



MAGNORA  
OFFSHORE WIND

# Talisk Floating Offshore Wind Farm

Offshore Habitats Regulations  
Appraisal Screening Report

January 2025

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## List of Abbreviations

Abbreviation	Meaning
AA	Appropriate Assessment
BDMPS	Biologically Defined Minimum Population Scales
CES	Crown Estate Scotland
CJEU	Court of Justice of the European Union
cSAC	candidate Special Areas of Conservation
CWSH	Coastal West Scotland and Hebrides
DECC	Department of Energy and Climate Change
DTA	David Tyldesley Associates
ECC	Export Cable Corridor
EIA	Environmental Impact Assessment
EMF	Electromagnetic Field
EU	European Union
FCS	Favourable Conservation Status
F	Foraging
HDD	Horizontal Directional Drilling
HND	Holistic Network Design
HRA	Habitat Regulations Appraisal
HVDC	High Voltage Direct Current
IAMMWG	Inter-Agency Marine Mammal Working Group
INNS	Invasive Non-Native Species
IROPI	Imperative Reasons of Overriding Public Interest
JNCC	Joint Nature Conservation Committee
JV	Joint Venture
LSE	Likely Significant Effect
MD-LOT	Marine Directorate Licensing Operations Team
MHWS	Mean High Water Springs
MM	Mean Max
MMF	Mean Maximum Foraging Range
MOW	Magnora Offshore Wind
MPA	Marine Protected Area
MSL	Mean Sea Level
MU	Management Unit
NI	Northern Ireland
NS	NatureScot
O&M	Operation and Maintenance
OSS	Offshore Substation Platform
OW	Offshore Wind
OWF	Offshore Wind Farm
PO	Plan Option
pSPA	Potential Special Protection Area
QI	Qualifying Interests
RIAA	Report to Inform Appropriate Assessment
ROI	Republic of Ireland
SAC	Special Areas of Conservation
SCI	Sites of Community Importance
SCOS	Special Committee on Seals
SD	Standard Deviation
SMP	Seabird Monitoring Scheme
SNH	Scottish Natural Heritage
SPA	Special Protection Area
SSC	Suspended Sediment Concentration
SSSI	Sites of Special Scientific Interest
TFMC	TechnipFMC
UK	United Kingdom
UWN	Underwater Noise
UXO	Unexploded Ordnance

Abbreviation	Meaning
WS	West Scotland
WTG	Wind Turbine Generator
Zol	Zone of Influence

## Glossary

Glossary term	Definition
Array Area	The area in which the generation infrastructure will be located, including turbines and associated foundations/ moorings, inter-array/ interconnector cables, and offshore substations.
Design Envelope	The design envelope contains the anticipated elements of the proposed offshore development which allows a certain degree of flexibility within the final design of the project. The degree of flexibility that is specified must allow for a robust assessment of the potential worst-case-scenario impacts development will have on the environment. This may require a range of design options with varying impact scenarios.
Developer	Magnora Offshore Wind.
Foundations	The foundation on which the wind turbine generators or offshore substation(s) are installed upon.
Landfall	The location where the offshore export cables will be brought onshore.
Landfall Area of Search	The area under consideration where the offshore export cables are proposed to be brought onshore.
Magnora Offshore Wind (MOW)	Magnora Offshore Wind (MOW) is the developer of this project and this company is jointly owned by Magnora ASA and TechnipFMC.
Offshore Export Cables	The subsea electricity cables running from the OSS(s) to the landfall and transmitting the electricity generated from the offshore wind farm to the onshore cables for transmission onwards to the onshore substation and the national electrical transmission system.
Offshore Export Cable Corridor (ECC)	The area within which the offshore export cables are likely to be installed.
Project	Talisk Offshore Wind Farm (covering the onshore and offshore infrastructure).
Proposed Offshore Development	The offshore elements of the Talisk Offshore Wind Farm to which the Offshore Scoping Report relates.
Wind Turbine Generators (WTGs)	The wind turbines that generate electricity consisting of tubular towers and blades attached to a nacelle housing mechanical and electrical generating equipment.
Offshore Substation Platforms	Structures used to convert and transmit electricity generated by offshore WTGs to the onshore grid.
Habitat Regulations	The Conservation (Natural Habitats, &c.) Regulations 1994, the Conservation (Natural Habitats, &c.) Amendment (Scotland) Regulations 2019, the Conservation of Habitats and Species Regulations 2017 and the Conservation of Offshore Marine Habitats and Species 2017.
Appropriate Assessment (AA)	A specific part of the Habitats Regulations Appraisal (HRA) process, evaluating whether a plan or project may affect the integrity of a European site.
Likely Significant Effect (LSE)	The screening exercise or result that determines if the proposed development "would be likely to have a significant effect" on a European site (as per the Habitats Regulations).
European Sites	Protected sites, originally established under EU legislation, including Special Areas of Conservation (SACs), Special Protection Areas (SPAs), and Ramsar sites.
Ramsar Sites	Wetlands of international importance designated under the Ramsar Convention.
National Site Network	A network of protected sites across the UK established post-Brexit, equivalent to the former Natura 2000 network.

# 1. Introduction

## 1.1 Background

- 1.1.1 In response to the climate crisis, Scotland has set a target to achieve net zero emissions of greenhouse gases (GHG) by 2045. In addition to this, the Scottish Government is targeting generating 50% of Scotland's overall energy consumption from renewable sources, including 11 gigawatts (GW) of installed offshore wind capacity, by 2030 (Scottish Government, 2020a). In 2021, Crown Estate Scotland (CES) initiated the ScotWind Leasing Process, making various areas of the seabed available for renewable energy development, and the Scottish Government identified a set of Plan Options (PO) as suitable areas for development; as set out within the Sectoral Marine Plan for Offshore Wind (Scottish Government, 2020b).
- 1.1.2 Magnora Offshore Wind (MOW) (referred to hereafter as the Developer) was established by Magnora ASA, a renewable energy developer, and TechnipFMC, a leading service provider within the offshore industry. The Developer was selected as a successful bidder within the N3 Plan Option (PO) with their plans to develop the Talisk Offshore Wind Farm (OWF) (the Project), and was granted an Option Agreement, providing them with exclusive development rights.
- 1.1.3 At its closest point, the awarded option area (Array Area) is approximately 25km off the northern coast of the Isle of Lewis and approximately 73km off the northwest coast of the Scottish mainland. The Option Agreement stipulates that the Developer must obtain all key consents and permissions from the relevant regulatory authorities in order to construct and operate the Talisk OWF. As part of this, the Developer will apply for the necessary consents and permissions, including conducting an Environmental Impact Assessment (EIA) and preparing supporting information to inform the Habitats Regulations Appraisal (HRA) process.
- 1.1.4 This Offshore HRA Screening Report takes into consideration all of the offshore infrastructure associated with the Talisk OWF that is located seaward of Mean High Water Spring tide (MHWS) which will hereafter be referred to as the Proposed Offshore Development (see Figure 1.1). The Proposed Offshore Development includes the proposed generation infrastructure located within the Array Area, comprising wind turbine generators (WTGs) and associated floating foundations, inter-array cables, and the Offshore Substation (OSS) and associated fixed foundations, along with the offshore export cables that will be located within the Offshore Export Cable Corridor (ECC) and landfall infrastructure located below the MHWS within the Landfall Area of Search. A summary of the Proposed Offshore Development is provided in Section 1 of this Offshore HRA Screening. Further details of the Proposed Offshore Development are provided within Chapter 3: Proposed Project Development Description of the Offshore Scoping Report (Magnora Offshore Wind, 2025), which has been submitted to Marine Directorate Licensing Operations Team (MD-LOT) alongside this Offshore HRA Screening Report.



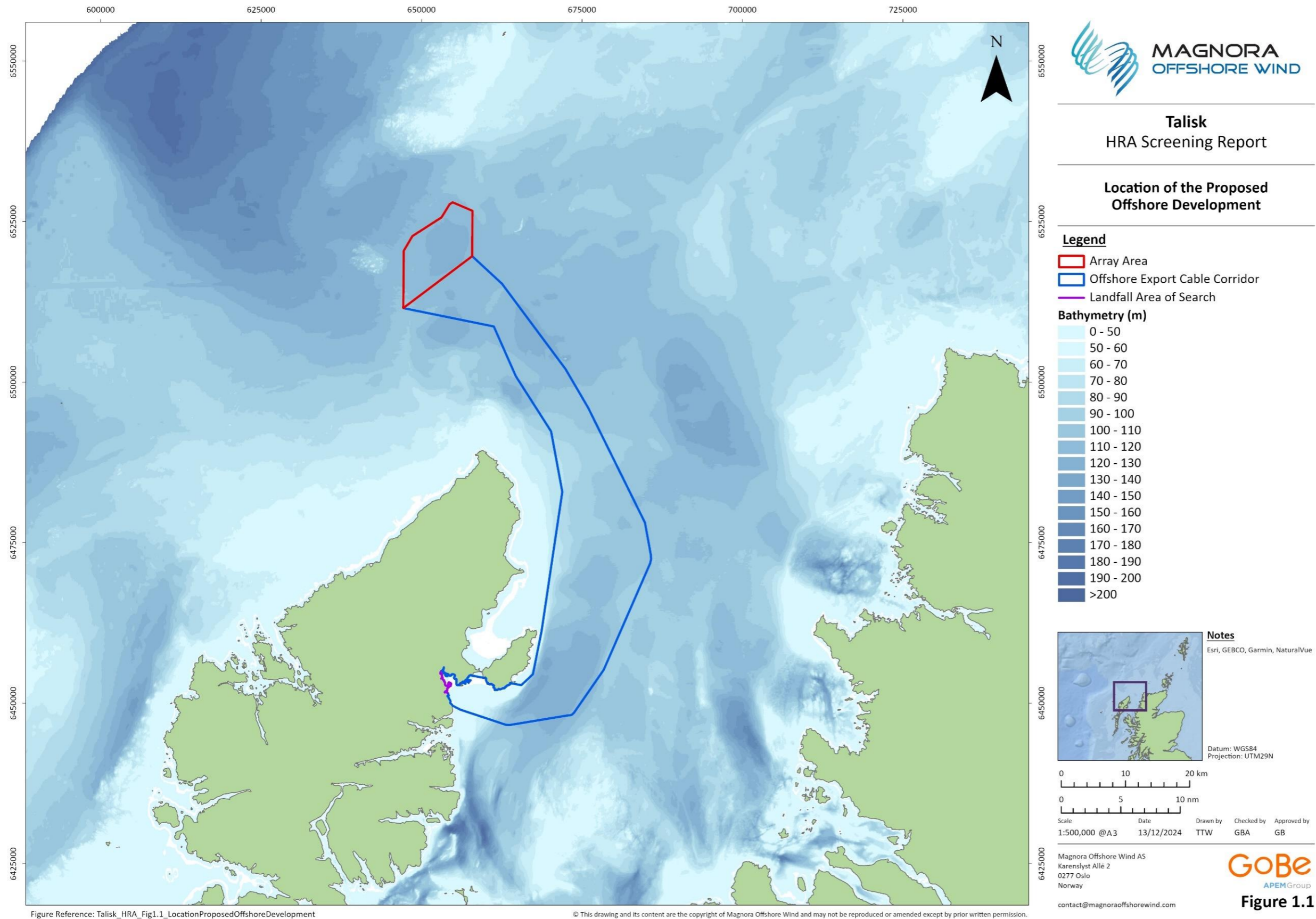


Figure 1.1 Location of the Proposed Offshore Development.

## 1.2 The Developer

- 1.2.1 As previously mentioned, the Developer is MOW, a company established by Magnora ASA and TechnipFMC. Magnora ASA has been a renewable energy developer since 2018, after transitioning from the oil and gas sector. Magnora is developing projects within solar power, battery energy storage systems, and offshore and onshore wind and is currently operating in six countries: the UK, Norway, Sweden, Italy, Germany and South Africa.
- 1.2.2 TechnipFMC is a global leader in both traditional and renewable energy sectors, employing approximately 21,000 people across 39 countries. The company provides the technologies, fully integrated projects, systems and services needed to meet the world's energy demands. With experience in fixed and floating offshore projects and floating offshore wind projects, TechnipFMC will use its competence to support the development of the Proposed Offshore Development.
- 1.2.3 MOW (the Developer) combines expertise in renewable energy project development with extensive experience in executing large-scale offshore floating and subsea projects utilising industry-leading technologies. The Developer is well-positioned to actively contribute to the energy transition towards renewables, including through delivery of the Proposed Offshore Development, and believes that floating offshore wind will become a competitive and crucial component in meeting global climate commitments.
- 1.2.4 MOW is further supported by DNV who are providing environmental review and advisory services, with regards to the EIA documentation.
- 1.2.5 The Developer has commissioned GoBe Consultants Ltd (part of APEM Group) to lead and develop the scoping reports for the Project. GoBe Consultants Ltd are responsible for overseeing the delivery of the overall EIA and HRA consenting process, including the coordination and submission of the HRA Screening Report.

## 1.3 Purpose of the Report

- 1.3.1 The purpose of this Offshore HRA Screening Report is to inform the HRA process for the Proposed Offshore Development, as required under the:
- Conservation (Natural Habitats, &c.) Regulations 1994;
  - Conservation of Habitats and Species Regulations 2017 (the 'Habitats Regulations'); and
  - Conservation of Offshore Marine Habitats and Species Regulations 2017.
- 1.3.2 This Offshore HRA Screening Report provides information for the Competent Authority, in this case MD-LOT (on behalf of the Scottish Ministers), to undertake the screening of the Proposed Offshore Development. The aim of the HRA screening exercise is to determine whether the Proposed Offshore Development would have the potential to have any likely significant effects (LSE) on any designated features of a 'European Site', either alone or in-combination with other plans and projects. In this context, 'European sites' encompasses sites within the National Site Network (UK's framework of protected areas), Natura 2000 (the EU-wide network of protected areas), as well as Ramsar sites (as designated under the Ramsar Convention). This step in the HRA process and associated reporting requirements are further described in Section 3: Methodology and Guidance.
- 1.3.3 The assessment provided in this report is based on the current proposed scope and nature of the Proposed Offshore Development and current understanding of the impact ranges and protected features of European sites. Screening has been completed through a review of project information associated with the Proposed Offshore Development, scientific evidence, and site-specific / other regional information currently available. The main receptors considered in this report include:
- Benthic Subtidal and Intertidal Ecology;
  - Marine Mammals;
  - Offshore Ornithology;
  - Fish and Shellfish Ecology; and

- Marine Physical Processes.

- 1.3.4 As the design parameters, including the preferred offshore export cable route and preferred landfall site are refined, and as site-specific baseline characterisation surveys and regional level environmental studies are completed and analysed, ongoing consultation will take place with respect to the assessment of the potential for LSE on European / Ramsar sites. This will inform any future Report to Inform Appropriate Assessment (RIAA).
- 1.3.5 It is anticipated that a review of the Scoping Opinion, as well as the project level engagement with the ongoing iterative plan review associated with the Sectoral Marine Plan for Offshore Wind (Scottish Government, 2020b), will also aid with identifying further requirements of the RIAA (although noting these processes sit outside of, and are separate to, the requirements of the Habitats Regulations for the consent applications for the Proposed Offshore Development).
- 1.3.6 Given the early stage of the Proposed Offshore Development, with further site-specific investigations and environmental survey/assessment work due to be completed and ongoing statutory and non-statutory consultation, this assessment will continue to evolve over time and any changes will be captured and incorporated within the RIAA that will be submitted with the consent application.
- 1.3.7 With regards to the requirement for onshore HRA, and in addition to an assessment of potential effects on protected Qualifying Interests (QIs) of European Sites within the EIA context, a separate Onshore HRA Screening exercise will be undertaken once grid connection location is confirmed and an onshore ECC is further refined. In consultation with NatureScot, consideration will be given to the pathways for potential LSE on structurally or functionally connected European Sites.

