated with the Offshore Site. Although assessed by the Project as highly unlikely to be required, UXO clearance may be necessary prior to construction of the Project, during which an underwater explosion will generate an acoustic pulse of very high peak pressure (an impulsive sound) potentially causing injury (as Permanent Threshold Shift (PTS) onset) or auditory fatigue or disturbance from the repeated focusing of the hearing apparatus on frequencies occurring at the limits of the individual's 'normal' hearing range. Such fatigue may cause a temporary reduction in hearing ability known as a Temporary Threshold Shift (TTS) (Finneran et al., 2005; Popov et al., 2013; Southall et al., 2019). TTS ranges are used as a suitable proxy to assess behavioural disturbance from UXO sound as the sound source is a single impulsive source (Sinclair et al., 2023) and is thus thought to elicit only an instantaneous 'startle' response, and not a long-lasting disturbance event. Disturbance, TTS and PTS have the potential to lead to a LSE on European Sites and due to the large impact range for TTS (up to 26 km for harbour porpoise), it was considered as the activity against which the likelihood of significant



effect for marine mammals should be considered. All other impact pathways will be considered further in the NIS.

This section summarises the assessment for injury and disturbance from UXO clearance to marine mammals from all hearing groups as presented in the Underwater Modelling and Assessment report (Appendix 11 of this volume of the NIS; Subacoustech, 2024). No UXO clearance is anticipated during the Project due to the very low likelihood of any UXO requiring in situ disposal (clearance), but the modelling has considered a scenario where one high order UXO detonation is required during the Offshore Site construction. The underwater noise modelling carried out used a maximum charge of 800 kg to assess the impact ratios for PTS and TTS for

- High-frequency cetaceans (HF) = bottlenose dolphin;
- Very high frequency cetaceans (VHF) = harbour porpoise; and
- > Phocid carnivores in water (PCW) = grey and harbour seal

Sound levels during UXO clearance are affected by multiple factors, including the charge weight (total size of explosive material being detonated), design, age, burial depth etc. The modelling has only considered the charge weight as the variable in its assessment, and no sound mitigation has been included. Should UXO clearance be required, the scenario with the greatest risk for injury would be a high-order detonation, where all explosive materials in the UXO are completely detonated. The modelled maximum largest charge weight for potential UXO items that may be present in the Project area was 800 kg, in addition to a smaller donor charge of 0.5 kg used to initiate the detonation. The maximum PTS and TTS impact ranges for the marine mammal QIs are shown in Table 3-8 and Table 3-9. The Guidance to Manage the Risk to Marine Mammals from Manmade Sound Sources in Irish Waters (NPWS, 2014), alongside other guidance such as that from Marine Scotland (2014) recommend using impact thresholds proposed by Southall et al. (2019), which is based on a combination of linear (unweighted) peak sound pressure levels (SPL) and weighted sound exposure levels (SEL). The unweighted SPL (SPLpeak, commonly referred to as Lp,pk) is a measure of sound intensity from a single pulse causing an instantaneous effect, while the weighted SEL, (commonly referred to as LE,p), is a metric of the combined total of sound exposure over a standard time period (for a single UXO detonation, this is the predicted duration of the pulse). The frequency-weighted SEL takes into account the varying hearing sensitivity at different frequencies for each hearing group.

Table 3-8 Estimated PTS impact ranges for high order detonation (800 kg charge	weight) for relevant marine mammal species using the
impulsive, unweighted $L_{p,pk}$ and Weighted $L_{E,p}$ sound criteria from Southall et al.	(2019)

Hearing	Species	Range (km)	
group		Unweighted Lp,pk	Weighted LE,p
HF	Bottlenose dolphin	0.84	0.07
VHF	Harbour porpoise	14	1.6
PCW	Harbour seal, grey seal	2.8	2

Table 3-9 Estimated TTS impact ranges (presented as a proxy for behavioural disturbance) for high order detonation (800 kg charge weight) for relevant marine mammal species using the impulsive, unweighted $L_{p,pk}$ and Weighted $L_{E,p}$ sound criteria from Southall et al. (2019)

Hearing	Species	Range (km)	
group		Unweighted Lp,pk	Weighted LE,p
TIE	Deuleneer delah:	1.5	0.69
Hr	Bottienose dolphin	1.5	0.02
VHF	Harbour porpoise	26	4.2
PCW	Harbour seal, grey seal	5.3	23



Based on the modelling results, the maximum disturbance (TTS) impact radius for HF bottlenose dolphin is 0.62 km (Weighted LE,p) and 1.5 km (Unweighted Lp,pk), for VHF harbour porpoise 4.2 km (Weighted LE,p) and 26 km (Unweighted Lp,pk) and for PCW seals 5.3 km (Unweighted Lp,pk) and 23 km (Weighted LE,p). Note that due to their greater hearing sensitivity at lower frequencies than both HF/VHF cetaceans, seals (PCW) are likely to be more sensitive to TTS at the weighted SEL (LE, p) threshold, rather than the unweighted SPL (Lp, pk) metric.

The disturbance from underwater noise is considered to have the greatest potential for LSE of marine mammal QI. The other activities listed in Table 3-7 are likely to be confined to a smaller area closer to the Offshore Site, and the noise levels from other activities are less than that of potential UXO clearance. Based on this, LSE for European Sites with marine mammal interest was identified as follows.

The maximum range of behavioural effects on Annex II marine mammals, based on the modelled acoustic effects of UXO clearance, is 26 km (for VHF cetaceans).

3.3.3.1 **Seals**

With respect to underwater noise emissions, harbour seals normally forage within 40 - 50 km around their haulout sites and breeding grounds (SCOS, 2020). While a 75 km connectivity range for harbour seal SACs was identified, based on the underwater noise modelling results of 23 km TTS range, and the likely confinement of harbours seals to 50 km from the SACs, LSE was only identified for sites within 50 km of the Offshore Site.

Grey seal SACs are principally breeding sites. While the grey seal foraging range is large (up to 200 km), grey seals congregate for pupping and mating and then disperse. Grey seals are at the breeding sites for a relatively short period of the year, do not tend to make long foraging trips while there and then disperse very widely and do not necessarily have any focus on that SAC site for the rest of the year. There is growing evidence that some grey seals can disperse widely, spending a considerable amount of the rest of the year well away from their breeding sites. Therefore, the recommended foraging distance of 20 km from SACs is considered appropriate when considering impact ranges during the breeding season for grey seals. As the underwater noise modelling results indicated that TTS (as a proxy for behavioural disturbance) is possible up to 23 km from the Offshore Site, it is considered that there is potential for LSE for all grey seal SACs within a precautionary 25 km radius from the Offshore Site.