## 2. Proposed Offshore Development Overview

### 2.1 Proposed Offshore Development Location

- 2.1.1 The Proposed Offshore Development is located within the N3 PO, located approximately 25km off the north coast of Lewis and 73km from the Scottish mainland (Figure 1.1). The size of the Array Area is approximately 103km<sup>2</sup>, with a maximum capacity of 495MW.
- 2.1.2 The boundary within which all infrastructure for the Proposed Offshore Development will be situated is shown in Figure 1.1. This boundary includes the Array Area, Offshore ECC and Landfall Area of Search.
- 2.1.3 A route optioneering process was conducted to assess environmental and technical constraints within the offshore environment, leading to the identification of a suitable Offshore ECC, which extends from the Array Area to the Landfall Area of Search. This process established a conservative Offshore ECC to support the EIA and HRA for initial Scoping and Screening.
- 2.1.4 The Offshore ECC encompasses approximately 828km<sup>2</sup> and it traverses down the east coast of the Isle of Lewis passing the Eye Peninsula before reaching the Landfall Area of Search (Figure 1.1).

### 2.2 Proposed Offshore Development Description

- 2.2.1 For a detailed description of the Proposed Offshore Development the reader is referred to the Offshore Scoping Report (Chapter 3: Proposed Project Development Description). A brief overview of the current Design Envelope is provided below. The Design Envelope for the Proposed Offshore Development includes the following key infrastructure components:
- WTGs, including associated infrastructure such as nacelles and blades, as well as floating foundations;
  - OSS with bottom-fixed foundations;
  - Scour protection for both WTG and OSS foundations;
  - Inter-array cables linking WTGs with each other and with the OSS;
  - Offshore export cables that link the OSS to the landfall site; and
  - Cable protection as required.
- 2.2.2 Each of the aforementioned infrastructure components can vary significantly depending on specific project requirements. The Developer has adopted a Design Envelope approach for impact assessment, following published guidance (Scottish Government, 2022). The Design Envelope outlines a range of parameters for each component of the Proposed Offshore Development (presented in Table 2.1), allowing for a comprehensive assessment of the potential worst-case environmental impacts. The specific design parameters will be refined as the project moves through the planning and development stages.

Table 2.1 Proposed Offshore Development design parameters.

Design parameter	Maximum design scenario
<b>WTGs</b>	
Number of WTGs	Up to 33
Anticipated WTG capacity	15 - 22MW
WTG rotor diameter	310m
Maximum blade tip height	340m (above Mean Sea Level; MSL)
Minimum blade tip height	22m (above Highest Astronomical Tide (HAT))
<b>WTG foundations</b>	
Floating foundation type	Semisubmersible floaters, Barges, Spar Buoys, Tension Leg Platforms (TLP).
Dimensions of floating foundations	Not yet defined
Depth of floating foundations within the water column	Not yet defined
Number of mooring lines	Up to nine
Mooring line radius	Up to 1,500m
Mooring line type	Catenary, taut and semi taut
Mooring line material	Combination of composite materials and/or steel. To be further defined
Installation method / anchoring method	Gravity, Suction, Driven pile, Drilled pile
<b>OSS</b>	
Number of OSSs	One
Maximum length of OSS topside	80m
Maximum width of OSS topside	50m
Height of OSS topside	Up to 80m (above MSL)
<b>OSS foundations</b>	
Fixed foundation type	Piled jacket, suction caisson jacket
Number of legs	Up to eight
Number of piles	Up to 16
<b>Inter-array cables</b>	
Transmission system	High Voltage Alternating Current (HVAC)
Number of cables	Up to eight
Voltage	66kV or 132kV
Total length	Approximately 90km in total
Maximum width of seabed affected by installation	Up to 20m
Maximum length of cable buoyant in the water/ free spanning	Accumulated total of 15km
Maximum length of cable buried or on the seabed	70km of buried inter-array cable (worst case seabed disturbance)
Total burial depth	Range between 0 to 3m (dependent on geotechnical properties)
Cable protection material	Rock placement, grout bags, mattresses
Cable protection height	Up to 1m
Cable protection width	Up to 3m
<b>Export cables</b>	
Transmission System	HVAC
Number of cables	Up to three
Voltage	132kV, 220kV or 275kV
Total length	100km per cable i.e., up to 300km in total
Maximum width of seabed affected by installation	Up to 20m
Maximum length of cable buried or on the seabed	Worst case fully buried i.e., 300km (3 x 100km of cables)
Total burial depth (m)	Range between 0 to 3m (dependent on geotechnical properties)
Cable protection material	Rock placement, grout bags, mattresses
Cable protection height	Up to 1m
Cable protection width	Up to 3m

## 3. Methodology and Guidance

### 3.1 HRA Legislative Context

#### Habitats Directive and Habitats Regulations

- 3.1.1 A network of protected areas for specific habitats and species of importance (known as European sites) has been established by European Union (EU) member states under the Habitats and Birds Directives (Council Directive 92/43/EEC and Directive 2009/147/EC). In Scotland, these are implemented through the Conservation (Natural Habitats &c.) Regulations 1994, the Conservation (Natural Habitats, &c.) Amendment (Scotland) Regulations 2019, the Conservation of Habitats and Species Regulations 2017 and the Conservation of Offshore Marine Habitats and Species Regulations 2017 (together hereinafter referred to as the Habitats Regulations). The three-stage process of determining the absence of adverse effects on European sites under the Habitats Directives/Regulations is known as an HRA.
- 3.1.2 Under the Regulations, an Appropriate Assessment (AA) is required where a plan or project is considered likely to have a significant effect upon a European site either individually or in combination with other plans or projects. European sites (in the context of the HRA assessment) include the following:
- Special Areas of Conservation (SACs) designated under the Habitats Directive for their habitats and/or species (except birds) of European importance;
  - Special Protection Areas (SPAs) designated under the Birds Directive for rare, vulnerable, and regularly occurring bird species; and
  - Ramsar sites designated under The Convention on Wetlands.
- 3.1.3 Of note, the assessment also considers candidate Special Areas of Conservation (cSACs), Sites of Community Importance (SCIs), and potential Special Protection Areas (pSPAs). These sites are treated with the same level of protection as fully designated SACs and SPAs during the assessment process to avoid any adverse effects before formal designation.
- 3.1.4 The Habitats Regulations (The Conservation (Natural Habitats, &c.) Regulations 1994, and The Conservation of Habitats and Species Regulations 2017) specify, amongst other issues, how development control decisions which could directly or indirectly affect European sites are to be reached. Regulation 63 of the Habitat Regulations (2017) and Regulation 48 of the Habitat Regulations (1994) states:

*"A competent authority, before deciding to undertake, or give any consent, permission or other authorization for, a plan or project which – (a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in-combination with other plans or projects), and (b) is not directly connected with or necessary to the management of that site, must make an appropriate assessment of the implications of the plan or project for that site in view of that site's conservation objectives".*

- 3.1.5 It is therefore necessary, in the first instance, to determine whether it is possible to conclude that there is no LSE on the site. Only where it is not possible to conclude this, does an AA need to be carried out by the Competent Authority. The European Court of Justice ruling in the case of Waddenzee (Case C-127/02) (Court of Justice of the European Union, 2004), stated that an AA of a project is necessary:

*"if it cannot be excluded, on the basis of objective information, that it will have a significant effect on the site"*

- 3.1.6 It is therefore clear that if it cannot be objectively ruled out, then an effect is likely. Therefore the test is negative and precaution is taken within it.
- 3.1.7 The Habitats Regulations require that a Competent Authority shall make an AA before any decision to give consent for any plan or project that is not directly connected with or necessary to the (conservation) management of a European site and which could likely have a significant effect on that site (either alone or in combination with other known plans or projects). An AA is therefore required for all plans or projects 'likely to have a significant effect' on a European site in view of the conservation objectives of the European site. The Competent Authority can only agree to the plan or project having ascertained that it will not adversely affect the integrity of the European site. To ascertain this, the competent authority must give

regard to the manner in which the plan or project is proposed to be carried out or to any conditions or restrictions proposed for the consent or permission.

- 3.1.8 As the Proposed Offshore Development is not directly connected with or necessary to the management of a European site, an HRA is required.

### Post-EU Exit Amendments

- 3.1.9 The UK withdrew from the EU in January 2020 and as such, since the beginning of January 2021, the UK is no longer bound by EU legislation; however, the Scottish and UK Parliaments passed EU-Exit legislation to ensure that Scotland's nature remains protected to at least the same standard as EU environmental standards with a further longer-term ambition to exceed these. This did result in some aspects of the Habitats Regulations being amended in Scotland, but these amendments were only to those necessary to ensure that the Habitats Regulations (UK Government, 2017a) remained operable and to ensure that the requirements of the Habitats and Birds Directives (European Parliament and Council of the European Union, 2009) must continue to apply to how European sites are designated and protected.

- 3.1.10 The amendments to the Habitats Regulations are summarised within 'EU Exit: The Habitats Regulations in Scotland' (Scottish Government, 2020c) and include:

- European sites in the UK are no longer part of the EU's Natura 2000 network. Instead, they form a UK-wide network of protected sites, referred to as the "National Site Network" (although the 1994 Regulations use the term "UK site network") and they retain the same protections;
- Management objectives are established for the National Site Network. For such sites in Scotland (including those in Scotland's inshore and offshore waters), the Scottish Ministers must work in co-operation with the other UK administrations to manage, and where necessary, adapt the National Site Network to contribute to the achievement of these objectives;
- The objectives in relation to the National Site Network are to:
  - Maintain or restore certain habitats and species listed in the Habitats Directive to favourable conservation status (FCS); and
  - Contribute to ensuring the survival and reproduction of certain species of wild bird in their area of distribution and to maintaining their populations at levels which correspond to ecological, scientific, and cultural requirements, while taking account of economic and recreational requirements.
- European marine sites and European offshore marine sites continue to contribute to Scotland's Marine Protected Area (MPA) network. The network also includes Nature Conservation MPAs, Sites of Special Scientific Interest (SSSIs) and Ramsar sites; and
- The European Commission no longer plays a role in the designation process, or provision of opinion in certain circumstances on whether there were Imperative Reasons of Overriding Public Interest (IROPI) for granting consent for a plan or project despite a competent authority being unable (following completion of an HRA) to ascertain no adverse effect on site integrity. This now all falls under the remit of the Scottish Ministers (for sites in Scotland), with advice from NatureScot and the Joint Nature Conservation Committee (JNCC).

- 3.1.11 To suitably encompass varying sites covered under the aforementioned directives, legislation and conventions, as well as those considered but not yet designated, the term 'European sites' will be used throughout the remainder of this document.

## 3.2 The HRA Stages

- 3.2.1 The HRA process is generally viewed as a staged process for the assessment of the effects of plans or projects on European sites. Cumulatively, these stages are referred to as an HRA in order to clearly distinguish the whole process from the second stage within it, which is referred to as AA.

- 3.2.2 There are potentially up to three HRA stages:

- Stage One: Screening;
- Stage Two: AA; and

- Stage Three: Assessment of Alternative Solutions and IROPI.

3.2.3 Each stage (except the last) defines the requirement for and scope of the next. This Offshore HRA Screening Report comprises HRA Stage One, where the identification of LSE is reported. In this context, Scottish Natural Heritage (SNH; now known as NatureScot (NS)) guidance (David Tyldesley Associates (DTA), 2015) paragraph 4.3 defines LSE as 'one that cannot be ruled out based on objective information'. The test is a 'likelihood' of effects rather than a 'certainty' of effects'. LSE should therefore 'not simply be interpreted as 'probable' or 'more likely than not', but rather 'whether a significant effect can objectively be ruled out'. The HRA process is applied to predicted effects from the project alone (Section 6), and 'in-combination' effects with other plans and projects, which is assumed if potential for LSE is confirmed alone on the basis of the definition of LSE. Screening of potential projects and plans to be considered is carried out within HRA Stage Two.

3.2.4 If, based on the best scientific information available, potential for a LSE to a European site cannot be discounted, then an AA of the effect-pathway(s) to the site is required at HRA Stage Two, where the implications for European site integrity are considered. Importantly, mitigation measures cannot be considered at HRA Stage One; however, such measures are an integral element of the assessment at HRA Stage Two.

3.2.5 Stage Three becomes relevant if the AA cannot exclude an adverse effect on site integrity.

3.2.6 Key guidance documents that have been used to inform this Offshore HRA Screening Report include:

- SNH (2000). Natura Casework Guidance: Consideration of Proposals affecting SPA and SAC. Guidance Note Series;
- SNH Guidance Note (undated). The handling of mitigation in Habitats Regulations Appraisal – the People Over Wind Court of Justice of the European Union (CJEU) judgement;
- Department of Energy and Climate Change (DECC) (2016). Guidance on when new marine Natura 2000 sites should be considered in offshore renewable energy consents and licences. May 2016;
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- DTA (2021a). The Habitat Regulations Assessment Handbook. <https://www.dtapublications.co.uk/>; and
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## 4. Summary of Potential Impacts

### 4.1 Introduction

4.1.1 The potential for LSE is considered using a source–pathway–receptor model.

- 'Source' is defined as the individual elements of the proposed works that have the potential to affect the identified ecological receptors both within and outside the European Site;
- 'Pathway' is defined as the means or route by which a source can affect the ecological receptor; and
- 'Ecological receptor' is defined as the QIs of RAMSARS, SPAs or SACs for which Conservation Objectives have been set.

4.1.2 Each element can exist independently, however an effect is created when there is a linkage between the source, pathway and receptor.

4.1.3 The following sections outline those sources and potential impact pathways for effect to each receptor group. It should be noted that the effects identified here do not correlate to LSE; these are potential impacts that may arise as a result of the construction, operation and maintenance (O&M), and decommissioning of the Proposed Offshore Development (which only have potential for LSE where temporal and spatial overlap occurs). The potential for LSE is explored subsequently, in relation to relevant sites and feature(s) in Section 6.

### 4.2 Benthic Subtidal and Intertidal Ecology

4.2.1 Potential impacts on QIs related to Benthic Subtidal and Intertidal Ecology, resulting from the Proposed Offshore Development during construction, O&M and decommissioning are outlined in Table 4.1.

Table 4.1 Potential impacts considered for the Benthic Subtidal and Intertidal Ecology features of European sites.

Potential impact	Pathway	Activities and infrastructure potentially resulting in effect		
		Construction	O&M	Decommissioning
Physical habitat loss/disturbance (temporary or permanent)	Direct physical interaction between the site/feature and the Proposed Offshore Development.	Installation of structures; seabed preparation; seabed dredging; sediment disposal; and installation of scour or cable protection.	Physical presence of structures; maintenance of structures; presence of scour or cable protection; and anchors and clump weights.	Scope of works currently unknown; however, anticipated to be similar to and no greater than those during construction.
Increase in Suspended sediment concentrations (SSCs)/deposition (temporary)	Sediment disturbance and dispersal through the water column to reach the site/ feature.	Installation of structures; seabed preparation; seabed dredging and sandwave clearance; sediment disposal; and installation of scour or cable protection.	Maintenance activities; and catenary action of mooring chains.	Scope of works currently unknown; however, anticipated to be similar to and no greater than those during construction.
Accidental pollution (temporary)	Pollution dispersing through the water column to reach the site/ feature (direct).	Accidental release or spill of materials or chemicals; and release of contaminants from suspended sediment (via all activities listed for suspended sediment/ deposition above).	Accidental release or spill of materials or chemicals; and release of contaminants from suspended sediment (via all activities listed for suspended sediment/ deposition above).	Scope of works currently unknown; however, anticipated to be similar to and no greater than those during construction.
Increased risk of introduction and/or spread of Invasive Non-Native Species (INNS) from vessel traffic (temporary or permanent)	Presence of the works/ structures allowing non-native species to travel between sites and features (indirect).	Vessel movements on and off site; and installation of solid structures.	Vessel movements on and off site; maintenance activities; and physical presence of structures.	Scope of works currently unknown; however, anticipated to be similar to and no greater than those during construction.
Electromagnetic Field (EMF) effects arising from cables (permanent)	Cables may generate EMF that can spread through the surrounding sediments and water column to a limited distance (indirect).	-	Generation of EMF from installed cables.	-
Changes to marine physical processes (permanent)	Via changes to water movements and transitional rates (indirect).	Installation of structures.	Physical presence of structures; and installation of cable and scour protection (where required).	-

A dash (-) signifies the absence of impact pathway at that development stage.

### **4.3 Marine Mammals**

- 4.3.1 Potential impacts on QIs related to Marine Mammals, resulting from activities related to the Proposed Offshore Development during construction, O&M and decommissioning are outlined in Table 4.2.

Table 4.2 Potential impacts considered for the Marine Mammal features of European sites.

Potential impacts	Pathway	Activities and infrastructure potentially resulting in effect		
		Construction	O&M	Decommissioning
Mortality, injury, behavioral impacts and auditory masking from underwater noise (hereafter referred to as UWN) (temporary)	Noise propagation through the water column within the site/range of the feature (direct).	Pre-construction geophysical surveys; Unexploded Ordnance (UXO) clearance; installation of anchors; pile driven OSS foundations; and other construction activities e.g., cable laying, dredging, trenching, etc.	Operational noise; and O&M activities.	Scope of works currently unknown; however, anticipated to be similar to and no greater than those during construction.
Vessel disturbance (temporary)	Vessel movement within the site/range of the feature, potentially resulting in behavioural alteration (direct).	Vessel movements associated with construction.	Maintenance activities and vessel movements.	Scope of works currently unknown; however, anticipated to be similar to and no greater than those during construction.
Collision risk (temporary)	Vessel movement within the site/range of the feature, potentially resulting in greater mortality/injury rates (direct).	Vessel movements associated with construction.	Vessel movements associated with O&M.	Scope of works currently unknown; however, anticipated to be similar to and no greater than those during construction.
Accidental pollution (temporary)	Pollution dispersing through the water column within the site/range of the feature (direct).	Accidental release or spills of chemicals or materials; and release of contaminants from disturbed sediment.	Accidental release or spills of chemicals or materials; and release of contaminants from disturbed sediment.	Scope of works currently unknown; however, anticipated to be similar to and no greater than those during construction.
Changes to prey (temporary or permanent)	Impacts site/ feature by impacting lower trophic level organisms through the increase of UWN, suspended sediment, changes in habitat, and electromagnetic fields(indirect).	Generation of UWN from construction activities; loss of supporting habitats (via all activities listed for physical habitat loss/ disturbance in Benthic Subtidal and Intertidal Ecology); and vessel movements.	Generation of UWN from O&M activities; loss of supporting habitats (via all activities listed for physical habitat loss/ disturbance in Benthic Subtidal and Intertidal Ecology); and vessel movements.	Scope of works currently unknown; however, anticipated to be similar to and no greater than those during construction.
Habitat loss (temporary or permanent)	Habitat alterations caused by development works (direct).	Removal of supporting habitat during installation of structures.	Prey habitat loss in footprint of structures/cable protection.	Scope of works currently unknown; however, anticipated to be similar to and no greater than those during construction.

Potential impacts	Pathway	Activities and infrastructure potentially resulting in effect		
		Construction	O&M	Decommissioning
Entanglement (permanent)	Physical presence of structures within the site/range of the feature (direct) .	-	Presence of mooring lines and cables.	-
Barrier effect (permanent)	Physical presence of structures within the site/range of the feature that have the potential to interrupt the movements or migration of marine mammals (direct) .	-	Presence of mooring lines and cables; and physical presence of OSS foundation.	-
Disturbance from EMF from cables (permanent)	Cables emit EMF which can have behavioural and psychological impacts on marine mammals (direct) or their prey (indirect).	-	Presence of array and export cables	-

A dash (-) signifies the absence of impact pathway at that development stage.

## **4.4 Offshore Ornithology**

- 4.4.1 Potential impacts and impact pathways on QIs related to Offshore Ornithology, resulting from activities related to the Proposed Offshore Development during construction, O&M and decommissioning are outlined in Table 4.3

Table 4.3 Potential impacts considered for the Offshore Ornithological features of European sites.

Potential impacts	Pathway	Activities and infrastructure potentially resulting in effect		
		Construction	O&M	Decommissioning
Distributional responses (temporary and permanent)	Physical presence of structures present within the movement/ migratory zones for features (direct) .	Vessel movements associated with construction <sup>1</sup>	Maintenance activities; physical presence of WTGs; physical presence of OSS; and vessel movements.	Scope of works currently unknown; however, anticipated to be similar to and no greater than those during construction <sup>1</sup>
Collision / Migratory collision (permanent)	Physical presence of structures within the movement/ migratory zones for features (direct).	-	Physical presence of floating WTGs.	-
Entanglement (permanent)	Physical presence of structures within the movement/ migratory zones for features (direct).	-	Mooring lines.	-
Changes to prey (temporary or permanent)	Impacts site/ feature by impacting lower trophic level organisms (indirect).	Installation activities (e.g., WTGs and OSS).	Maintenance activities; and physical presence of turbines.	Scope of works currently unknown; however, anticipated to be similar to and no greater than those during construction.
Impacts resulting from artificial light (temporary)	Introduction of artificial lighting used during all phases of the Proposed Offshore Development.	Installation activities may require lighting; and vessel lighting.	Maintenance activities that may require lighting; and vessel lighting.	Scope of works currently unknown; however, anticipated to be similar to and no greater than those during construction.

A dash (-) signifies the absence of impact pathway at that development stage.

<sup>1</sup> For the Proposed Offshore Development, this impact pathway applies only to Red-throated divers from the Lewis Peatlands SPA within the Offshore ECC (see Table 5.5).

## **4.5 Fish and Shellfish Ecology**

- 4.5.1 Potential impacts and impact pathways on QIs related to Fish and Shellfish Ecology, resulting from activities related to the Proposed Offshore Development during construction, O&M and decommissioning are outlined in Table 4.4.



Table 4.4 Potential impacts considered for the Fish and Shellfish Ecology features of Designated sites

Potential impacts	Pathway	Activities and infrastructure potentially resulting in effect		
		Construction	O&M	Decommissioning
Mortality, injury (Temporary Threshold Shift (TTS)), and behavioral impacts and auditory masking arising from noise and vibration (temporary)	Noise propagation and vibration through the water column within the site/range of the feature (direct).	Pre-construction geophysical surveys; UXO clearance; installation of anchors; pile driven OSS foundations; and other construction activities e.g., cable laying, dredging, trenching etc.	Operational noise; and O&M activities including noise & vibration from vessels.	Scope of works currently unknown; however, anticipated to be similar to and no greater than those during construction.
Increase in suspended sediment concentrations (SSCs)/deposition (temporary)	Sediment disturbance and dispersal through the water column to reach the site/ feature (direct).	Installation of structures and cables; seabed preparation; seabed dredging and sandwave clearance; sediment disposal; and cable installation.	Maintenance activities; and catenary action of mooring chains.	Scope of works currently unknown; however, anticipated to be similar to and no greater than those during construction.
Direct and indirect seabed disturbance leading to release of sediment contaminants (temporary)	Pollution dispersing through the water column within the site/range of the feature (direct).	Release of contaminants from disturbed sediment (see suspended sediment/ deposition pathway in row above).	Release of contaminants from disturbed sediment (see suspended sediment/ deposition row above).	Scope of works currently unknown; however, anticipated to be similar to and no greater than those during construction.
Accidental pollution (temporary)	Pollution dispersing through the water column to reach the site/ feature (direct).	Accidental release or spill of materials or chemicals.	Accidental release or spill of materials or chemicals.	Scope of works currently unknown; however, anticipated to be similar to and no greater than those during construction.
EMF effects arising from cables (permanent)	Cables may generate EMF that can spread through the surrounding sediments and water column to a limited distance (indirect).	-	Generation of EMF from installed cables.	-
Increased risk of introduction and/or spread of INNS from vessel traffic (temporary)	Presence of the works/structures allowing non-native species to travel between sites and features (indirect).	Vessel movements on and off site; and installation of solid structures.	Vessel movements on and off site; maintenance activities; and physical presence of structures.	Scope of works currently unknown; however, anticipated to be similar to and no greater than those during construction.

Potential impacts	Pathway	Activities and infrastructure potentially resulting in effect		
		Construction	O&M	Decommissioning
Colonisation of hard Substrates (permanent)	Presence of structures allowing species to colonise, facilitating travel between sites and features (indirect).	-	Presence of solid structures.	-
Habitat loss and disturbance (temporary and permanent)	Direct physical interaction between the site/feature and the Proposed Offshore Development (direct).	Installation of structures; seabed preparation; seabed dredging; and vessel movements/anchoring.	Maintenance of structures.	Scope of works currently unknown; however, anticipated to be similar to and no greater than those during construction.

A dash (-) signifies the absence of impact pathway at that developmental stage.

## **4.6 Marine Physical Processes**

- 4.6.1 Potential impacts and impact pathways on QIs related to Marine Physical Processes, resulting from activities related to the Proposed Offshore Development during construction, O&M and decommissioning are outlined in Table 4.5.

Table 4.5 Potential Impacts considered for the Marine Physical Processes features of European sites.

Potential impacts	Pathway	Activities and infrastructure potentially resulting in effect		
		Construction	O&M	Decommissioning
Suspended sediment/ deposition (temporary)	Sediment disturbance and dispersal may result in changes to seabed levels and changes to surficial sediment type, altering habitats of sites/ features (indirect)	Installation of export and inter array cables; anchors and clump weights; Horizontal directional drilling (HDD); OSS foundation installation.	Maintenance activities; and catenary action of mooring chains.	Scope of works currently unknown; however, anticipated to be similar to and no greater than those during construction.
Change in seabed morphology (permanent)	Installation of infrastructure disrupts seabed morphology, potentially altering habitats of sites/ features (direct).	Installation of export and inter array cables; anchors and clump weights; HDD; and OSS foundation installation.	Maintenance activities; catenary action of mooring chains; physical presence of floating WTGs; fixed OSS; export and inter-array cables and associated cable protection; and anchors and clump weights.	Scope of works currently unknown; however, anticipated to be similar to and no greater than those during construction.
Modifications to littoral transport and coastal behaviour (erosion), including at landfall	Construction or presence of infrastructure at landfall can modify sediment transport, potentially affecting coastal erosion patterns (direct or indirect).	Installation of export cables; and HDD.	-	Scope of works currently unknown; however, anticipated to be similar to and no greater than those during construction.
Seabed scouring (permanent)	Seabed scouring around installed structures (e.g., WTGs, OSSs, or anchors) leading to habitat alterations (direct).	-	Physical presence of floating WTGs; fixed OSS; export and inter-array cables and associated cable protection; and anchors and clump weights.	-
Modifications to the tidal regime, and associated impacts to morphological features (permanent)	Presence of infrastructure (for example, WTGs), and the baseline metocean regime tides may result in localised changes to tidal current speeds and turbulence. These changes may, in turn, impact on adjacent physical features,	-	Physical presence of floating WTGs; fixed OSS; export and inter-array cables and associated cable protection; and anchors and clump weights.	-

Potential impacts	Pathway	Activities and infrastructure potentially resulting in effect		
		Construction	O&M	Decommissioning
	both offshore and along the coast.			
Modification to stratification (permanent)	Physical presence of structures could impact water column stratification, potentially affecting site features (e.g. QIs related to Benthic Subtidal and Intertidal Ecology and Fish and Shellfish Ecology).	-	Physical presence of floating WTGs; fixed OSS; and anchors and clump weights.	-

A dash (-) signifies the absence of impact pathway at that developmental stage.

## 5. Scoping

### 5.1 Scoping Process

#### Site Scoping

- 5.1.1 Given the nature and scale of the Proposed Offshore Development and the number of European sites that could potentially be affected, the offshore HRA screening is fronted by an initial scoping process to identify which sites and features require consideration within the screening process. This is achieved through a receptor-based approach with a source-pathway-receptor methodology, where an effect can only result if a pathway exists between the impact source and the receptor.
- 5.1.2 This step to the process essentially provides a long list of designated sites identified based on potential spatial connectivity to the Proposed Offshore Development, to be taken forward for consideration of no LSE. The potential effects associated with the construction, O&M and decommissioning of the Proposed Offshore Development are presented in Section 6, as well as a summary of all designated sites for each receptor group. Where some designated sites are designated for features covering multiple receptor groups, the site has been repeated in all relevant sections below, with only the features relevant to the specific receptor group presented in the relevant section. The site selection process is described below on a receptor group basis.

#### Impact Scoping

- 5.1.3 Impact scoping involves evaluating the potential impacts of the Proposed Offshore Development on designated sites and their associated QIs. This will conclude what QIs have the potential to be affected by the considered impacts, and if no protected sites with these QIs fall within the Zone of Influence (Zoi) of the impact, that impact will be scoped out of the assessment. This process further examines how different aspects of the development might negatively affect the integrity of a site, establishing whether the considered impact is capable of resulting in a LSE.

### 5.2 Benthic Subtidal and Intertidal Ecology

#### Site Scoping

- 5.2.1 An initial site scoping range of 10km from the boundary of the Proposed Offshore Development was applied to identify all designated sites with QIs related to Benthic Subtidal and Intertidal Ecology. This conservative scoping range is based on the maximum potential range, or Zoi, for any impacts caused by the Proposed Offshore Development on designated sites with QIs related to Benthic Subtidal and Intertidal Ecology. This maximum potential range is based on the impact with the largest Zoi which is considered to be a temporary increase in suspended sediment and sediment deposition. Therefore, a precautionary sedimentary Zoi of 10km has been assumed based on experience from other projects in the wider region and expert judgement as a reasonable distance within which indirect effects (for example, resulting from increased SSC and deposition) will occur. This range will be confirmed (or updated, if necessary) through subsequent technical reporting (specifically, numerical modelling of Marine Physical Processes).
- 5.2.2 There are no European sites with QIs related to Benthic Subtidal and Intertidal Ecology within the 10km sedimentary scoping range from the boundary of the Proposed Offshore Development (see Figure 5.1). All relevant designated sites are located more than 10km away from the Proposed Offshore Development and, therefore, benthic, subtidal and intertidal ecology sites/receptors are not considered further in the Screening for LSE.

#### Impact Scoping

- 5.2.3 As no sites are scoped in regarding Benthic Subtidal and Intertidal Ecology, consideration of impacts is unnecessary.