3.3.3.2 Harbour porpoise

While the ZoI for harbour porpoise is the relevant MU for the species (CIS MU), the underwater noise modelling indicated that the maximum TTS range for the species is 26 km. Considering the large charge of the modelled detonation scenario (800 kg) and that UXO clearance is not anticipated to be required, the ZoI for the species is considered highly precautious. Taking a precautionary approach, LSE for harbour porpoise QIs from underwater noise (considered as the activity with the highest potential impact radius) is considered for sites 100 km from the Offshore Site. Although there is limited information on the movement patterns of harbour porpoise around the CIS MU, in particular with respect to movements of SAC animals in relation to the boundaries of their SACs, there is no evidence that the Offshore Site and surrounding waters represents significant foraging areas for this species, within the context of the wider CIS MU. Therefore, it is highly unlikely that harbour porpoise associated with SACs in the Irish Sea, Celtic Sea and western English Channel (overlapping with the CIS MU) will experience any effects as a result of the Offshore Site.

3.3.3.3 Bottlenose dolphin

While the ZoI for bottlenose dolphin encompasses the relevant MUs for the species (West Coast of Ireland MU and Shannon Estuary MU), the underwater noise modelling indicated that the maximum TTS range for the species is 1.5 km as the species is less susceptible to acoustic disturbance. Considering the large charge of the modelled detonation scenario (800 kg) and that UXO clearance is not anticipated to be required, the ZoI for the species is considered highly precautious. Taking a precautionary approach, LSE for bottlenose dolphin QIs from underwater noise (considered as the activity with the highest potential impact radius) is considered for sites 100



km from the Offshore Site. Furthermore, there is no evidence that the Offshore Site and surrounding waters represents a significant foraging area for bottlenose dolphin, within the context of the wider WCI MU.

The 100 km range of LSE resulting from UXO clearance for bottlenose dolphin, harbour porpoise, grey seal and harbour seal is also considered sufficient to account for LSE arising from the other potential impacts listed in Table 3-10.

In conclusion, LSE for the following European Sites is identified and the sites are fully assessed in the NIS.

SAC	Species	Distance from Offshore Site (km)
Inishmore Island SAC	Harbour porpoise	< 1 (adjacent with no overlap)
Kilkieran Bay and Islands SAC	Harbour porpoise, harbour seal	1.4
Lower River Shannon SAC	Bottlenose dolphin	8.75 (direct distance, at sea connectivity 15+)
Slyne Head Peninsula SAC	Bottlenose dolphin	13.4
Slyne Head Islands SAC	Bottlenose dolphin, grey seal	17.4
West Connacht Coast SAC	Bottlenose dolphin, harbour porpoise	22.7
Inishbofin and Inishshark SAC	Grey seal	38.2
Galway Bay Complex SAC	Harbour seal	43.2
Blasket Islands SAC	Harbour porpoise	90.1
Duvillaun Islands SAC	Bottlenose dolphin	91.5

Table 3-10 European Sites where LSE on marine mammal QI has been identified

Notwithstanding the justification for a 100 km range for LSE, all SACs with harbour porpoise QI which overlap with the CIS MU have been carried forward to the NIS, as this was the approach taken by the decision-maker in determining the two Foreshore Licence applications for site investigations for the Project (FS007161, FS007543). Solely to ensure consistency with this previous approach, the following 34 sites with Annex II marine mammal QIs have also been considered within the NIS:

- > Kenmare River SAC (Ireland)
- > Hook Head SAC (Ireland)
- > Belgica Mound Province SAC (Ireland)
- Roaringwater Bay and Islands SAC (Ireland)
- Sweedore Bay and Islands SAC (Ireland)
- > Bunduff Lough and Machair/Trawalua/Mullaghmore SAC (Ireland)
- St John's Point SAC (Ireland)
- Carnsore Point SAC (Ireland)
- > Blackwater Bank SAC (Ireland)
- > Lough Swilly SAC (Ireland)
- Codling Fault Zone SAC (Ireland)
- > Rockabill to Dalkey SAC (Ireland)
- > North Channel SAC (UK)
- > West Wales Marine / Gorllewin Cymru Foro SAC (UK)
- > Bristol Channel Approaches / Dynesfeydd Môr Hafren SAC (UK)



- Mers Celtiques Talus du golfe de Gascogne SCI (France)
- North Anglesey Marine / Gogledd Môn Foro SAC (UK)
- Lambay Island SAC (Ireland)
- Nord Bretagne DH SAC (France)
- > Ouessant-Molène SAC (France)
- > Abers -Côte des legends SAC (France)
- Chaussée de Sein SAC (France)
- Côte de Granit rose-Sept-Iles SAC (France)
- > Baie de Morlaix SAC (France)
- Côtes de Crozon SAC (France)
- > Récifs et landes de la Hague SAC (France)
- > Anse de Vauville SAC (France)
- > Banc et récifs de Surtainville SAC (France)
- > Baie du Mont Saint-Michel SAC (France)
- > Estuaire de la Rance SAC (France)
- > Baie de Lancieux, Baie de l'Arguenon, Archipel de Saint Malo et Dinard SAC (France)
- Cap d'Erquy-Cap Fréhel SAC (France)
- Baie de Saint-Brieuc SAC (France)
- > Tregor Goëlo Es SAC (France)

3.3.4 European Sites Designated for Marine Ornithological Features

Table 3-2 lists the SPAs that have been 'Screened in' for connectivity. This includes all SPAs with species within a foraging range which will be considered further at Stage 2.

Where seabird species were not recorded in the OAA over the duration of site-specific baseline surveys (24 months), it is considered objectively reasonable using expert judgement to exclude them from further assessment. Seabird species that were not recorded in the OAA on baseline surveys were considered extremely unlikely to use the OAA in numbers large enough to warrant further consideration. The seabird QIs that have been screened out of further assessment on this basis are Leach's petrel, red-throated diver, black-throated diver and black-headed gull. Therefore, SPAs for these unrecorded seabird species have been screened out from further assessment.

The QI bird species and relevant SPAs where LSE could not be screened out are summarised in Table 3-11. These species and SPAs are therefore brought forward for Stage 2 assessment.

The potential for LSE on the QIs of SPAs listed in Table 3-2 in the absence of any mitigation, individually or in combination with other plans or projects, has been identified. Table 3-11 summarises the Conservation Objectives considered for each SPA, as well as identifying the relevant QIs.