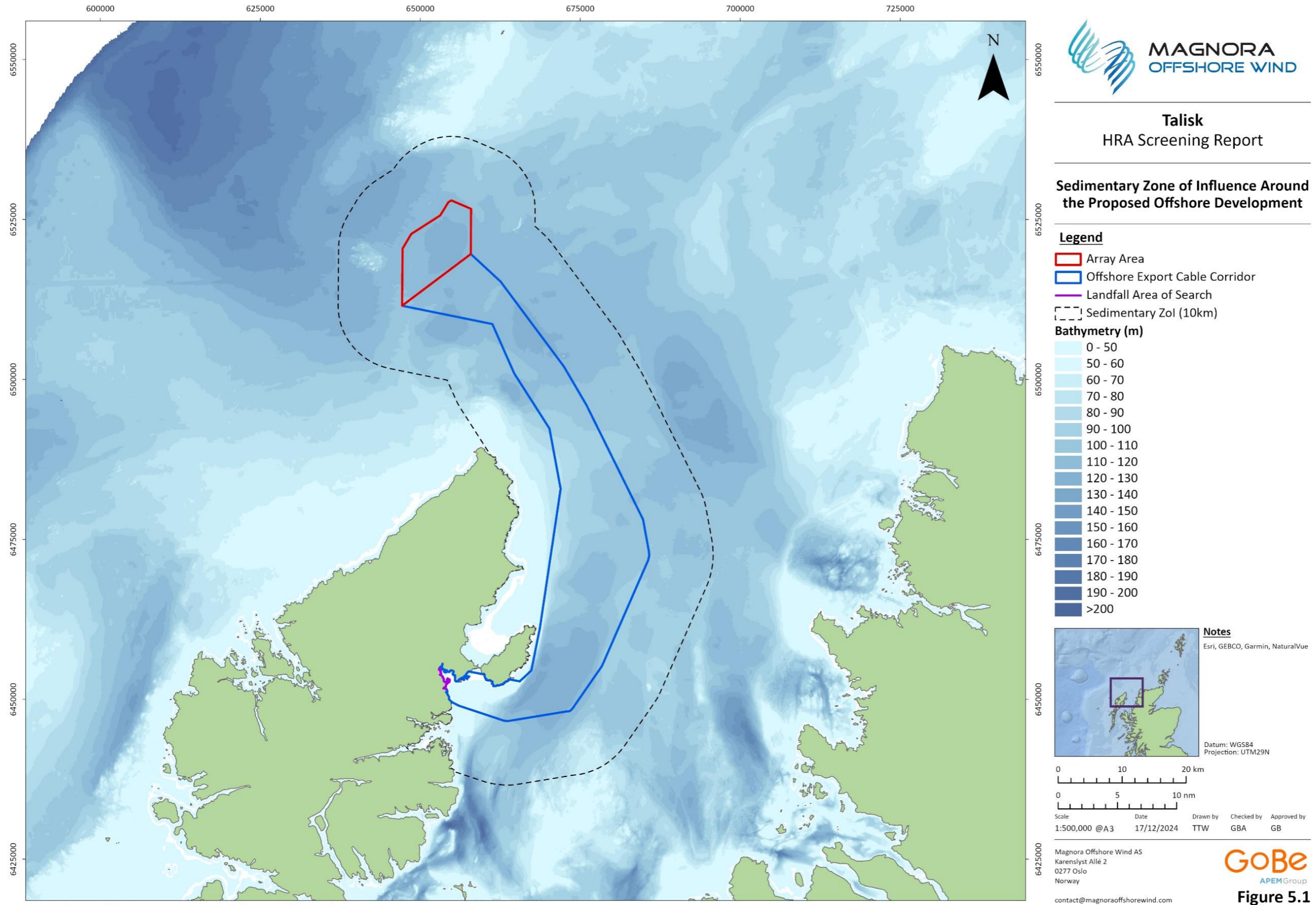


Figure 5.1 Sedimentary Zone of Influence around the Proposed Offshore Development.

### 5.3 Marine Mammals

#### Site Scoping

- 5.3.1 The site selection process is concerned with the four Annex II marine mammal species (European Union, 1992) which may have SAC designation. These are bottlenose dolphin (*Tursiops truncatus*), harbour porpoise (*Phocoena phocoena*), grey seal (*Halichoerus grypus*), and harbour seal (*Phoca vitulina*). An initial scoping exercise was conducted to identify relevant designated European sites that support these marine mammal species.
- 5.3.2 There are additional protected sites for marine mammals of relevance to the Proposed Offshore Development, such as the North-east Lewis MPA for Risso’s dolphins (*Grampus griseus*). However, as MPAs are not designated under the Habitats Regulations, they are not considered in the HRA. The EIA will include an assessment of impact for this MPA, and others of relevance.
- 5.3.3 The approach used for scoping sites for cetacean species is to consider the species-specific Management Unit (MU) (IAMMWG, 2023) that the Proposed Offshore Development is located in. The spatial extent of the MU is used to determine potential connectivity between the Proposed Offshore Development and designated sites for that species. All designated SACs within the species-specific MUs are taken forward to the screening stage for the identified species. The relevant MUs for the identified species are:
- Harbour porpoise: West Scotland (WS) MU;
  - Bottlenose dolphin: Coastal West Scotland and Hebrides (CWSH) MU; and
  - Bottlenose dolphin: Offshore Waters (OW) MU.
- 5.3.4 The approach used for seal species is to consider a scoping buffer or range. NatureScot recommends a scoping buffer of 50km for harbour seal and 20km for grey seal, to reflect their at-sea distribution during the breeding season, as informed by telemetry data (Carter *et al.*, 2022). This advice has been adopted in previous Scottish OWF HRAs (Caledonia Offshore Wind Farm Limited, 2022; Muir Mhòr Offshore Wind Farm Limited, 2023).
- A 50km radius is applied to harbour seal due to their year-round site fidelity, with no significant seasonal variation in their presence or movements (Carter *et al.*, 2022; SCOS, 2022); and
  - For grey seal, the 20km buffer is appropriate as they rarely travel beyond this distance from the colony during the breeding season (Carter *et al.*, 2022). Although telemetry data show that grey seals may undertake wide-ranging foraging trips of 100km or more offshore (Jones *et al.*, 2015; Carter *et al.*, 2022), these occur outside the breeding season and, therefore, do not affect the Conservation Objectives for grey seal SACs, which focus specifically on the breeding season.
- 5.3.5 There are no SACs designated for either seal species within the scoping buffer distances from the Proposed Offshore Development. Similarly, no SACs designated for bottlenose dolphin are present within the CWSH MU or OW MU. Harbour porpoise is the only marine mammal species with SACs designated within the relevant MU, therefore only designated sites for harbour porpoise are taken forward to the screening stage. The two sites designated for harbour porpoise in the WS MU are detailed in Table 5.1.

Table 5.1 Sites within the scope of the Screening Assessment, and their Marine Mammal features.

Designated site	Relevant features	Distances from Array Area (km)	Distance from Offshore ECC (km)
Inner Hebrides and the Minches SAC	Harbour porpoise	45.3	0
Skerries and Causeway SAC	Harbour porpoise	382.5	317.3



## Impact Scoping

- 5.3.6 With consideration of the features scoped in within Table 5.1 above, Table 5.2 outlines the potential impacts, pathways of effect, and their Zol, determining whether the identified species or features should be carried forward for screening for LSE.

Table 5.2 Potential impacts on associated Marine Mammal species and their range.

Potential impact	Stage of development			Species/Feature	Zone of Influence	Scoped in/out
	C	O&M	D			
UWN (temporary)	✓	✓	✓	Harbour porpoise	Harbour porpoise are highly mobile and range throughout their MU; as such they may be exposed to the Zol from the pathway for effect.	In
Vessel disturbance (temporary)	✓	✓	✓	Harbour porpoise	Harbour porpoise are highly mobile and range throughout their MU; as such they may be exposed to the Zol from the pathway for effect.	In
Collision risk (temporary)	✓	✓	✓	Harbour porpoise	Harbour porpoise are highly mobile and range throughout their MU; as such they may be exposed to the Zol from the pathway for effect.	In
Accidental pollution (temporary)	✓	✓	✓	Harbour porpoise	Harbour porpoise are highly mobile and range throughout their MU; the Zol of the impact is restricted to the Proposed Offshore Development area.	In
Changes to prey (temporary or permanent)	✓	✓	✓	Harbour porpoise	Harbour porpoise are highly mobile and range throughout their MU; the Zol of the impact is restricted to the Proposed Offshore Development area.	In
Habitat loss (temporary or permanent)	✓	✓	✓	Harbour porpoise	Harbour porpoise are highly mobile and range throughout their MU; the Zol of the impact is restricted to the Proposed Offshore Development area.	In
Entanglement (permanent)	-	✓	-	Harbour porpoise	Harbour porpoise are highly mobile and range throughout their MU; the Zol of the impact is restricted to the Proposed Offshore Development area.	In
Barrier effect (permanent)	-	✓	-	Harbour porpoise	Harbour porpoise are highly mobile and range throughout their MU; the Zol of the impact is restricted to the Proposed Offshore Development area.	In
Disturbance from EMF from cables (permanent)	-	✓	-	Harbour porpoise	There is no evidence of EMF from array or export cables having an effect (positive or negative) on marine mammals (Copping and Hemery, 2020). Therefore, direct impacts of EMF on marine mammals are negligible. Indirect impacts of EMF are considered in changes to prey assessment.	Out

## 5.4 Offshore Ornithology

### Site Scoping

- 5.4.1 An initial scoping exercise was conducted to identify all European sites designated for relevant ornithological features. This precautionary approach ensures that all sites with potential connectivity to the Proposed Offshore Development, in relation to LSE on offshore ornithological features, are captured for further consideration in the screening process.
- 5.4.2 The connectivity distances for each species are derived from mean maximum foraging (MMF) range plus one standard deviation (SD) ( $MMF \pm 1SD$ ) during the breeding season (Woodward *et al.*, 2019), detailed in Table 5.3, as recommended within Guidance Note 3: Guidance to support Offshore Wind applications (NatureScot, 2023).
- 5.4.3 In the non-breeding season, seabirds are not constrained by the need to attend a nest and therefore foraging ranges do not apply. Instead, most seabirds either migrate south or disperse throughout the regional seas, mixing with seabirds from designated and non-designated colonies. Therefore, in addition to SPA colonies with breeding season connectivity, some SPAs beyond the defined  $MMF + 1SD$  will have connectivity in the non-breeding season. For non-breeding features where these are outside of the above established foraging ranges, the site is within the scope of assessment if it's within the same biologically defined minimum population scale (BDMPS) region as the Array Area, and the site's population contributes to >1% of the relevant BDMPS region population (Appendix 1). Note, that any feature screened in for breeding season connectivity is also considered in the non-breeding season. Given the extensive connectivity distances for potential LSE on Offshore Ornithology, Table 5.4 includes only those designated sites with relevant offshore ornithological features, excluding sites without such features from further analysis.
- 5.4.4 Migratory features were considered by assessing the percentage of flight lines passing through the Array Area, from all UK and Republic of Ireland (ROI) SPAs, towards pre-defined northern and southern migration endpoints. Where this percentage exceeded 10% the SPA was examined for relevant migratory features. Features with a migratory flight zone that overlapped with the Array Area were then scoped in.

Table 5.3 Seabird foraging ranges derived from Woodward et al. (2019).

Species common name	Species Latin name	Foraging range (km)	Metric <sup>2</sup>
Common eider (hereafter 'Eider')	<i>Somateria mollissima</i>	21.5	MMF
Red-throated diver	<i>Gavia stellata</i>	9	Max foraging (F) (range)/ MMF
European storm-petrel (hereafter 'Storm-petrel')	<i>Hydrobates pelagicus</i>	336	Max F/ MMF
Leach's storm-petrel	<i>Hydrobates leucorhous</i>	657	Mean F
Northern fulmar (hereafter 'Fulmar')	<i>Fulmarus glacialis</i>	1200.2	MMF±1SD
Manx shearwater	<i>Puffinus puffinus</i>	2365.5	MMF±1SD
Northern gannet <sup>3</sup> (hereafter 'Gannet')	<i>Morus bassanus</i>	509.4	MMF±1SD
European shag (hereafter 'Shag')	<i>Phalacrocorax aristotelis</i>	23.7	MMF±1SD
Great cormorant (hereafter 'Cormorant')	<i>Phalacrocorax carbo</i>	33.9	MMF±1SD
Black-legged kittiwake (hereafter 'Kittiwake')	<i>Rissa tridactyla</i>	300.6	MMF±1SD
Black-headed gull	<i>Chroicocephalus ridibundus</i>	18.5	Max F/ MMF
Mediterranean gull	<i>Larus melanocephalus</i>	20	Max F/ MMF
Common gull	<i>Larus canus</i>	50	Max F/ MMF
Great black-backed gull	<i>Larus marinus</i>	73	Max F/ MMF
Herring gull	<i>Larus argentatus</i>	85.6	MMF±1SD
Lesser black-backed gull	<i>Larus fuscus</i>	236	MMF±1SD
Sandwich tern	<i>Thalasseus sandvicensis</i>	57.5	MMF±1SD
Little tern	<i>Sternula albifrons</i>	5	Max F/ MMF
Roseate tern	<i>Sterna dougallii</i>	23.2	MMF±1SD
Common tern	<i>Sterna hirundo</i>	26.9	MMF±1SD
Arctic tern	<i>Sterna paradisaea</i>	40.5	MMF±1SD
Great skua	<i>Stercorarius skua</i>	931.2	MMF±1SD
Arctic skua	<i>Stercorarius parasiticus</i>	2.7	Mean+1SD
Common guillemot <sup>4</sup> (hereafter 'Guillemot')	<i>Uria aalge</i>	95.2	MMF±1SD
Razorbill <sup>5</sup>	<i>Alca torda</i>	122.2	MMF±1SD
Black guillemot	<i>Cepphus grylle</i>	9.1	MMF±1SD
Atlantic puffin (hereafter 'Puffin')	<i>Fratercula arctica</i>	265.4	MMF±1SD

<sup>2</sup> Preference is for the metric to be Mean Maximum Foraging range (MMF) + 1 Standard Deviation (SD). However, where this is not possible MMF, followed by Max F and Mean F is used, in that hierarchy.

<sup>3</sup> Exceptions to Gannet range apply to Forth Islands SPA (590km), Grassholm SPA (516.7km) and St Kilda SPA (709km), based on Max ranges, recommended by NatureScot (2023).

<sup>4</sup> Exception to Guillemot range for all Northern Isle SPAs (153.7km), based on MM+SD, recommended by NatureScot (2023).

<sup>5</sup> Exception to Razorbill range for all Northern Isle SPAs (164.6km), based on MM+SD, recommended by NatureScot (2023).

Table 5.4 Sites within the scope of the Screening Assessment and their ornithology features.

Designated site	Relevant qualifying interests	Distance from Offshore ECC (km)	Distance from Array Area (km)
Lewis Peatlands SPA/ Ramsar	Black-throated diver ( <i>Gavia artctica</i> ), Dublin ( <i>Calidris alpina schinzii</i> ), Golden eagle ( <i>Aquila chrysaetos</i> ), Golden plover ( <i>Pluvialis apricaria</i> ), Greenshank ( <i>Tringa nebularia</i> ), Merlin ( <i>Falco columbarius</i> ), Red-throated diver.	5.9	30.1
North Rona and Sula Sgeir SPA	Fulmar, Gannet, Great black-backed gull, Guillemot, Kittiwake, Leach's Storm-petrel, Puffin, Razorbill, Seabird assemblage (Breeding), Storm-petrel.	31.4	23.6
Cape Wrath SPA	Fulmar, Guillemot, Kittiwake, Puffin, Razorbill, Seabird assemblage (Breeding).	48.8	72.5
Handa SPA	Fulmar, Great skua, Guillemot, Kittiwake, Razorbill, Seabird assemblage (Breeding).	33.8	72.8
Flannan Isles SPA	Fulmar, Guillemot, Kittiwake, Leach's Storm-petrel, Puffin, Razorbill, Seabird assemblage (Breeding).	66.4	77.1
Shiant Isles SPA	Fulmar, Greenland barnacle goose ( <i>Branta leucopsis</i> ), Guillemot, Kittiwake, Puffin, Razorbill, Seabird assemblage (Breeding), Shag.	23.0	88.2
Priest Island (Summer Isles) SPA	Storm-petrel.	36.8	100.3
Sule Skerry and Sule Stack SPA	Gannet, Guillemot, Leach's Storm-petrel, Puffin, Seabird assemblage (Breeding), Shag, Storm-petrel.	95.8	100.5
Dornoch Firth and Loch Fleet Ramsar	Bar-tailed godwit ( <i>Limosa lapponica</i> ), Curlew ( <i>Numenius arquata</i> ), Dunlin, Greylag goose ( <i>Anser anser</i> ), Osprey ( <i>Pandion haliaetus</i> ), Oystercatcher ( <i>Haematopus ostralegus</i> ), Redshank ( <i>Tringa totanus</i> ), Scaup ( <i>Aythya marila</i> ), Teal ( <i>Anas crecca</i> ), Waterfowl assemblage (Non-breeding), Wigeon ( <i>Anas penelope</i> ).	154.3	108.1
North Caithness Cliffs SPA	Fulmar, Guillemot, Kittiwake, Peregrine ( <i>Falco peregrinus</i> ), Puffin, Razorbill, Seabird assemblage (Breeding).	112.8	137.8
Moray and Nairn Coast Ramsar	Greylag goose, Pink-footed goose ( <i>Anser brachyrhynchus</i> ), Redshank, Waterfowl assemblage (Non-breeding).	194.1	142.2
St Kilda SPA	Fulmar, Gannet, Great skua, Guillemot, Kittiwake, Leach's Storm-petrel, Manx shearwater, Puffin, Razorbill, Seabird assemblage (Breeding), Storm-petrel.	124.2	146.4
Dornoch Firth and Loch Fleet SPA	Bar-tailed godwit, Curlew, Dunlin, Greylag goose, Osprey, Oystercatcher, Redshank, Scaup, Teal, Waterfowl assemblage (Non-breeding), Wigeon.	108.1	154.3
South Uist Machair and Lochs SPA	Corncrake ( <i>Crex crex</i> ), Dunlin, Little tern, Oystercatcher, Redshank, Ringed plover ( <i>Charadrius hiaticula</i> ), Sanderling ( <i>Calidris alba</i> ).	104.4	157.2
Hoy SPA	Arctic skua, Fulmar, Great black-backed gull, Great skua, Guillemot, Kittiwake, Peregrine, Puffin, Red-throated diver, Seabird assemblage (Breeding).	146.4	160.4

Designated site	Relevant qualifying interests	Distance from Offshore ECC (km)	Distance from Array Area (km)
Moray Firth SPA	Common scoter ( <i>Melanitta nigra</i> ), Eider, Goldeneye ( <i>Bucephala clangula</i> ), Great northern diver ( <i>Gavia immer</i> ), Long-tailed duck ( <i>Clangula hyemalis</i> ), Red-breasted merganser ( <i>Mergus serrator</i> ), Red-throated diver, Scaup, Shag, Slavonian grebe ( <i>Podiceps auritus</i> ), Velvet scoter ( <i>Melanitta fusca</i> ).	116.5	161.9
Marwick Head SPA	Guillemot, Kittiwake, Seabird assemblage (Breeding).	161.3	168.3
Cromarty Firth SPA	Bar-tailed godwit, Common tern, Curlew, Dunlin, Greylag goose, Knot ( <i>Calidrus canutus</i> ), Osprey, Oystercatcher, Pintail ( <i>Anas acuta</i> ), Red-breasted merganser, Redshank, Scaup, Waterfowl assemblage (Non-breeding), Whooper swan ( <i>Cygnus cygnus</i> ), Wigeon.	113.3	169.3
East Caithness Cliffs SPA	Cormorant, Fulmar, Great black-backed gull, Guillemot, Herring gull ( <i>Larus argentatus</i> ), Kittiwake, Peregrine, Razorbill, Seabird assemblage (Breeding), Shag.	131.5	171.0
Loch Eye Ramsar	Greylag goose, Whooper swan.	125.1	173.9
Loch Eye SPA	Greylag goose, Whooper swan.	125.1	173.9
Inner Moray Firth Ramsar	Bar-tailed godwit, Greylag goose, Red-breasted merganser, Redshank, Waterfowl assemblage (Non-breeding).	119.6	179.7
Inner Moray Firth SPA	Bar-tailed godwit, Common tern, Cormorant, Curlew, Goldeneye, Goosander ( <i>Merganser merganser</i> ), Greylag goose, Osprey, Oystercatcher, Red-breasted merganser, Redshank, Scaup, Teal, Waterfowl assemblage (Non-breeding), Wigeon.	119.6	179.7
Rum SPA	Golden eagle ( <i>Aquila chrysaetos</i> ), Guillemot, Kittiwake, Manx shearwater, Red-throated diver, Seabird assemblage (Breeding).	115.0	180.5
Rousay SPA	Arctic skua, Arctic tern, Fulmar, Guillemot, Kittiwake, Seabird assemblage (Breeding).	175.6	181.9
Canna and Sanday SPA	Guillemot, Herring gull, Kittiwake, Puffin, Seabird assemblage (Breeding), Shag.	117.6	182.4
West Westray SPA	Arctic skua, Arctic tern, Fulmar, Guillemot, Kittiwake, Razorbill, Seabird assemblage (Breeding).	185.3	188.3
Moray and Nairn Coast SPA	Bar-tailed godwit, Dunlin, Greylag goose, Osprey, Oystercatcher, Pink-footed goose, Red-breasted merganser, Redshank, Waterfowl assemblage (Non-breeding), Wigeon.	142.1	194.2
Copinsay SPA	Fulmar, Great black-backed gull, Guillemot, Kittiwake, Seabird assemblage (Breeding).	187.2	203.1
Calf of Eday SPA	Cormorant, Fulmar, Great black-backed gull, Guillemot, Kittiwake, Seabird assemblage (Breeding).	198.6	204.4
Auskerry SPA	Arctic tern, Storm-petrel.	201.3	213.1
Loch Spynie SPA	Greylag goose.	166.9	213.6
Mingulay and Berneray SPA	Fulmar, Guillemot, Kittiwake, Puffin, Razorbill, Seabird assemblage (Breeding), Shag.	162.9	218.5

Designated site	Relevant qualifying interests	Distance from Offshore ECC (km)	Distance from Array Area (km)
Treshnish Isles SPA	Greenland barnacle goose, Storm-petrel.	178.2	243.5
Glas Eileanan SPA	Common tern.	184.1	251.3
Troup, Pennan and Lion's Heads SPA	Fulmar, Guillemot, Herring gull, Kittiwake, Razorbill, Seabird assemblage (Breeding).	217.4	259.7
Fair Isle SPA	Arctic skua, Arctic tern, Fair Isle wren ( <i>Troglodytes troglodytes fridariensis</i> ), Fulmar, Gannet, Great skua, Guillemot, Kittiwake, Puffin, Razorbill, Seabird assemblage (Breeding), Shag.	266.3	270.8
Foula SPA	Arctic skua, Arctic tern, Fulmar, Great skua, Guillemot, Kittiwake, Leach's Storm-petrel, Puffin, Razorbill, Red-throated diver, Seabird assemblage (Breeding), Shag.	273.8	270.9
North Colonsay and Western Cliffs SPA	Chough ( <i>Pyrhocorax pyrrhocorax</i> ), Guillemot, Kittiwake, Seabird assemblage (Breeding).	220.7	286.8
Loch of Skene SPA	Goldeneye, Goosander, Greylag goose.	243.7	293.3
Buchan Ness to Collieston Coast SPA	Fulmar, Guillemot, Herring gull, Kittiwake, Seabird assemblage (Breeding), Shag.	256.4	301.0
Sumburgh Head SPA	Arctic tern, Fulmar, Guillemot, Kittiwake, Seabird assemblage (Breeding).	301.2	302.2
Mousa SPA	Arctic tern, Storm-petrel.	314.9	314.5
Fowlsheugh SPA	Fulmar, Guillemot, Herring gull, Kittiwake, Razorbill, Seabird assemblage (Breeding).	265.5	317.2
Ronas Hill – North Roe and Tingon SPA	Great skua, Red-throated diver.	328.3	324.5
Noss SPA	Fulmar, Gannet, Great skua, Guillemot, Kittiwake, Puffin, Seabird assemblage (Breeding).	327.4	326.3
Outer Firth of Forth and St Andrews Bay Complex SPA	Arctic tern, Black-headed gull, Common gull, Common scoter, Common tern, Eider, Gannet, Goldeneye, Guillemot, Herring gull, Kittiwake, Little gull ( <i>Hydrocoloeus minutus</i> ), Long-tailed duck, Manx shearwater, Puffin, Razorbill, Red-breasted merganser, Red-throated diver, Seabird assemblage (Breeding and Non-breeding), Shag, Slavonian grebe, Velvet scoter, Waterfowl assemblage (Non-breeding).	265.5	327.0
Firth of Forth SPA and Ramsar	Bar-tailed godwit, Common scoter, Cormorant, Curlew, Dunlin, Eider, Golden plover, Goldeneye, Great crested grebe, Grey plover, Knot, Lapwing, Long-tailed duck, Mallard, Oystercatcher, Pink-footed goose, Red-breasted merganser, Red-throated diver, Redshank, Ringed plover, Sandwich tern, Scaup, Shelduck, Slavonian grebe, Turnstone, Velvet scoter, Waterfowl assemblage, Wigeon.	261.7	329.2
Loch Leven Ramsar	Cormorant, Gadwall ( <i>Anas strepera</i> ), Goldeneye, Pink-footed goose, Pochard ( <i>Aythya farina</i> ), Shoveler ( <i>Anas clypeata</i> ), Teal, Tufted duck ( <i>Aythya fuligula</i> ), Waterfowl assemblage (Non-breeding), Whooper swan.	267.4	333.3

Designated site	Relevant qualifying interests	Distance from Offshore ECC (km)	Distance from Array Area (km)
Loch Leven SPA	Cormorant, Gadwall, Goldeneye, Pink-footed goose, Pochard, Shoveler, Teal, Tufted duck, Waterfowl assemblage (Non-breeding), Whooper swan.	267.4	333.3
Greers Isle SPA	Black-headed gull, Common gull, Sandwich tern.	397.5	337.2
Nólsoy Island RAMSAR	Puffin, Kittiwake, Fulmar, Guillemot, Storm-petrel.	352.1	343.5
Lough Swilly SPA	Great crested grebe, Grey heron ( <i>Ardea cinerea</i> ), Whooper swan, Greylag goose, Shelduck, Wigeon, Teal, Mallard, Shoveler, Scaup, Goldeneye, Red-breasted merganser, Coot ( <i>Fulica atra</i> ), Oystercatcher, Knot, Dunlin, Curlew, Redshank, Greenshank, Black-headed gull, Common gull, Sandwich tern, Common tern, Greenland white-fronted goose ( <i>Anser albifrons</i> ), Wetland and Waterbirds.	406.3	344.8
Fetlar SPA	Arctic skua, Arctic tern, Dunlin, Fulmar, Great skua, Red-necked phalarope ( <i>Phalaropus lobatus</i> ), Seabird assemblage (Breeding), Whimbrel ( <i>Numenius phaeopus</i> ).	355.5	352.1
Forth Islands SPA	Arctic tern, Common tern, Cormorant, Gannet, Guillemot, Herring gull, Kittiwake, Lesser black-backed gull, Puffin, Razorbill, Roseate tern, Sandwich tern, Seabird assemblage (Breeding), Shag.	286.8	353.5
Imperial Dock Lock, Leith SPA	Common tern.	297.1	363.2
Hermaness, Saxa Vord and Valla Field SPA	Fulmar, Gannet, Great skua, Guillemot, Kittiwake, Puffin, Red-throated diver, Seabird assemblage (Breeding), Shag.	368.3	364.5
Rathlin Island SPA	Peregrine, Guillemot, Razorbill, Kittiwake, Fulmar, Common gull, Lesser black-backed gull, Herring gull, Puffin, Seabird assemblage (Breeding).	312.8	378.4
Illancrone and Inishkeeragh SPA	Barnacle goose, Common tern, Arctic tern, Little tern.	435.9	378.8
Fala Flow Ramsar	Pink-footed goose.	320.8	386.6
Fala Flow SPA	Pink-footed goose.	320.8	386.6
Horn Head to Fanad Head SPA	Fulmar, Cormorant, Shag, Barnacle goose, Peregrine, Kittiwake, Guillemot, Razorbill, Chough, Greenland white-fronted goose.	329.0	389.6
Ailsa Craig SPA	Gannet, Guillemot, Herring gull, Kittiwake, Lesser black-backed gull, Seabird assemblage (Breeding).	323.7	391.4
Tory Island SPA	Fulmar, Corncrake, Razorbill, Puffin.	340.4	398.1
West Donegal Coast SPA	Fulmar, Cormorant, Shag, Peregrine, Herring gull, Kittiwake, Razorbill, Chough.	359.1	416.7



Designated site	Relevant qualifying interests	Distance from Offshore ECC (km)	Distance from Array Area (km)
Northumberland Marine SPA	Arctic tern, Common tern, Guillemot, Little tern, Puffin, Roseate tern, Sandwich tern, Seabird assemblage.	363.9	425.9
Lough Neagh and Lough Beg SPA	Common tern, Golden plover, Berwick's swan ( <i>Cygnus columbianus bewickii</i> ), Whooper swan, Goldeneye, Great crested grebe, Pochard, Scaup, Tufted duck, Waterbird assemblage.	368.8	434.0
Copeland Island SPA	Arctic tern, Manx shearwater.	384.5	451.3
Carlingford Lough (NI) SPA	Light-bellied brent goose, Sandwich tern and Common tern.	520.4	454.6
Lough Derg (Donegal) SPA	Lesser black-backed gull, Herring gull.	402.1	462.7
Strangford Lough SPA	Sandwich tern, Common tern, Arctic tern, Golden plover, Light-bellied brent goose, Bar-tailed godwit, Redshank, Shelduck, Knot, Waterbird assemblage.	396.3	462.9
Coquet Island SPA	Arctic tern, Common tern, Roseate tern, Sandwich tern, Seabird assemblage.	416.8	479.4
Ardboline Island and Horse Island SPA	Cormorant and Barnacle goose.	447.5	505.2
Morecambe Bay and Duddon Estuary SPA	Bar-tailed godwit, Black-tailed godwit ( <i>Limosa limosa</i> ), Common tern, Curlew, Dunlin, Golden plover, Grey plover, Herring gull, Knot, Lesser black-backed gull, Little egret ( <i>Egretta garzetta</i> ), Little tern, Mediterranean gull ( <i>Larus melanocephalus</i> ), Oystercatcher, Pink-footed goose, Pintail, Redshank, Ringed plover, Ruff ( <i>Philomachus pugnax</i> ), Sanderling, Sandwich tern, Seabird assemblage, Shelduck, Turnstone, Waterbird assemblage, Whooper swan.	449.7	518.2
Liverpool Bay SPA	Common scoter, Common tern, Little gull, Little tern, Red-throated diver, Waterbird assemblage.	485.2	553.7
Duvillaun Islands SPA	Fulmar, Storm-petrel, Barnacle goose.	509.3	562.3
Lambay Island SPA	Fulmar, Cormorant, Shag, Greylag goose, Lesser black-backed gull, Herring gull, Kittiwake, Guillemot, Razorbill, Puffin.	515.2	581.2
Clare Island SPA	Fulmar, Shag, Common gull, Kittiwake, Guillemot, Razorbill, Chough.	531.6	585.8
Anglesey Terns / Morwenoliaid Ynys MÃ'n SPA	Common tern, Arctic tern, Roseate tern, Sandwich tern.	518.9	586.6
Humber Estuary Ramsar	Bar-tailed godwit, Black-tailed godwit, Dunlin, Golden plover, Knot, Redshank, Shelduck, Waterbird assemblage (Wintering).	654.5	588.1
Ribble and Alt Estuaries SPA	Bar-tailed godwit, Berwick's swan, Black-tailed godwit, Common tern, Dunlin, Golden plover, Grey plover, Knot, Lesser black-backed gull, Oystercatcher, Pink-footed goose, Pintail, Redshank, Ringed plover, Ruff, Sanderling, Seabird assemblage, Shelduck, Teal, Waterbird assemblage, Whooper swan, Wigeon.	520.9	589.4