SPA and distance to OAA	Conservation Objectives (NPWS, 2024; JNCC, 2024))	Relevant Qualifying Interest species
Mid-Clare Coast SPA	To maintain or restore the favourable conservation	Barnacle Goose -
	condition of the bird species listed as Special	
60.6km	Conservation Interests for this SPA:	
	The favourable conservation status of a species is	
	achieved when:	
	\circ population dynamics data on the species	
	concerned indicate that it is maintaining	
	itself on a long-term basis as a viable	
	component of its natural habitats;	

Table 3-11 SPAs, Conservation Objectives and Relevant Qualifying Interest Species considered for further assessment at Stage 2



SPA and distance to OAA	Conservation Objectives (NPWS, 2024; JNCC, 2024))	Relevant Qualifying Interest species
	 the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	
Slyne Head to Ardmore Point Islands SPA 6.7 km	 To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	Barnacle Goose, Arctic Tern, Sandwich Tern and Little Tern
Inishmore SPA 16 km	 To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats. the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future. there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	Kittiwake, Arctic Tern, Guillemot and Little Tern
Cruagh Island SPA 38.6	 To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats. the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future. 	Manx Shearwater, Barnacle Goose



SPA and distance to OAA	Conservation Objectives (NPWS, 2024; JNCC, 2024))	Relevant Qualifying Interest species
	there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.	
River Shannon and River Fergus Estuaries SPA 104.6km	 To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	Whooper Swan, Light- belied Brent Goose
Cliffs of Moher SPA 42.2 km	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	Fulmar, Kittiwake, Guillemot, Razorbill and Puffin
Illaunonearaun SPA 65.9km	 To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	Barnacle Goose



SPA and distance to OAA	Conservation Objectives (NPWS, 2024; JNCC, 2024))	Relevant Qualifying Interest species
High Island, Inishshark and Duvillaun SPA 51.1 km	 To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	Fulmar, Barnacle Goose and Arctic Tern
Inner Galway Bay SPA 56.5 km	 To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats. the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future. there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	Great Northern Diver, Common Gull, Sandwich Tern, Common Tern and Wildfowl and Waders
Illaunnanoon SPA 50.5km	 To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats. the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future. there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	Sandwich Tern
Magharee Islands SPA 103.3km	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:	Storm Petrel, Barnacle Goose,


SPA and distance to OAA	Conservation Objectives (NPWS, 2024; JNCC, 2024))	Relevant Qualifying Interest species
	 The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats. the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future. there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	Common tern, Artic Tern and Little tern
Clare Island SPA 70.7 km	 To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	Fulmar, Kittiwake, Guillemot and Razorbill
Loop Head SPA 74.8 km	 To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	Kittiwake, Guillemot
Bills Rocks SPA 76.0 km	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: • population dynamics data on the species concerned indicate that it is maintaining	Storm Petrel, Puffin



SPA and distance to OAA	Conservation Objectives (NPWS, 2024; JNCC, 2024))	Relevant Qualifying Interest species
	 itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	
Dingle Peninsula SPA 119.3km	 To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	Fulmar
Duvillaun Islands SPA 104.5km	 To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	Fulmar, Storm Petrel and Barnacle Goose
Inishglora and Inishkeeragh SPA 117 km	 To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future: 	Storm Petrel, Barnacle Goose, Lesser black- backed Gull and Arctic Tern



SPA and distance to OAA	Conservation Objectives (NPWS, 2024; JNCC, 2024))	Relevant Qualifying Interest species
	 there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	
Blasket Islands SPA 139 km	 To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	Fulmar, Manx shearwater, Storm Petrel, Lesser black- backed Gull, Kittiwake, Razorbill and Puffin
Puffin Island SPA 167.5 km	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	Fulmar, Manx shearwater, Storm Petrel, Lesser black- backed Gull and Puffin
Iveragh Peninsula SPA 171.1 km	 To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	Fulmar, Kittiwake



SPA and distance to OAA	Conservation Objectives (NPWS, 2024; JNCC, 2024))	Relevant Qualifying Interest species
Skelligs SPA 176.4 km	 To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	Fulmar, Manx shearwater, Storm Petrel, Gannet, Kittiwake and Puffint
Stags of Broad Haven SPA 143.1km	 To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	Storm Petrel
Eirk Bog SPA 145km	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA	Greenland White-fronted Goose
The Gearagh SPA 165km	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA. To maintain or restore the favourable conservation condition of the wetland habitat at The Gearagh SPA as a resource for the regularly occurring migratory waterbirds that utilise it.	Wigeon, Teal, Mallard, Coot
Deenish Island and Scariff Island SPA 190.1 km	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: • population dynamics data on the species concerned indicate that it is maintaining	Fulmar, Manx shearwater, Storm Petrel, Lesser black- backed Gull



SPA and distance to OAA	Conservation Objectives (NPWS, 2024; JNCC, 2024))	Relevant Qualifying Interest species
	 itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	
Clonakilty Bay SPA 195 km	To maintain the favourable conservation condition of Shelduck, Dunlin, Black-tailed Godwit and Curlew in Clonakilty Bay SPA in terms of the long term population trend being stable or increasing and no significant decrease in the range, timing or intensity of use of areas by these species	Shelduck, Dunlin, Black- tailed Godwit and Curlew
Illanmaster SPA 226.2km	 To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	Storm Petrel
The Bull and The Cow Rocks SPA 192.4 km	 To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	Storm Petrel, Gannet and Puffin
Beara Peninsula SPA 206.1km	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when:	Fulmar



SPA and distance to OAA	Conservation Objectives (NPWS, 2024; JNCC, 2024))	Relevant Qualifying Interest species
	 population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	
Aughris Head SPA 225.7 km	 To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	Kittiwake
West Donegal Coast SPA 247.7 km	 To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	Fulmar, Kittiwake
Tory Island SPA 290.4km	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when:	Fulmar



SPA and distance to OAA	Conservation Objectives (NPWS, 2024; JNCC, 2024))	Relevant Qualifying Interest species
	 the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	
Horn Head to Fanad Head SPA 305.6	 To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	Fulmar, Barnacle Goose and Greenland white- fronted goose
Saltee Islands SPA 491.9 km	 To maintain the favourable conservation condition of Gannet in the Saltee Islands SPA, which is defined by the following list of attributes and targets: Breeding population abundance - No significant decline Productivity rate - No significant decline Distribution: breeding colonies - No significant decline Prey biomass available - No significant decline Barriers to connectivity – No significant increase Disturbance at the breeding site - No significant increase Disturbance at marine areas immediately adjacent to the colony - No significant increase 	Fulmar and Gannet
Mingulay and Berneray SPA 421.4km	 To ensure for the qualifying species that the following are maintained in the long term: Population of the species as a viable component of the site Distribution of the species within site Distribution and extent of habitats supporting the species Structure, function and supporting processes of habitats supporting the species No significant disturbance of the species 	Fulmar



SPA and distance to OAA	Conservation Objectives (NPWS, 2024; JNCC, 2024))	Relevant Qualifying Interest species
Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Penfro SPA 543.1km	 To ensure for the qualifying species that the following are maintained in the long term: The size of the population should be stable or increasing, allowing for natural variability, and sustainable in the long term. The distribution of the population should be being maintained, or where appropriate increasing. There should be sufficient habitat, of sufficient quality, to support the population in the long term. Factors affecting the population or its habitat should be under appropriate control 	Manx Shearwater
Rum SPA	Draft Conservation Objectives:	Manx Shearwater
511km	 To ensure that the qualifying features of Rum SPA are in favourable condition and make an appropriate contribution to achieving Favourable Conservation Status. To ensure that the integrity of Rum SPA is restored in the context of environmental changes by meeting objectives 2a, 2b and 2c for each qualifying feature: The populations of the qualifying features are viable components of Rum SPA. The distributions of the qualifying features throughout the site are maintained by avoiding significant disturbance of the species. The supporting habitats and processes relevant to qualifying features and their prey/food resources are maintained, or where appropriate, restored at Rum SPA 	
Seas off St Kilda SPA	Draft Conservation Objectives:	Fulmar
577.2km	 To ensure that the qualifying features of St Kilda SPA and the Seas off St Kilda SPA are in favourable condition and make an appropriate contribution to achieving Favourable Conservation Status. To ensure that the integrity of St Kilda SPA and 	
	the Seas off St Kilda SPA is restored in the context of environmental changes by meeting objectives 2a, 2b and 2c for each qualifying feature:	