Designated site	Relevant qualifying interests	Distance from Offshore ECC (km)	Distance from Array Area (km)
High Island, Inishshark and Davillaun SPA	Fulmar, Barnacle goose, Arctic tern.	555.9	610.1
Mersey Narrows and North Wirral Foreshore SPA	Bar-tailed godwit, Common tern, Knot, Little gull, Waterbird assemblage.	553.8	622.3
Flamborough & Filey Coast SPA	Gannet, Guillemot, Kittiwake, Razorbill, Seabird assemblage.	559.7	622.9
Humber Estuary SPA	Avocet ( <i>Recurvirostra avosetta</i> ), Bar-tailed godwit, Bittern ( <i>Botaurus stellaris</i> ), Black-tailed godwit, Dunlin, Golden plover, Hen harrier ( <i>Circus cyaneus</i> ), Knot, Little tern, Marsh harrier ( <i>Circus aeruginosus</i> ), Redshank, Ruff, Shelduck, Waterbird assemblage.	588.1	654.5
Glannau Aberdaron ac Ynys Enlli/ Aberdaron Coast and Bardsey Island SPA	Chough, Manx shearwater.	593.6	660.8
Cliffs of Moher SPA	Fulmar, Kittiwake, Guillemot, Razorbill, Puffin, Chough.	604.5	662.0
Kerry Head SPA	Fulmar, Chough.	667.0	724.3
Saltee Islands SPA	Fulmar, Gannet, Cormorant, Shag, Lesser black-backed gull, Herring gull, Kittiwake, Guillemot, Razorbill, Puffin.	666.2	731.4
Dingle Peninsula SPA	Fulmar, Peregrine, Chough.	692.0	748.7
Iveragh Peninsula SPA	Fulmar, Peregrine, Kittiwake, Guillemot, Chough.	717.5	774.6
Skomer, Skokholm and the Seas off Pembrokeshire SPA	Storm-petrel, Red-billed chough, Short-eared owl ( <i>Asio flammeus</i> ), Manx shearwater, Puffin, Lesser black-backed gull, Seabird assemblage.	708.7	775.2
Basket Island SPA	Fulmar, Manx shearwater, Storm-petrel, Shag, Lesser black-backed gull, Herring gull, Kittiwake, Arctic tern, Razorbill, Puffin, Chough.	720.6	776.3
Grassholm SPA	Gannet.	711.6	778.0
Puffin Island SPA	Fulmar, Manx shearwater, Storm-petrel, Lesser black-backed gull, Razorbill, Puffin.	747.8	804.2
Deenish Island and Scariff Island SPA	Fulmar, Manx shearwater, Storm-petrel, Lesser black-backed gull, Arctic tern.	754.4	811.4
Beara Peninsula SPA	Fulmar, Chough.	754.7	812.6
Skelligs SPA	Fulmar, Manx shearwater, Storm-petrel, Gannet, Kittiwake, Guillemot, Puffin.	756.4	812.7

Designated site	Relevant qualifying interests	Distance from Offshore ECC (km)	Distance from Array Area (km)
Alde-Ore Estuary Ramsar	Avocet, Lesser black-backed gull, Redshank, Waterbird assemblage (Wintering), Wetland bird assemblage (Breeding).	822.2	886.7
Alde-Ore Estuary SPA	Avocet, Lesser black-backed gull, Little tern, Marsh harrier, Redshank, Ruff, Sandwich tern.	822.1	886.7
Isles of Scilly SPA	Shag, Great black-backed gull, Lesser black-backed gull, Seabird assemblage, Storm-petrel.	906.3	971.8

## Impact Scoping

- 5.4.5 With consideration of the QIs within above Table 5.5 outlines the potential impacts, pathways of effect and connectivity distance for relevant features, determining whether the identified species should be carried forward for screening for LSE. Where species listed in Table 5.4 are not included within Table 5.5 it is concluded that there is no potential pathway for effect on that QI and it is outside of the scope of this report and will not be considered further.
- 5.4.6 Furness and Wade (2012), Bradbury *et al.* (2014) and Deakin *et al.* (2022) have been referred to when considering which species may endure potential impacts.
- 5.4.7 With regards to assemblages, they have been included within the relevant impacts below, however impacts will only be considered on them should there be a species within the assemblage that are not already considered individually (recognised within a different qualifying feature of the same site) potentially being impacted. The nature of these features is that they are present to conserve the diversity of a site, and as such it is considered highly unlikely for there to be the potential for impact.

Table 5.5 Potential impacts with associated Seabird and Waterbird species and their range.

Potential impact	Stage of development			Species / QI	Connectivity distance	Justification / Clarification
	C	O&M	D			
Distributinal responses (regarding connectivity to the Offshore ECC) (temporary and permanent)	✓	✓	✓	Red-throated diver	Breeding: MMF from Woodward <i>et al.</i> (2019). This impact will only impact breeding features.	In (Offshore ECC only) – In addition, foraging range from nest site during breeding season are likely to be less than 10km (NatureScot, 2016).  Out (Array Area) – There are no designated sites with this species as a breeding qualifying feature that have connectivity to the Array Area. Therefore, this impact is scoped out.
	✓	✓	✓	Black-throated diver	Breeding: There is no connectivity during the breeding season to any identified offshore SPAs.	Out (Offshore ECC only) – There is no connectivity during the breeding season as they forage within the onshore Lewis Peatlands SPA. Out (Array Area) – There are no designated sites with this species as a breeding qualifying feature that have connectivity to the Array Area. Therefore, this impact is scoped out.
Distributinal responses (regarding connectivity to the Array Area) (temporary and permanent)	✓	✓	✓	Puffin; Kittiwake; Black guillemot; Guillemot; Shag; Cormorant; Fulmar; Gannet; Razorbill; and European Storm-petrel.	Breeding and non-breeding: MMF±1SD from Woodward <i>et al.</i> (2019). Non-breeding: Where outside of the above established foraging ranges, potential for impact is concluded if within the same BDMPS region as the Array Area and the sites population contributes to more than 1% of the relevant BDMPS region population (Appendix 1).	Out – The construction phase has the potential to affect birds in the marine environment through disturbance due to activities, including the installation of anchors, connection of floating structures, export cable laying and the movement of associated vessels en-route to / from the footprint of the Project. During installation of anchors, there is limited use of large offshore construction vessels at the development site and none of the extensive piling operations associated with fixed bottom WTGs. Construction noise associated with installation of anchors is, therefore, substantially lower and both its duration and the distance of disturbance are also considered to be considerably shorter. Any impacts resulting from disturbance and displacement from these installation activities are considered to be short-term, temporary and reversible in nature, lasting only for the duration of the activity, as birds would return to the area once activities have ceased therefore, a LSE can be ruled out.
	✓	✓	✓	Common scoter; and Great northern diver.	Non-breeding: 4km in the non-breeding season (JNCC <i>et al.</i> , 2022).	Out – Common scoter and great northern diver are non-breeding species in the UK. Migratory waterbirds are unlikely to be affected by disturbance / displacement effects during migration movements, as they do not interact with the marine

Potential impact	Stage of development			Species / QI	Connectivity distance	Justification / Clarification
	C	O&M	D			
						environment around the Project. As such, LSE can be excluded for these features for all phases of the Project.
Entanglement (permanent)	-	✓	-	Puffin; Arctic tern; Black guillemot; Guillemot; Common tern; Shag; Cormorant; Little tern; Gannet; Roseate tern; and Sandwich tern.	Breeding and non-breeding: MMF±1SD from Woodward <i>et al.</i> (2019). Non-breeding: Where outside of the above established foraging ranges, potential for impact is concluded if within the same BDMPS region as the Array Area and the site's population contributes to more than 1% of the relevant BDMPS region population (Appendix 1).	In – for SPA features within 100km of the Array Area. The probability of entanglement from features of SPAs beyond this range is extremely small as they are highly unlikely to be utilising the Array Area frequently.
Collision Risk (permanent)		✓		Arctic tern; Black-headed gull; Kittiwake; Common gull; Common tern; Great black-backed gull; Great skua; Herring gull; Lesser black-backed gull; Little tern; Manx shearwater; Gannet; Roseate tern; Sandwich tern; and European Storm-petrel.	Breeding and non-breeding: Species MMF±1SD from Woodward <i>et al.</i> (2019). Non-breeding: Where outside of the above established foraging ranges, potential for impact is concluded if within the same BDMPS region as the Array Area and the sites population contributes to more than 1% of the relevant BDMPS region population (Appendix 1).	In

Potential impact	Stage of development			Species / QI	Connectivity distance	Justification / Clarification
	C	O&M	D			
Migratory Collision Risk (permanent)		✓		Black-tailed godwit; Brent goose; Common scoter; Dunlin; Gadwall; Golden plover; Great northern diver; Greylag goose; Knot; Oystercatcher; Pink-footed goose; Pintail; Red-breasted merganser; Redshank; Ringed plover; Shelduck; Teal; Whooper swan; and Wigeon.	Screened in if greater than 10% of the species migration routes from the designated site pass over the Array Area. All SPAs in the whole of the UK are within the scope.	In
Changes in prey (Temporary and permanent)	✓	✓	✓	Puffin; Arctic tern; Black-headed gull; Kittiwake; Black guillemot; Common gull; Common tern; Shag; Great black-backed gull;	Breeding and non-breeding: MMF±1SD from Woodward <i>et al.</i> (2019). Non-breeding: Where outside of the above established foraging ranges, potential for impact is concluded if within the same BDMPS region as the Array Area and the site's population contributes to more than 1% of the relevant BDMPS region population (Appendix 1).	Out – Prey species could be affected by changes to water quality, suspended sediment, UWN, direct habitat loss or damage, changes to physical processes, and invasive and non-native species (INNS). Impacts on species could result due to displaced or reduced foraging resource. The pathway to effects due to insufficient prey resource is weak for these highly mobile receptors. Temporary and low-impact effects are anticipated for local fish and benthic ecology associated with the Array Area only. As such, there would be sufficient alternative resource available to support the species population.

Potential impact	Stage of development			Species / QI	Connectivity distance	Justification / Clarification
	C	O&M	D			
				Cormorant; Great skua; Herring gull; Lesser black-backed gull; Little tern; Manx shearwater; Fulmar; Gannet; Roseate tern; Sandwich tern; and European Storm-petrel.		
Disturbance from artificial light (temporary)	✓	✓	✓	Manx shearwater; Storm-petrel; and Leach's Storm-petrel.	Breeding and non-breeding: MMF±1SD from Woodward <i>et al.</i> (2019). Non-breeding: Where outside of the above established foraging ranges, potential for impact is concluded if within the same BDMPS region as the Array Area and the sites population contributes to more than 1% of the relevant BDMPS region population (Appendix 1).	In



## 5.5 Fish and Shellfish Ecology

### Site Scoping

- 5.5.1 A site scoping range of 10km from the boundary of the Proposed Offshore Development has been applied, based on the maximum potential range for any sedimentary impacts caused by the Proposed Offshore Development on designated sites with QIs related to Fish and Shellfish Ecology. This range is based on maximum range of impact from temporary increases in suspended sediment and sediment deposition. A precautionary buffer of 10km has therefore been assumed based on experience from other projects in the wider region and expert judgement as a reasonable distance within which indirect effects (for example, resulting from increased SSC and deposition) will occur. This range will be confirmed (or updated, if necessary) through subsequent technical reporting (specifically, numerical modelling of Marine Physical Processes).
- 5.5.2 A further site scoping range of 100km from the boundary of the Proposed Offshore Development has also been applied, based on the maximum potential range for any impacts from UWN, from the Proposed Offshore Development on designated sites with QIs related to fish or shellfish ecology. A precautionary site scoping range of 100km has therefore been assumed based on experience from other projects in the wider region and expert judgement as a reasonable distance within which indirect effects from UWN will occur. This range will be confirmed (or updated, if necessary) through subsequent UWN modelling.
- 5.5.3 Based on these site scoping ranges, there are no European sites with QIs related to Fish and Shellfish Ecology within the 10km sedimentary scoping range from the boundary of the Proposed Offshore Development. However, there are two European sites with relevant Fish and Shellfish Ecology features, that lie within the 100km UWN scoping range, these are the Langavat SAC and the Little Gruinard River SAC (Table 5.6).

Table 5.6 Designated sites relevant to Fish and Shellfish Ecology.

Designated site	Relevant features	Distances from Array Area (km)	Distance from Offshore ECC (km)
Langavat SAC	Atlantic salmon (Annex II)	63.5	20.1
Little Gruinard River SAC	Atlantic salmon (Annex II)	112.8	47.4

### Impact Scoping

- 5.5.4 With consideration of the features scoped in within Table 5.6 above, Table 5.7 outlines the potential impacts, pathways of effect, and their respective ZoI, determining whether the identified species should be carried forward for screening for LSE.
- 5.5.5 Both the Langavat SAC and the Little Gruinard River SAC are situated outside the 10km sedimentary scoping range but fall within 100km UWN site scoping range. Therefore, the only potential impact pathway is from mortality, injury, and behavioral impacts and auditory masking arising from noise and vibration.

Table 5.7 Potential impacts on designated sites relevant to Fish and Shellfish Ecology.

Potential impact	Stage of development			Species/Feature	Zone of Influence	Scoped in/out
	C	O&M	D			
Mortality, injury (TTS), and behavioral impacts and auditory masking arising from noise and vibration (temporary)	✓	-	✓	Langavat SAC designated for Atlantic salmon (Annex II); and Little Gruinard River SAC designated for Atlantic salmon (Annex II).	SACs within 100km radius for construction & decommissioning phases. Within the Array Area and Offshore ECC for operational and management phase as noise and vibration Zol limited to up to 50m from activity and vessels.	In – Construction & decommissioning. Out – O&M
Temporary increases in SSCs and deposition (temporary)	✓	✓	✓	None	10km based on maximum distance for any sedimentary impacts.	Out – no SACs with Fish and Shellfish Ecology features within 10km.
Direct and indirect seabed disturbance leading to release of sediment contaminants (temporary)	✓	-	✓	None	10km based on maximum distance for any sedimentary impacts.	Out – no SACs with Fish and Shellfish Ecology features within 10km.
Accidental pollution (temporary)	✓	✓	✓	None	10km based on maximum distance for any sedimentary impacts.	Out – no SACs with Fish and Shellfish Ecology features within 10km.
EMF effects arising from cables (permanent)	-	✓	-	None	Immediate vicinity of live cabling.	Out – no SACs with Fish and Shellfish Ecology features within 10km.
Increased risk of introduction and/or spread of INNS from vessel traffic (temporary)	✓	-	✓	None	Within the Array Area and Offshore ECC.	Out – no SACs with Fish and Shellfish Ecology features within 10km.
Colonisation of Hard Substrates (permanent)	✓	✓	✓	None	Within the Array Area and Offshore ECC.	Out – no SACs with Fish and Shellfish Ecology features within 10km.
Habitat loss and disturbance (temporary and long-term)	-	✓	-	None	Within the Array Area and Offshore ECC.	Out – no SACs with Fish and Shellfish Ecology features within 10km.