SPA and distance to OAA	Conservation Objectives (NPWS, 2024; JNCC, 2024))	Relevant Qualifying Interest species
	2a. The populations of qualifying features are viable components of St Kilda SPA and Seas off St Kilda SPA.	
	2b. The distributions of the qualifying features throughout St Kilda SPA and Seas off St Kilda SPA are maintained by avoiding significant disturbance of the species.	
	2c. The supporting habitats and processes relevant to qualifying features and their prey/food resources are maintained, or where appropriate restored, at St Kilda SPA and/or Seas off St Kilda	
St Kilda SPA	Draft Conservation Objectives:	Fulmar and Manx
551.7km	1. To ensure that the qualifying features of St Kilda SPA and the Seas off St Kilda SPA are in favourable condition and make an appropriate contribution to achieving Favourable Conservation Status.	Shearwater
	2. To ensure that the integrity of St Kilda SPA and the Seas off St Kilda SPA is restored in the context of environmental changes by meeting objectives 2a, 2b and 2c for each qualifying feature:	
	2a. The populations of qualifying features are viable components of St Kilda SPA and Seas off St Kilda SPA.	
	2b. The distributions of the qualifying features throughout St Kilda SPA and Seas off St Kilda SPA are maintained by avoiding significant disturbance of the species.	
	2c. The supporting habitats and processes relevant to qualifying features and their prey/food resources are maintained, or where appropriate restored, at St Kilda SPA and/or Seas off St Kilda	
Copeland Islands SPA	SPA SELECTION FEATURE OBJECTIVES	Manx Shearwater
535.9km	To maintain or enhance the population of the qualifying species	
	Fledging success sufficient to maintain or enhance population	
	To maintain or enhance the range of habitats utilised by the qualifying species	



SPA and distance to OAA	Conservation Objectives (NPWS, 2024; JNCC, 2024))	Relevant Qualifying Interest species
	To ensure that the integrity of the site is maintained;	
	To ensure there is no significant disturbance of the species and	
	To ensure that the following are maintained in the long term:	
	\neg Population of the species as a viable component of the site	
	\neg Distribution of the species within site	
	\neg Distribution and extent of habitats supporting the species	
	¬ Structure, function and supporting processes of habitats supporting the species	
Glannau Aberdaron ac Ynys Enlli/ Aberdaron Coast and Bardsey Island SPA	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the	Manx Shearwater
547.4km	conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU.	
Shiant Isles SPA 599km	 To ensure for the qualifying species that the following are maintained in the long term: Population of the species as a viable component of the site Distribution of the species within site ³/₄ Distribution and extent of habitats supporting the species Structure, function and supporting processes of habitats supporting the species No significant disturbance of the species 	Fulmar
Flannan Isles SPA 623.4km	 To ensure for the qualifying species that the following are maintained in the long term: Population of the species as a viable component of the site Distribution of the species within site ³/₄ Distribution and extent of habitats supporting the species Structure, function and supporting processes of habitats supporting the species No significant disturbance of the species 	Fulmar



SPA and distance to OAA	Conservation Objectives (NPWS, 2024; JNCC, 2024))	Relevant Qualifying Interest species
Lambay Island SPA 649km	 To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis. 	Fulmar
Ouessant-Molène SPA 727km	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU For reference see the Saltee Islands SPA in Ireland for the conservation of objectives of these qualifying interests.	Fulmar and Manx Shearwater
Handa SPA 677.9km	 To ensure for the qualifying species that the following are maintained in the long term: Population of the species as a viable component of the site Distribution of the species within site ³/₄ Distribution and extent of habitats supporting the species Structure, function and supporting the species No significant disturbance of the species 	Fulmar
Cape Wrath SPA 704.5km	 To ensure for the qualifying species that the following are maintained in the long term: Population of the species as a viable component of the site Distribution of the species within site ³/₄ Distribution and extent of habitats supporting the species Structure, function and supporting processes of habitats supporting the species No significant disturbance of the species 	Fulmar



SPA and distance to OAA	Conservation Objectives (NPWS, 2024; JNCC, 2024))	Relevant Qualifying Interest species
Cote de Granit Rose-Sept Iles SPA 779km	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU. For reference see the Saltee Islands SPA in Ireland for the conservation of objectives of these qualifying interests	Fulmar andManx Shearwater
Camaret SPA 701km	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU. For reference see the Saltee Islands SPA in Ireland for the conservation of objectives of these qualifying interests	Fulmar
North Rona and Sula Sgeir SPA 689.1km	 To ensure for the qualifying species that the following are maintained in the long term: Population of the species as a viable component of the site Distribution of the species within site ³/₄ Distribution and extent of habitats supporting the species Structure, function and supporting processes of habitats supporting the species No significant disturbance of the species 	Fulmar
North Caithness Cliffs SPA 771km	 To ensure for the qualifying species that the following are maintained in the long term: Population of the species as a viable component of the site Distribution of the species within site ³/₄ Distribution and extent of habitats supporting the species Structure, function and supporting the species No significant disturbance of the species 	Fulmar
Hoy SPA	To ensure for the qualifying species that the following are maintained in the long term:	Fulmar



SPA and distance to OAA	Conservation Objectives (NPWS, 2024; JNCC, 2024))	Relevant Qualifying Interest species
810.2km	 Population of the species as a viable component of the site Distribution of the species within site ³/₄ Distribution and extent of habitats supporting the species Structure, function and supporting the species No significant disturbance of the species 	
Cap d'Erquy-Cap Fréhel SPA 855km	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU. For reference see the Saltee Islands SPA in Ireland for the conservation of objectives of these qualifying interests	Fulmar
Rousay SPA 859.5km	 To ensure for the qualifying species that the following are maintained in the long term: Population of the species as a viable component of the site Distribution of the species within site ³/₄ Distribution and extent of habitats supporting the species Structure, function and supporting the species No significant disturbance of the species 	Fulmar
West Westray SPA 864.5km	 To ensure for the qualifying species that the following are maintained in the long term: Population of the species as a viable component of the site Distribution of the species within site ³/₄ Distribution and extent of habitats supporting the species Structure, function and supporting processes of habitats supporting the species No significant disturbance of the species 	Fulmar
Copinsay SPA 908.9	To ensure for the qualifying species that the following are maintained in the long term: O Population of the species as a viable component of the site	Fulmar



SPA and distance to OAA	Conservation Objectives (NPWS, 2024; JNCC, 2024))	Relevant Qualifying Interest species
	 Distribution of the species within site ³/₄ Distribution and extent of habitats supporting the species Structure, function and supporting processes of habitats supporting the species No significant disturbance of the species 	
East Caithness Cliffs SPA 871.1km	 To ensure for the qualifying species that the following are maintained in the long term: Population of the species as a viable component of the site Distribution of the species within site ³/₄ Distribution and extent of habitats supporting the species Structure, function and supporting the species No significant disturbance of the species 	Fulmar
Calf of Eday SPA 869.3km	 To ensure for the qualifying species that the following are maintained in the long term: Population of the species as a viable component of the site Distribution of the species within site ³/₄ Distribution and extent of habitats supporting the species Structure, function and supporting the species No significant disturbance of the species 	Fulmar
Iles Houat-Hoedic SPA 879.9km	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU. For reference see the Saltee Islands SPA in Ireland for the conservation of objectives of these qualifying interests	Manx Shearwater
Falaise du Bessin Occidental SPA 936.8km	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU.	Fulmar



SPA and distance to OAA	Conservation Objectives (NPWS, 2024; JNCC, 2024))	Relevant Qualifying Interest species	
	For reference see the Saltee Islands SPA in Ireland for the conservation of objectives of these qualifying interests		
Seas off Foula SPA	Site conservation objective:	Fulmar	
893.7km	To avoid significant deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, subject to natural change, thus ensuring that the integrity of the site is maintained in the long term and makes an appropriate contribution to achieving the aims of the Birds Directive for each of the qualifying species. This contribution would be achieved through delivering the following objectives for each of the sites qualifying features: A. Avoid significant mortality, injury and disturbance of the qualifying features, so that the distribution of the species and ability to use the site are maintained in the long-term; B. Maintain the habitats and food resources of the qualifying features in favourable condition.		
Fair Isle SPA 975.9km	 To ensure for the qualifying species that the following are maintained in the long term: Population of the species as a viable component of the site Distribution of the species within site ³/₄ Distribution and extent of habitats supporting the species Structure, function and supporting the species No significant disturbance of the species 	Fulmar	
Littoral seino-marin SPA 1,030.3km	For all European Sites outside UK or Irish waters, a precautionary approach has been taken in this assessment and assumed a 'Restore to or maintain favourable conservation status' objective for the QI. The determination will be based upon the conservation objectives of the closest designated site with the same qualifying feature that has conservation objectives within the same MU. For reference see the Saltee Islands SPA in Ireland for the conservation of objectives of these qualifying interacts	Fulmar	



SPA and distance to OAA	Conservation Objectives (NPWS, 2024; JNCC, 2024))	Relevant Qualifying Interest species	
Troup, Pennan and Lion's Heads SPA 1,185.5km	 To ensure for the qualifying species that the following are maintained in the long term: Population of the species as a viable component of the site Distribution of the species within site ³/₄ Distribution and extent of habitats supporting the species Structure, function and supporting processes of habitats supporting the species No significant disturbance of the species 	Fulmar	
Foula SPA	Site conservation objective:	Fulmar	
924.5km	To avoid significant deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, subject to natural change, thus ensuring that the integrity of the site is maintained in the long term and makes an appropriate contribution to achieving the aims of the Birds Directive for each of the qualifying species. This contribution would be achieved through delivering the following objectives for each of the sites qualifying features: A. Avoid significant mortality, injury and disturbance of the qualifying features, so that the distribution of the species and ability to use the site are maintained in the long-term; B. Maintain the habitats and food resources of the qualifying features in favourable condition.		
Sumburgh Head SPA 963.7km	 To ensure for the qualifying species that the following are maintained in the long term: Population of the species as a viable component of the site Distribution of the species within site ³/₄ Distribution and extent of habitats supporting the species Structure, function and supporting processes of habitats supporting the species. No significant disturbance of the species 	Fulmar	
Buchan Ness to Collieston Coast SPA	To ensure for the qualifying species that the following are maintained in the long term:	Fulmar	
1.032.1km	component of the site		



SPA and distance to OAA	Conservation Objectives (NPWS, 2024; INCC,	Relevant Oualifying
	2024))	Interest species
	 Distribution of the species within site ³/₄ Distribution and extent of habitats supporting the species Structure, function and supporting processes of habitats supporting the species. 	
	\circ No significant disturbance of the species	
Noss SPA 976.5km	 To ensure for the qualifying species that the following are maintained in the long term: Population of the species as a viable component of the site Distribution of the species within site ³/₄ Distribution and extent of habitats supporting the species Structure, function and supporting processes of habitats supporting the species. 	Fulmar
	\circ No significant disturbance of the species	
Hermaness, Saxa Vord and Valla Field SPA 1,044.5km	 To ensure for the qualifying species that the following are maintained in the long term: Population of the species as a viable component of the site Distribution of the species within site ³/₄ Distribution and extent of habitats supporting the species Structure, function and supporting processes of habitats supporting the species. No significant disturbance of the species 	Fulmar
Fetlar SPA 933km	 To ensure for the qualifying species that the following are maintained in the long term: Population of the species as a viable component of the site Distribution of the species within site ³/₄ Distribution and extent of habitats supporting the species Structure, function and supporting processes of habitats supporting the species. No significant disturbance of the species 	Fulmar



3.4

European Sites with the Potential to be Significantly Affected by the Offshore Site

Taking the precautionary approach and in the absence of mitigation, a potential pathway for LSE was identified for the following European sites based on information in Table 3-2 and Section 3.3. Sites which have been included solely to ensure consistency with the foreshore licensing approach, are marked with an asterix.

- > Inishmore Island SAC
- Mid-Clare Coast SPA
- > Carrowmore Point to Spanish Point and Islands SAC
- > Inishmore SPA
- > Kilkieran Bay and Islands SAC
- Carrowmore Dunes SAC
- > Slyne Head to Ardmore Point Islands SPA
- Kilkee Reefs SAC
- > Cruagh Island SPA
- Connemara Bog Complex SAC
- > Lower River Shannon SAC
- > River Shannon and River Fergus Estuaries SPA
- > Inishmaan Island SAC
- > Slyne Head Peninsula SAC
- Cliffs of Moher SPA
- > Illaunonearaun SPA
- > Slyne Head Islands SAC
- West Connacht Coast SAC
- Maumturk Mountains SAC
- > Loop Head SPA
- > High Island, Inishshark and Duvillaun SPA
- > Lough Corrib SAC
- Mweelrea/Sheeffry/Erriff Complex SAC
- > Inishbofin and Inishshark SAC
- > Inner Galway Bay SPA
- Salway Bay Complex SAC
- > Illaunnanoon SPA
- > Magharee Islands SPA
- > Clare Island SPA
- > Bills Rocks SPA
- > Dingle Peninsula SPA
- > Blasket Islands SAC
- > Duvillaun Islands SAC
- > Duvillaun Islands SPA
- > Blasket Islands SPA
- > Inishglora and Inishkeeragh SPA
- > Iveragh Peninsula SPA
- > Puffin Island SPA
- > Skelligs SPA
- > Stags of Broad Haven SPA
- Kenmare River SAC *
- > Eirk Bog SPA
- > The Gearagh SPA
- > Clonakilty Bay SPA
- > Deenish Island and Scariff Island SPA
- > Illanmaster SPA
- > The Bull and The Cow Rocks SPA