## 5.6 Marine Physical Processes

### Site Scoping

- 5.6.1 An initial site scoping range of 10km from the boundary of the Proposed Offshore Development was applied to identify all designated sites with QIs related to Marine Physical Processes. This conservative scoping range is based on the maximum potential range for any impacts caused by the Proposed Offshore Development on designated sites with QIs related to Marine Physical Processes. Therefore, a precautionary buffer of 10km has been assumed based on the largest spring tidal ellipse excursion around the Proposed Offshore Development of approximately 10km (ABPmer, 2008). This range will be confirmed (or updated, if necessary) through subsequent technical reporting (such as site-specific numerical modelling of Marine Physical Processes).
- 5.6.2 There are no European sites with QIs related to Marine Physical Processes that have a connectivity to the Proposed Offshore Development. All relevant designated sites are located more than 10km away from the Proposed Offshore Development and, therefore, are not considered further in the Screening for LSE.

### Impact Scoping

- 5.6.3 As no sites are scoped in regarding Marine Physical Processes, consideration of impacts is unnecessary.

## 6. Screening Undertaken for the Proposed Offshore Development Alone

### 6.1 Screening Process

6.1.1 In Section 1, a list of relevant European sites and their QIs was identified based on potential impacts arising from activities associated with the Proposed Offshore Development. This section evaluates the potential for LSEs on the designated sites and relevant QIs scoped in from Section 1, with justification provided for each assessment.

### 6.2 Benthic Subtidal and Intertidal Ecology

6.2.1 There are no European sites with QIs related to Benthic Subtidal and Intertidal Ecology that have a connectivity to the Proposed Offshore Development. All relevant designated sites are located more than 10km (Zol) away from the Proposed Offshore Development and are therefore not considered further in the Screening for LSE.

### 6.3 Marine Mammals

#### Impacts

6.3.1 The potential impacts related to Marine Mammals are detailed in Table 5.2. All impact pathways detailed in Table 5.2, with the exception of disturbance from EMF, have been considered in the screening assessment, due to the ranging of mobile marine mammal species throughout their MU (IAMMWG, 2023) and so connectivity to the Proposed Offshore Development and associated Zols. The impacts considered comprise those relating to:

- UWN (temporary);
- Vessel disturbance (temporary);
- Collision risk (temporary);
- Accidental pollution (temporary);
- Changes to prey (temporary or permanent);
- Habitat loss (temporary or permanent);
- Entanglement (permanent); and
- Barrier effect (permanent).

#### Screening of Sites

6.3.2 The screening results of the Proposed Offshore Development for the marine mammal receptor group are listed in Table 6.1 and shown in Figure 6.1. Only the Inner Hebrides and the Minches SAC has been screened into the assessment.

Table 6.1 Screening results of the Proposed Offshore Development for Marine Mammal receptors.

Designated site	Relevant features	Closest distance to proposed Offshore Development (km)	Potential for LSE (phase of development)			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
Inner Hebrides and the Minches SAC	Harbour porpoise	Within Proposed Offshore Development.	<b>LSE:</b> UWN; Vessel Disturbance; Collision Risk; Accidental pollution; Changes to prey; and Habitat loss.	<b>LSE:</b> UWN; Vessel Disturbance; Collision Risk; Changes to prey; Entanglement; Barrier effects; and Habitat loss.	<b>LSE:</b> UWN; Vessel Disturbance; Collision Risk; Accidental pollution; Changes to prey; and Habitat loss.	<b>No</b>
Skerries and Causeway SAC	Harbour porpoise	317km	<b>LSE:</b> UWN; Vessel Disturbance; Collision Risk; Accidental pollution; Changes to prey; and Habitat loss.	<b>LSE:</b> UWN; Vessel Disturbance; Collision Risk; Changes to prey; Entanglement; Barrier effects; and Habitat loss.; and	<b>LSE:</b> UWN; Vessel Disturbance; Collision Risk; Accidental pollution; Changes to prey; and Habitat loss.	<b>Yes</b> – For UK SACs, conservation objectives are largely site based, with little to no consideration of connectivity of the feature. Due to the distance between the SAC and the Proposed Offshore Development, it is unlikely that potential effects would impact harbour porpoise within this SAC. Therefore, the Proposed Offshore Development is considered to have no LSE on the harbour porpoise feature of the SAC.

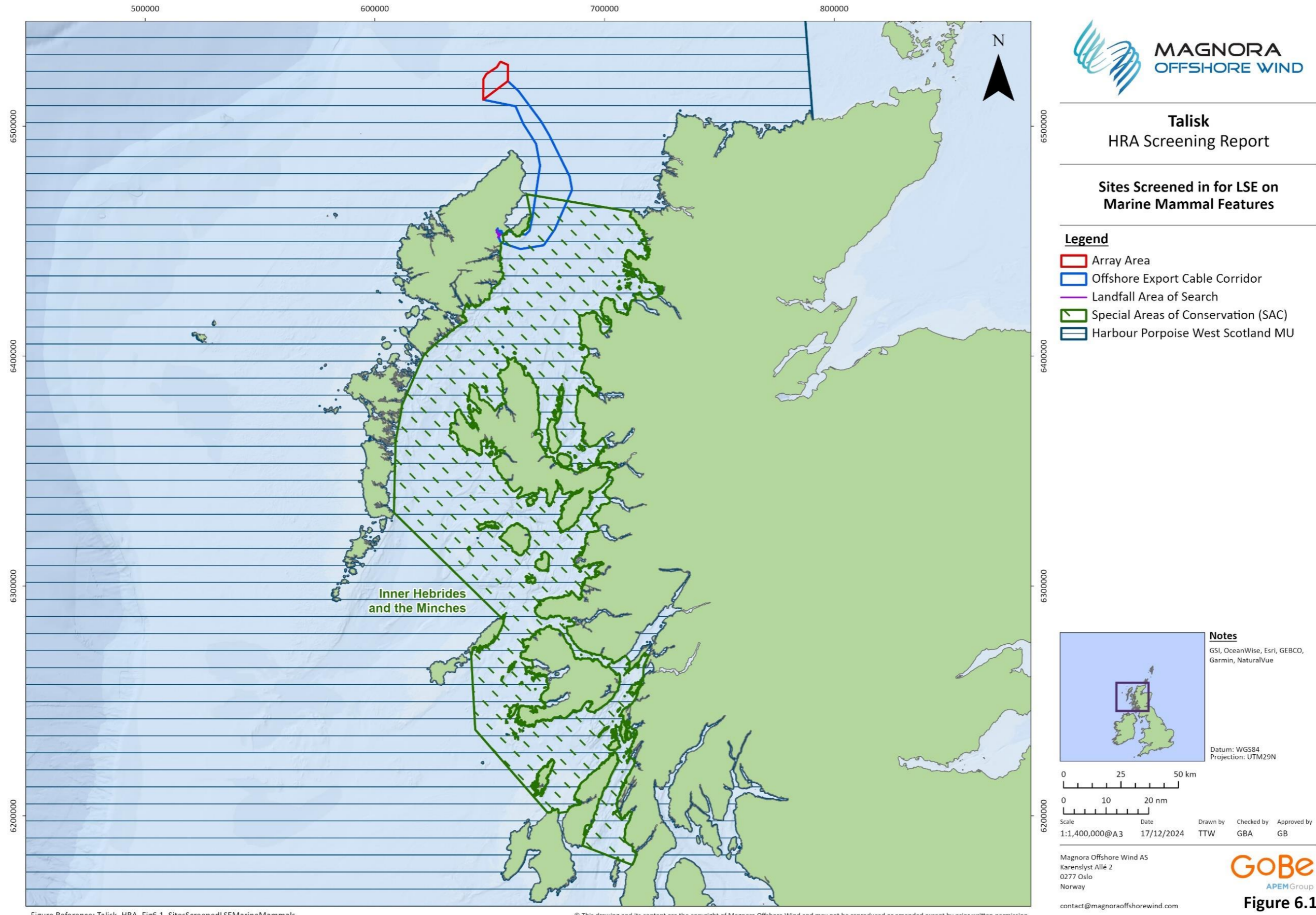


Figure 6.1 Sites screened in for LSE on Marine Mammal features.

## 6.4 Offshore Ornithology

### Impacts

6.4.1 The impacts screened in within the assessment comprise of:

- Collision risk (permanent);
- Distributional responses (permanent);
- Migratory collision risk (permanent);
- Entanglement (permanent);
- Changes to prey (temporary or permanent); and
- Disturbance from artificial light (temporary).

6.4.2 As the majority of impacts originate exclusively from the Array Area, the distances used for the screening will solely be from the Array Area unless otherwise specified.

### Screening of Sites

6.4.3 The screening results of the Proposed Offshore Development for the Offshore Ornithology receptor group are listed in Table 6.2 and shown in Figure 6.2 across Scotland and Figure 6.3 across England and the wider EU.

Table 6.2 Screening results of the Proposed Offshore Development for Offshore Ornithology receptors

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
Lewis Peatlands SPA	5.91 (from ECC)	Red-throated diver (Br)	<b>LSE:</b> Distributional responses	<b>LSE:</b> Distributional responses.	<b>LSE:</b> Distributional responses.	No
		Black-throated diver (Br)	<b>No LSE.</b>	<b>No LSE.</b>	<b>No LSE.</b>	Yes: This species was scoped out as there is no connectivity during the breeding season as they forage within the onshore Lewis Peatlands SPA.
	30.14	Dunlin (Br)	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	Yes: Beyond species MMF+ISD. Therefore, no breeding season connectivity. Migratory collision risk is screened out for these species due to no SPA migratory pathways exceeding 10% coverage of the Array Area.
		Golden plover (Br)				
		Greenshank (Br)				
Merlin (Br)						
Golden eagle (Br)	<b>No LSE.</b>	<b>No LSE.</b>	<b>No LSE.</b>	Yes: Not a seabird		
North Rona and Sula Sgeir SPA	23.6	Puffin (Br)	<b>No LSE.</b>	<b>LSE:</b> Distributional responses; and Entanglement.	<b>No LSE.</b>	No
		Guillemot (Br)				
		Razorbill (Br)				
		Fulmar (Br)	<b>No LSE.</b>	<b>LSE:</b> Distributional responses.	<b>No LSE.</b>	No
		Great black-backed gull (Br)	<b>No LSE.</b>	<b>LSE:</b> Collision risk.	<b>No LSE.</b>	No
		Gannet (Br)	<b>No LSE.</b>	<b>LSE:</b> Collision risk; Distributional responses; and Entanglement.	<b>No LSE.</b>	No
		Kittiwake (Br)	<b>No LSE.</b>	<b>LSE:</b>	<b>No LSE.</b>	No

<sup>6</sup> Distance is to Array Area unless stated otherwise e.g., Lewis Peatlands SPA connectivity to Red-throated diver and Black-throated diver



Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
				Collision risk; and Distributional responses.		
		Storm-petrel (Br)	<b>LSE:</b> Artificial light	<b>LSE:</b> Collision risk; Artificial light; and Distributional responses.	<b>LSE:</b> Artificial light	No
		Leach's storm-petrel (Br)	<b>LSE:</b> Artificial light	<b>LSE:</b> Artificial light	<b>LSE:</b> Artificial light	
		Seabird assemblage (Br)	<b>No LSE.</b>	<b>LSE:</b> Collision risk; Distributional responses; and Entanglement.	<b>No LSE.</b>	No
Cape Wrath SPA	72.6	Puffin (Br)	<b>No LSE.</b>	<b>LSE:</b> Distributional responses; and Entanglement.	<b>No LSE.</b>	No
		Guillemot (Br)				
		Razorbill (Br)				
		Fulmar (Br)	<b>No LSE.</b>	<b>LSE:</b> Distributional responses.	<b>No LSE.</b>	No
		Kittiwake (Br)	<b>No LSE.</b>	<b>LSE:</b> Collision risk; and Distributional responses.	<b>No LSE.</b>	No
		Seabird assemblage (Br)	<b>No LSE.</b>	<b>LSE:</b> Collision risk; Distributional responses; and Entanglement.	<b>No LSE.</b>	No
Handa SPA	72.8	Guillemot (Br)	<b>No LSE.</b>	<b>LSE:</b>	<b>No LSE.</b>	No
		Razorbill (Br)				

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
				Distributional responses; and Entanglement.		
		Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No
		Great skua (Br)	No LSE.	LSE: Collision risk.	No LSE.	No
		Kittiwake (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No
		Seabird assemblage (Br)	No LSE.	LSE: Collision risk; Distributional responses; and Entanglement.	No LSE.	No
Flannan Isles SPA	77.2	Puffin (Br)	No LSE.	LSE: Distributional responses; and Entanglement.	No LSE.	No
		Guillemot (Br)				
		Razorbill (Br)				
		Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No
		Kittiwake (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No
		Leach's storm-petrel (Br)	LSE: Artificial light.	LSE: Artificial light.	LSE: Artificial light.	No
		Seabird assemblage (Br)	No LSE.	LSE: Collision risk;	No LSE.	No

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
Shiant Isles SPA	88.3	Puffin (Br)	No LSE.	Distributional responses; and Entanglement.	No LSE.	No
		Guillemot (Br)		LSE: Distributional responses; and Entanglement.		
		Razorbill (Br)				
		Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No
		Kittiwake (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No
		Seabird assemblage (Br)	No LSE.	LSE: Collision risk; Distributional responses; and Entanglement.	No LSE.	No
		Greenland barnacle goose (Non-br)	No LSE.	No LSE: Migratory collision risk	No LSE.	Yes: Migratory collision risk is screened out for this species due to no SPA migratory pathways exceeding 10% coverage of the Array Area.
		Shag (Br)	No LSE.	No LSE: Distributional responses; and Entanglement.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
Priest Island (Summer Isles) SPA	100.4	Storm-petrel (Br)	LSE: Artificial light.	LSE: Collision risk; Artificial light; and Distributional responses.	LSE: Artificial light.	No
	100.6	Puffin (Br)	No LSE.	LSE:	No LSE.	No

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
Sule Skerry and Sule Stack SPA				Distributional responses; and Entanglement.		
		Guillemot (Br)	No LSE.	No LSE: Distributional responses; and Entanglement.	No LSE.	Yes: Beyond species MMF+ISD. Therefore, no connectivity.
		Gannet (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No
		Seabird assemblage (Br)	No LSE.		No LSE.	No
		Storm-petrel (Br)	LSE: Artificial light.	LSE: Collision risk; Artificial light; and Distributional responses.	LSE: Artificial light.	No
		Leach's storm-petrel (Br)	LSE: Artificial light.	LSE: Artificial light.	LSE: Artificial light.	
		Shag (Br)	No LSE.	No LSE: Distributional responses; and Entanglement.	No LSE.	
Dornoch Firth and Loch Fleet Ramsar	108.2	Greylag goose (Non-br)	No LSE.	LSE: Migratory collision risk.	No LSE.	No: Ramsar migratory pathways exceeding 10% coverage of Talisk Array Area and species migratory zone overlapping.
		Dunlin (Non-br)				
		Oystercatcher (Non-br)				
		Bar-tailed godwit (Non-br)	No LSE.	No LSE: Migratory collision risk.	No LSE.	Yes: Ramsar migratory pathways do not exceed 10% coverage of Talisk Array Area.
		Curlew (Non-br)				
		Osprey (Non-br)				
		Redshank (Non-br)				

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
		Scaup (Non-br)				
		Teal (Non-br)				
		Waterfowl assemblage (Non-br)				
		Wigeon (Non-br)				
North Caithness Cliffs SPA	137.8	Puffin (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No
		Guillemot (Br); Razorbill (Br)	No LSE.	No LSE.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No
		Kittiwake (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No
		Seabird assemblage (Br)				
		Peregrine (Br)	No LSE.	No LSE.	No LSE.	Yes: non-seabird species with no connectivity to the Array Area.
Moray and Nairn Coast Ramsar	142.3	Greylag goose (Non-br)	No LSE.	LSE: Migratory collision risk.	No LSE.	No: Ramsar migratory pathways exceeding 10% coverage of Talisk Array Area and species migratory zone overlapping.
		Pink-footed goose (Non-br)				
		Redshank (Non-br)				
		Waterfowl assemblage (Non-br)	No LSE.	No LSE.	No LSE.	
St Kilda SPA	146.5	Puffin (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
		Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No
		Manx shearwater (Br)	LSE: Artificial light.	LSE: Collision risk; Artificial light; and Distributional responses.	LSE: Artificial light.	No
		Guillemot (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Beyond species MMF+ISD. Therefore, no connectivity.
		Razorbill (Br)				
		Great skua (Br)	No LSE.	LSE: Collision risk.	No LSE.	No
		Kittiwake (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No
		Gannet (Br)				
		Seabird assemblage (Br)				
		Leach's petrel (Br)	LSE: Artificial light.	LSE: Artificial light.	LSE: Artificial light.	No
		Storm-petrel (Br)	LSE: Artificial light.	LSE: Collision risk; Artificial light; and Distributional responses.	LSE: Artificial light.	
Dornoch Firth and Loch Fleet SPA	154.3	Dunlin (Non-br)	No LSE.	LSE: Migratory collision risk.	No LSE.	No: SPA migratory pathways exceeding 10% coverage of Talisk Array Area and species migratory zone overlapping with Talisk Array Area.
		Greylag goose (Non-br)				
		Oystercatcher (Non-br)				
		Bar-tailed godwit (Non-br)	No LSE.	No LSE: Migratory collision risk.	No LSE.	