- > Beara Peninsula SPA
- > Hook Head SAC*
- > Belgica Mound Province SAC*
- Roaringwater Bay and Islands SAC*
- > Aughris Head SPA
- > West Donegal Coast SPA
- Gweedore Bay and Islands SAC*
- > Bunduff Lough and Machair/Trawalua/ Mullaghmore SAC*
- St John's Point SAC*
- Carnsore Point SAC*
- > Blackwater Bank SAC*
- Lough Swilly SAC*
- Codling Fault Zone SAC*
- > Tory Island SPA
- > Horn Head to Fanad Head SPA
- > Saltee Islands SPA
- Mingulay and Berneray SPA
- Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Penfro SPA
- > North Channel SAC*
- West Wales Marine / Gorllewin Cymru Forol SAC*
- > Rum SPA
- > Seas off St Kilda SPA
- > Bristol Channel Approaches / Dynesfeydd Môr Hafren SAC*
- > St Kilda SPA
- Mers Celtiques Talus du golfe de Gascogne SCI*
- > Copeland Islands SPA
- Glannau Aberdaron ac Ynys Enlli/ Aberdaron Coast and Bardsey Island SPA
- > Rockabill to Dalkey Island SAC*
- > Shiant Isles SPA
- > North Anglesey Marine / Gogledd Môn Forol SAC*
- > Flannan Isles SPA
- > Lambay Island SPA
- Lambay Island SAC*
- > Nord Bretagne DH SAC*
- > Ouessant-Molène SAC*
- > Ouessant-Molène SPA
- > Handa SPA
- > Abers Côte des legends SAC*
- Chaussée de Sein SAC*
- > Cape Wrath SPA
- Cote de Granit Rose-Sept Iles SPA
- Côte de Granit rose-Sept-Iles SAC*
- > Baie de Morlaix SAC*
- Côtes de Crozon SAC*
- Camaret SPA
- North Rona and Sula Sgeir SPA
- North Caithness Cliffs SPA
- > Hoy SPA
- > Récifs et landes de la Hague SAC*
- Cap d'Erquy-Cap Fréhel SPA
- > Anse de Vauville SAC*
- > Banc et récifs de Surtainville SAC*
- > Baie du Mont Saint-Michel SAC (France)*
- > Estuaire de la Rance SAC (France) *
- > Baie de Lancieux, Baie de l'Arguenon, Archipel de Saint Malo et Dinard SAC (France)*



- > Cap d'Erquy-Cap Fréhel SAC (France)*
- > Baie de Saint-Brieuc SAC (France)*
- > Tregor Goëlo Es SAC (France)*
- > Rousay SPA
- > West Westray SPA
- > Copinsay SPA
- > East Caithness Cliffs SPA
- > Calf of Eday SPA
- > Iles Houat-Hoedic SPA
- > Falaise du Bessin Occidental SPA
- > Seas off Foula SPA
- > Fair Isle SPA
- > Littoral seino-marin SPA
- > Troup, Pennan and Lion's Heads SPA
- > Foula SPA
- > Sumburgh Head SPA
- > Buchan Ness to Collieston Coast SPA
- > Noss SPA
- > Hermaness, Saxa Vord and Valla Field SPA
- > Fetlar SPA

3.5 **Assessment of Likely Significant Effects when** considered in-cumulation with the Onshore Site

3.5.1 Impacts of the Offshore Site in cumulation with the Onshore Site

Whilst this Appropriate Assessment Screening Report (Appendix to NIS Volume 1- Offshore) provides an assessment of the potential for LSE on European Sites arising from the Offshore Site, this section considers the potential for LSE on European Sites as a result of the cumulation of both the Onshore Site and Offshore Sites i.e. the Project.

Having regard to this document, as well as the AASR for the Onshore Site included as Volume 2 of the Project NIS, the following European Sites have been identified to be within the likely ZoI for both the Offshore and Onshore Sites, based on consideration of the site-specific conservation objectives of the European Sites and the Project's ZoI in respect of the specific QIs of the European Sites as set out in Section 1.4.1.1 of this document and: Section 3.2 of Appendix 1 of Volume 2 – Onshore Site

- Lower River Shannon SAC (002165),
- Carrowmore Dunes SAC (002250),
- > River Shannon and River Fergus Estuaries SPA (004077), and
- Mid-Clare Coast SPA (004182).

Considering the screening assessments in both Appropriate Assessment Screening Reports, no additional European Sites have been identified to be within the likely ZoI of the Project as a result of combined effects from the Onshore and Offshore Sites. The potential for the Offshore Site to result in LSE on the aforementioned European Sites when considered in cumulation with the Onshore Site cannot be excluded and is considered further in the NIS. The potential LSE of the Project in combination with other plans and projects identified in this AASR for the Offshore is considered in further detail below.



Assessment of the Offshore Site In-Combination Effects with other plans and projects

This section assesses the potential LSE of the Offshore Site in combination with other plans and projects on the relevant European Sites.

A search and review were conducted across various platforms, databases and portals to compile a list of other plans and projects that may have the potential to result in in combination impacts on European Sites was conducted. This included a review of online Planning Registers, development plans, relevant websites (e.g. EPA) and other available information and served to identify past and future plans and projects, their activities and their predicted environmental effects (Table 3-12). Particular focus has been placed on those projects that are in closest proximity to the Offshore Site and those that could potentially result in impacts on European Sites in light of the sites' conservation objectives, through the pathways identified in Section 3.3 of this Report.

Table 3-12 Data sources	used to comp	ile list of plan	s and proiec	cts for in-combination	assessment
1 HOIC O IL D HH SO H CCO	abed to comp	no not or prairi	and project	olo ioi mi comomunici	

Title	Description	Author
Marine Institute Open Access Repository and Ireland's Marine Atlas	https://www.marine.ie/site-area/data-services/interactive- maps/irelands-marine-atlas	Marine Institute
European Marine Observation and Data Network (EMODnet)	https://www.emodnet-humanactivities.eu/view-data.php	EMODnet
Kingfisher Information Services (KISORCA)	https://kis-orca.org/map/	KISORCA
National Marine Planning Framework SEA Environmental Report	https://www.gov.ie/en/publication/a4a9a-national-marine- planning-framework/	DHLGH
Department for Environment, Climate and Communications (DECC) – Current Applications for Statutory Consents	https://www.gov.ie/en/organisation/department-of-the- environment-climate-and-communications/	DECC
Department of Housing, Local Government and Heritage Foreshore Unit Applications	https://www.gov.ie/en/collection/f2196-foreshore- applications-and-determinations/	DHLGH
Department of Agriculture, Food and the Marine (DAFM) Aquaculture Licence Applications	https://www.gov.ie/en/collection/d8ea9- aquacultureforeshore-licence-applications/	DAFM
Environmental Reports for the Galway Bay Marine and Renewable Energy Test Site	https://tethys.pnnl.gov/project-sites/galway-bay-test-site	Tethys



Maritime Area Regulatory Authority	https://www.maritimeregulator.ie/licensing-of-maritime- usages/	MARA
Environmental Protection Agency – Dumping at Sea (DaS) Licences	https://www.epa.ie/	EPA
Ireland's Marine Renewable Energy Atlas	https://atlas.marine.ie/OceanEnergy.html#?c=53.2981:- 8.7808:8	DCCAE, SEAI, Marine Institute

Review of Other Plans and Projects

Assessment material was compiled on the relevant plans and projects (as defined in Section 1.3.1.4) within the vicinity of the Offshore Site. The material was gathered through a search of relevant online Planning Registers, reviews of relevant documents, planning application details and planning drawings, their activities and their environmental impacts.

Plans that were considered and do not have potential for an in-combination effect included:

- > Offshore Renewable Energy Development Plan
- Regional Spatial & Economic Strategy for the Northern and Western Region
- > Regional Economic and Spatial Strategy for the Southern Region
- Galway County Council Development Plan 2022 -2028
- Salway County Council's Local Authority Renewable Energy Strategy
- Clare County Council Development Plan 2023 2029
- Clare Renewable Energy Strategy
- Strategic Integrated Framework Plan for the Shannon Estuary

Having considered the policies and objectives within the above plans that relate to designated sites for nature conservation, biodiversity and protected species, no relevant plans were identified during step 1 that could contribute to any in-combination effects with the Offshore Site of the Project. As such, only relevant projects that could potentially lead to in-combination impacts were considered further in step 2 short list.

All relevant projects were considered in relation to the potential for in-combination effects. All relevant data were reviewed (e.g. individual AASRs, NISs, layouts, drawings etc.) for all relevant projects where available. This included:

- > Project timeframe
- > Physical footprint
- > Distance to the Offshore Site
- > Associated activities
- > Intensity of associated activities

All projects within the vicinity of the Offshore Site were considered as part of this assessment and predominantly included developments pertaining to the following:

- > Discharge points;
- > Submarine cables; and
- > Dumping of dredged material at sea.

Specifically for Offshore Ornithology it was concluded that as there are no operational, consented or submitted OWF projects within 509.4 km of the Project, it is considered that there will be no in combination effects on



offshore ornithology arising in the breeding season. The 509.4 km distance is the breeding season mean maximum (+1S.D.) foraging range for gannet, and this is considered appropriate to use here as gannet is considered a key species in terms of potential collision and displacement impacts. Although other species such as Manx shearwater and fulmar have larger foraging ranges during the breeding season, these species are not considered to be at risk of potential displacement or collision effects, based on reviews of evidence from operational OWFs (e.g. Dierschke *et al.*, 2016). Similarly in the non-breeding season, when seabirds are not linked to their breeding colonies, it is considered that the distance between the Offshore Site and other operational, consented or submitted OWF projects will make the potential for any significant in combination interactions very unlikely. Therefore, in-combination effects between the Offshore Site and other operational, consented OWF projects in Irish east coast and west coast UK or more distant projects do not require further assessment due to lack of likely significant effects.

A list of the relevant projects considered is provided in Table 3-13.

Most operational projects are considered to form part of the environmental baseline for the area and not considered to have ongoing impacts on any European Sites, except when explicitly otherwise stated in Table 3-13.



Distance Distance Development **Development** to to OAA Location Status Additional Information Considered further OECC Type Name (km) (km) **Foreshore Licences** IRIS sub-sea No - operational project is Licence for Construction of Cable. 2022- overall duration Operational considered part of baseline Galway Cable fibre optic 0 71.87 2-3 months cable system conditions. UCD No - operational project is Scientific Research considered part of baseline Galway 13.12 28.21 Operational Licence for Data Monitoring Equipment. 2022-2027. research Experiments, conditions. Inishmaan **Eirgrid** Cross No - operational project is Licence held for Construction of Cable. Duration of Clare / considered part of baseline Cable Shannon 21.54 80.04 Operational construction 12 months. Kerry Cable Project conditions. Dumping at Sea No - Project activities will Shannon Permit valid Shannon Dredged through **Foynes Port** not overlap in time with this 86.61 32.48 Permit No. S0009-03 Estuary material Company 31/12/2026 permit

Permit valid

31/12/2026

Permit No. S0009-03

through

Table 3-13 Potential in combination projects

Shannon

Company

Foynes Port

88.85

34.89

Dredged

material

Foynes

Harbour

No – Project activities will

permit

not overlap in time with this



Discharge points							
Kilkee	Discharge Point	Kilkee	64.4	11.9	Active	Discharge in coastal water	Yes – there is potential impact pathway associated with effects upon marine water quality, particularly due to any disturbed sediments affecting turbidity
Kilrush	Discharge Point	Kilrush	73.21	14.85	Active	Discharge in coastal water	Yes – there is potential impact pathway associated with effects upon marine water quality, particularly due to any disturbed sediments affecting turbidity
Ennistymon	Discharge Point	Ennistymon Waste Water Treatment Plant	53.16	25.99	Active	Discharge to estuary	No – estuaries typically experience naturally elevated levels of SSC such that any additional discharge will likely be readily incorporated into the local environment.
Clifden	Discharge Point	Clifden Waste Water Treatment Plant	21.37	26.79	Active	Discharge to estuary	No – estuaries typically experience naturally elevated levels of SSC such that any additional discharge will likely be readily incorporated into the local environment.



The Project is the only Relevant Project / Phase 1 offshore renewable development in the region with a Maritime Area Consent (MAC), the only offshore wind development in the region which was successful in Offshore Renewable Electricity Support Scheme (ORESS) 1 and the only offshore wind development in the region, which is permitted to make a planning application.

A number of proposed offshore renewable developments (at various levels of inception) were proposed to be developed off the western coast of Ireland before the State's policy changed to a plan-led regime. Current policy is such that none of these projects are permitted to seek a MAC or make a planning application. Whether any of them may progress in the future is entirely dependent on future policy decisions. Several foreshore licence applications have been made, primarily in relation to environmental surveys in support of these renewables developments. Given that Government policy precludes these proposals from proceeding, in that context, it is not appropriate or necessary to assess the effects of the surveys the subject of the foreshore licence applications for these project proposals in combination with the Project.

The Kilkee and Kilrush Discharge points identified in Table 3-13 with potential for in combination effects are brought forward for consideration in the in-combination assessment

3.6.2 Conclusion of In Combination Assessment for the Offshore Site

Where the potential for the Offshore Site to result in LSE on European Sites has been identified in the preceding sections of this document, there is potential for it to result in LSE when considered in combination with other plans and projects and specifically the Kilkee and Kilrush discharge points. The sites listed in Section 4.1 will be considered within the NIS.

Where no pathway for effect on a particular European Site was identified, there is no potential for LSE to occur as a result of the Offshore Site. Therefore, it cannot contribute to any in-combination effects on that site when considered in combination with other plans and projects. Therefore, assessment of these sites in the NIS is not required.

No additional European Sites, in view of their conservation objectives, have been identified for LSE on the basis of the In Combination assessment

3.6.3 **Conclusion of In Combination Assessment for the Project** (Offshore and Onshore Sites)

Where the potential for the Project to result in LSE on European Sites has been identified in the preceding sections of this document and in Appendix 1 of NIS Volume 2 - Onshore, there is potential for it to result in LSE when considered in combination with other offshore and onshore (NIS Volume 2 Onshore - Appendix B) plans and projects. The sites listed in Section 4.1 will be considered within the NIS.

Where no pathway for effect on a particular European Site was identified, there is no potential for LSE to occur as a result of the Project. Therefore, it cannot contribute to any in-combination effects on that site when considered in combination with other plans and projects. Therefore, assessment of these sites in the NIS is not required.

No additional European Sites, in view of their conservation objectives, have been identified for LSE on the basis of the In Combination assessment

4.

4.1

APPROPRIATE ASSESSMENT SCREENING STATEMENT AND CONCLUSIONS

The findings of this Screening Assessment are presented in accordance with the European Commission's Assessment of Plans and Projects Significantly affecting Natura 2000 Sites: Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (EC, 2021) and Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (EC, 2018), OPR Practice Note PN01 (2021), Appropriate Assessment Screening for Development Management. Office of the Planning Regulator, Dublin 7, Ireland OPR (2021) as well as the Department of the Environment's Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (DoEHLG, 2010).

Concluding Statement

The Project alone or in combination with other plans and projects (i.e. Offshore and Onshore plans and projects) has the potential to have LSE on the following European Sites, in light of their conservation objectives and best scientific information (without the application of mitigation). Sites which have been included solely to ensure consistency with the foreshore licensing approach, are marked with an asterix.

- > Inishmore Island SAC,
- > Kilkieran Bay and Islands SAC,
- > Lower River Shannon SAC,
- > Slyne Head Peninsula SAC,
- > Slyne Head Islands SAC,
- West Connacht Coast SAC,
- > Galway Bay Complex SAC,
- > Blasket Islands SAC,
- > Duvillaun Islands SAC,
- > Connemara Bog Complex SAC,
- > Twelve Bens/Garraun Complex SAC,
- Maumturk Mountains SAC,
- > Lough Corrib SAC,
- Mweelrea/Sheeffry/Erriff Complex SAC,
- > Inishmaan Island SAC,
- Carrowmore Point to Spanish Point and Islands SAC,
- > Carrowmore Dunes SAC,
- > Kilkee Reefs SAC,
- > Kenmare River SAC*,
- > Hook Head SAC*,
- > Belgica Mound Province SAC*,
- > Roaringwater Bay and Islands SAC*,
- > Gweedore Bay and Islands SAC*,
- > Bunduff Lough and Machair/Trawalua/Mullaghmore SAC*,
- St John's Point SAC*,
- > Carnsore Point SAC*,
- > Blackwater Bank SAC*,
- > Lough Swilly SAC*,
- > Codling Fault Zone SAC*,
- > Rockabill to Dalkey SAC*,
- > North Channel SAC*,
- > West Wales Marine / Gorllewin Cymru Foro SAC*,
- > Bristol Channel Approaches / Dynesfeydd Môr Hafren SAC*,
- Mers Celtiques Talus du golfe de Gascogne SCI*,



- > North Anglesey Marine / Gogledd Môn Foro SAC*,
- > Lambay Island SAC*,
- > Nord Bretagne DH SAC*,
- > Ouessant-Molène SAC*,
- > Abers -Côte des legends SAC*,
- > Chaussée de Sein SAC*,
- Côte de Granit rose-Sept-Iles SAC*,
- > Baie de Morlaix SAC*,
- Côtes de Crozon SAC*,
- > Récifs et landes de la Hague SAC*,
- > Anse de Vauville SAC*,
- > Banc et récifs de Surtainville SAC*,
- > Baie du Mont Saint-Michel SAC*,
- Estuaire de la Rance SAC*,
- > Baie de Lancieux SAC, Baie de l'Arguenon, Archipel de Saint Malo et Dinard SAC*,
- Cap d'Erquy-Cap Fréhel SAC*,
- > Baie de Saint-Brieuc SAC*,
- > Tregor Goëlo Es SAC*,
- Mid-Clare Coast SPA
- > Slyne Head to Ardmore Point Islands SPA
- > Inishmore SPA
- > Cruagh Island SPA
- River Shannon and River Fergus Estuaries SPA
- > Cliffs of Moher SPA
- > Illaunonearaun SPA
- > High Island, Inishark and Duvillaun SPA
- > Inner Galway Bay SPA
- > Illaunnanoon SPA
- > Magharee Islands SPA
- Clare Island SPA
- > Loop Head SPA
- Bills Rock SPA
- Dingle Peninsula SPA
- > Duvillaun Islands SPA
- > Inishglora and InisKeeragh SPA
- > Blasket Islands SPA
- > Puffin Islands SPA
- > Iveragh Peninsula SPA
- > Skelligs SPA
- > Stages of Broadhaven SPA
- > Eirk SPA
- > The Gearagh SPA
- > Deenish Island and Scariff Island SPA
- > Clonakilty SPA
- > Illanmaster SPA
- > The Bull and The Cow Rocks SPA
- > Beara Peninsula SPA
- > Aughris Head SPA
- > West Donegal Coast SPA
- > Tory Island SPA
- > Horn Head to Fanad Head SPA
- > Saltee Islands SPA
- Mingulay and Berneray SPA
- Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Penfro SPA
- > Rum SPA



- > Seas off St Kilda SPA
- > St Kilda SPA
- > Copeland Islands SPA
- > Glannau Aberdaron ac Ynys Enlli/ Aberdaron Coast and Bardsey Island SPA
- > Shiant Isles SPA
- > Flannan Isles SPA
- > Lambay Island SPA
- > Ouessant-Molène SPA (France)
- > Handa SPA
- > Cape Wrath SPA
- > Cote de Granit Rose-Sept Iles SPA
- > Camaret SPA
- > North Rona and Sula Sgeir SPA
- North Caithness Cliffs SPA
- > Hoy SPA
- Cap d'Erquy-Cap Fréhel SPA (France)
- Rousay SPA
- > West Westray SPA
- > Copinsay SPA
- > East Caithness Cliffs SPA
- > Calf of Eday SPA
- > Iles Houat-Hoedic SPA (France)
- Falaise du Bessin Occidental SPA (France)
- > Seas off Foula SPA
- > Fair Isle SPA
- Littoral seino-marin SPA
- > Troup, Pennan and Lion's Heads SPA
- > Foula SPA
- > Sumburgh Head SPA
- > Buchan Ness to Collieston Coast SPA
- > Noss SPA
- > Hermaness, Saxa Vord and Valla Field SPA
- > Fetlar SPA
- > Tullaher Lough and Bog SAC

As a result, an Appropriate Assessment is required, and a Natura Impact Statement has been prepared.



5.

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