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
		Curllew (Non-br)				Yes: Although SPA migratory pathways exceed 10% coverage of Talisk Array Area, species migratory zone does not overlap.
		Osprey (Non-br)				
		Redshank (Non-br)				
		Scaup (Non-br)				
		Teal (Non-br)				
		Waterfowl assemblage (Non-br)				
		Wigeon (Non-br)				
South Uist Machair and Lochs SPA	157.3	Little tern (Br)	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
		Corncrake (Br)	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	Yes: SPA migratory pathways do not exceed 10% coverage of Talisk Array Area.
		Dunlin (Br)				
		Oystercatcher (Br)				
		Redshank (Br)				
		Ringed plover (Non-br)				
Sanderling (Br)						
Hoy SPA	160.6	Puffin (Br)	<b>No LSE.</b>	<b>LSE:</b> Distributional responses.	<b>No LSE.</b>	No
		Fulmar (Br)				
		Great skua (Br)	<b>No LSE.</b>	<b>LSE:</b> Collision risk.	<b>No LSE.</b>	No
		Kittiwake (Br)	<b>No LSE.</b>	<b>LSE:</b> Collision risk; and Distributional responses.	<b>No LSE.</b>	No
		Arctic skua (Br)	<b>No LSE.</b>	<b>No LSE:</b>	<b>No LSE.</b>	

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
		Great black-backed gull (Br)		Collision risk; and Distributional responses.		Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Guillemot (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Peregrine (Br)	No LSE.	No LSE.	No LSE.	Yes: non-seabird species with no connectivity to the Array Area.
		Red-throated diver (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: SPA migratory pathways do not exceed 10% coverage of Talisk array.
		Seabird assemblage (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No
Moray Firth SPA	161.9	Great northern diver (Non-br)	No LSE.	LSE: Migratory collision risk.	No LSE.	No: SPA migratory pathways exceeding 10% coverage of Talisk Array Area and species migratory zone overlapping with Talisk Array Area.
		Red-breasted merganser (Non-br)				
		Eider (Non-br)	No LSE.	No LSE: Migratory collision risk.	No LSE.	
		Goldeneye (Non-br)				
		Long-tailed duck (Non-br)				
		Red-throated diver (Non-br)				
		Scaup (Non-br)				
		Slavonian grebe (Non-br)				
		Velvet scoter (Non-br)				



Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
		Common scoter (Non-br)	No LSE.	No LSE: Migratory collision risk.	No LSE.	Yes: SPA migratory pathways do not exceed 10% coverage of Talisk Array Area.
		Shag (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
Marwick Head SPA	168.4	Kittiwake (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No
		Seabird assemblage (Br)				
		Guillemot (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	
Cromarty Firth SPA	169.4	Common tern (Br)	No LSE.	No LSE: Migratory collision risk.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
		Bar-tailed godwit (Nob-br)	No LSE.	No LSE: Migratory collision risk.	No LSE.	Yes: SPA migratory pathways do not exceed 10% coverage of Talisk Array Area.
		Curlew (Non-br)				
		Dunlin (Non-br)				
		Greylag goose (Non-br)				
		Knot (Non-br)				
		Osprey (Br)				
		Oystercatcher (Non-br)				
		Pintail (Non-br)				
		Red-breasted merganser (Non-br)				
		Redshank (Non-br)				
Scaup (Non-br)						

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
		Whooper swan (Non-br)				
		Wigeon (Non-br)				
		Waterfowl assemblage (Non-br)				
East Caithness Cliffs SPA	171.0	Kittiwake (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No
		Great black-backed gull (Br)	No LSE.	No LSE: Collision risk.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Herring gull (Br)				
		Guillemot (Br)	No LSE.	No LSE: Distributional responses	No LSE.	
		Razorbill (Br)				
		Fulmar (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	
		Cormorant (Br)	No LSE.	No LSE: Distributional responses	No LSE.	
		Shag (Br)	No LSE.	No LSE: Distributional responses	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Peregrine (Br)	No LSE.	No LSE.	No LSE.	Yes: non-seabird species with no connectivity to the Array Area.
Seabird assemblage (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No		

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
Loch Eye SPA & Ramsar	173.9	Greylag goose (Non-br)	No LSE.	LSE: Migratory collision risk.	No LSE.	No: Ramsar migratory pathways exceeding 10% coverage of Talisk Array Area and species migratory zone overlapping with Talisk Array Area.
		Whooper swan (Non-br)	No LSE.	No LSE: Migratory collision risk.	No LSE.	Yes: Ramsar migratory pathways do not exceed 10% coverage of Talisk Array Area.
Inner Moray Firth SPA & Ramsar	179.8	Common tern (Br)	No LSE.	No LSE: Collision risk.	No LSE.	Yes: Beyond species MMF+ISD. Therefore, no connectivity. No overlap on migration.
		Cormorant (Non-br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Beyond species MMF+ISD. Therefore, no connectivity.
		Greylag goose (Non-br)	No LSE.	No LSE: Migratory collision risk.	No LSE.	Yes: SPA migratory pathways do not exceed 10% coverage of Talisk Array Area.
		Bar-tailed godwit (Non-br)				
		Curlew (Non-br)				
		Goldeneye (Non-br)				
		Goosander (Non-br)				
		Osprey (Br)				
		Oystercatcher (Non-br)				
		Red-breasted merganser (Non-br)				
		Redshank (Non-br)				
		Scaup (Non-br)				
Teal (Non-br)						
Wigeon (Non-br)						

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
		Waterfowl assemblage (Non-br)				
Rum SPA	180.6	Manx shearwater (Br)	<b>LSE:</b> Artificial light	<b>LSE:</b> Collision risk; Artificial light; and Distributional responses.	<b>LSE:</b> Artificial light	No
		Guillemot (Br)	<b>No LSE.</b>	<b>No LSE:</b> Distributional responses.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Kittiwake (Br)	<b>No LSE.</b>	<b>LSE:</b> Collision risk; and Distributional responses.	<b>No LSE.</b>	No
		Seabird assemblage (Br)	<b>No LSE.</b>	<b>LSE:</b> Collision risk; and Distributional responses	<b>No LSE.</b>	No
		Golden eagle (Br)	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	Yes: SPA migratory pathways do not exceed 10% coverage of Talisk Array Area.
		Red-throated diver (Br)				
Rousay SPA	182.0	Fulmar (Br)	<b>No LSE.</b>	<b>LSE:</b> Distributional responses.	<b>No LSE.</b>	No
		Guillemot (Br)	<b>No LSE.</b>	<b>No LSE:</b> Distributional responses.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Kittiwake (Br)	<b>No LSE.</b>	<b>LSE:</b> Collision risk; and Distributional responses.	<b>No LSE.</b>	No
		Arctic skua (Br)	<b>No LSE.</b>	<b>No LSE:</b>	<b>No LSE.</b>	

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
		Arctic tern (Br)		Collision risk.		Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
		Seabird assemblage (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No
Canna and Sanday SPA	182.4	Puffin (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No
		Guillemot (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Shag (Br)				
		Herring gull (Br)	No LSE.	No LSE: Collision risk	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Kittiwake (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No
		Seabird assemblage (Br)				
West Westray SPA	188.4	Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No
		Kittiwake (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No
		Arctic skua (Br)	No LSE.	No LSE: Migratory collision risk.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
		Arctic tern (Br)				
		Guillemot (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Razorbill (Br)				
			No LSE.	LSE:	No LSE.	No

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
		Seabird assemblage (Br)		Collision risk; and Distributional responses.		
Moray and Nairn Coast SPA	194.2	Dunlin (Non-br)	<b>No LSE.</b>	<b>LSE:</b> Migratory collision risk.	<b>No LSE.</b>	No: SPA migratory pathways exceeding 10% coverage of Talisk Array Area and species migratory zone overlapping with Talisk Array Area.
		Greylag goose (Non-br)				
		Oystercatcher (Non-br)				
		Pink-footed goose (Non-br)				
		Bar-tailed godwit (Non-br)	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	
		Osprey (Br)				
		Red-breasted merganser (Non-br)				
		Redshank (Non-br)				
		Wigeon (Non-br)				
		Waterfowl assemblage (Non-br)				
Copinsay SPA	203.2	Fulmar (Br)	<b>No LSE.</b>	<b>LSE:</b> Distributional responses.	<b>No LSE.</b>	No
		Kittiwake (Br) Seabird assemblage (Br)	<b>No LSE.</b>	<b>LSE:</b> Collision risk; and Distributional responses.	<b>No LSE.</b>	No
		Great black-backed gull (Br)	<b>No LSE.</b>	<b>No LSE:</b> Collision risk.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Guillemot (Br)	<b>No LSE.</b>	<b>No LSE:</b>	<b>No LSE.</b>	

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
				Distributional responses.		Yes: Beyond species MMF+1SD. Therefore, no connectivity.
Calf of Eday SPA	204.4	Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No
		Kittiwake (Br) Seabird assemblage (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No
		Cormorant (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Great black-backed gull (Br)	No LSE.	No LSE: Collision risk.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Guillemot (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
Auskerry SPA	213.2	Storm-petrel (Br)	LSE: Artificial light	LSE: Collision risk; Artificial light; and Distributional responses.	LSE: Artificial light	No
		Arctic tern (Br)	No LSE.	No LSE: Migratory collision risk.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
Loch Spynie SPA	213.7	Greylag goose (Non-br)	No LSE.	No LSE: Migratory collision risk.	No LSE.	Yes: Although SPA migratory pathways exceed 10% coverage of Talisk Array Area species migratory zone does not overlap.
Mingulay and Berneray SPA	218.6	Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No
		Puffin (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)	
			Construction	O&M	Decommissioning		
		Guillemot (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity.	
		Razorbill (Br)					
		Shag (Br)					
		Kittiwake (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.		No
		Seabird assemblage (Br)					
Treshnish Isles SPA	243.6	Greenland barnacle goose (Non-br)	No LSE.	No LSE: Migratory collision risk.	No LSE.	Yes: Although SPA migratory pathways exceed 10% coverage of Talisk Array Area, species migratory zone does not overlap.	
		Storm-petrel (Br)	LSE: Artificial light	LSE: Collision risk; Artificial light; and Distributional responses.	LSE: Artificial light	No	
Glas Eileanan SPA	251.4	Common tern (Br)	No LSE.	No LSE: Collision risk.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.	
Troup, Pennan and Lion's Heads SPA	259.8	Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No	
		Kittiwake (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No	
		Seabird assemblage (Br)					
		Herring gull (Br)	No LSE.	No LSE: Collision risk.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.	
		Guillemot (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.	
Razorbill (Br)							
Firth of Forth SPA and Ramsar	261.8	Pink-footed goose (Non-br)	No LSE.	LSE: Migratory collision risk.	No LSE.	No: Screened in due to SPA and/or Ramsar migratory pathways exceeding 10%	



Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
		Redshank (Non-br)				coverage of Talisk Array Area and species migratory zone overlapping with Talisk Array Area.
		Common scoter (Non-br)				
		Golden plover (Non-br)				
		Knot (Non-br)				
		Oystercatcher (Non-br)				
		Red-breasted merganser (Non-br)				
		Shelduck (Non-br)				
		Wigeon (Non-br)				
		Dunlin (Non-br)				
		Cormorant (Non-br)	<b>No LSE.</b>	<b>No LSE:</b> Distributional responses.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Bar-tailed godwit (Non-br)	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	Yes: Although SPA migratory pathways exceed 10% coverage of Talisk Array Area, species migratory zone does not overlap.
		Curlew (Non-br)				
		Eider (Non-br)				
		Goldeneye (Non-br)				
		Great crested grebe (Non-br)				
		Grey plover (Non-br)				
		Lapwing (Non-br)				
		Long-tailed duck (Non-br)				

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
Fair Isle SPA	270.8	Mallard (Non-br)	No LSE.	LSE: Collision risk.	No LSE.	No
		Red-throated diver (Non-br)				
		Ringed plover (Non-br)				
		Sandwich tern (Non-br; passage only)				
		Scaup (Non-br)				
		Slavonian grebe (Non-br)				
		Turnstone (Non-br)				
		Velvet scoter (Non-br)				
		Waterfowl assemblage (Non-br)				
		Great skua (Br)				
Gannet (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No		
Kittiwake (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No		
Seabird assemblage (Br)						
Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No		
Arctic skua (Br)	No LSE.	No LSE: Collision risk.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.		
Arctic tern (Br)						

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
		Fair Isle wren (Br)	No LSE.	No LSE: Migratory collision risk.	No LSE.	Yes: Ramsar migratory pathways do not exceed 10% coverage of Talisk Array Area.
		Guillemot (Br)	No LSE.	No LSE: Distributinal responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
		Puffin (Br)				
		Razorbill (Br)				
		Shag (Br)				
Foula SPA	270.90	Great skua (Br)	No LSE.	LSE: Collision risk.	No LSE.	No
		Fulmar (Br)	No LSE.	LSE: Distributinal responses.	No LSE.	No
		Kittiwake (Br)	No LSE.	LSE: Collision risk; and Distributinal responses.	No LSE.	No
		Seabird assemblage (Br)				
		Leach's storm-petrel (Br)	LSE: Artificial light	LSE: Artificial light.	LSE: Artificial light	No
		Arctic skua (Br)	No LSE.	No LSE: Collision risk.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
		Arctic tern (Br)				
		Guillemot (Br)	No LSE.	No LSE: Distributinal responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
		Puffin (Br)				
		Razorbill (Br)				
		Shag (Br)				
		Red-throated diver (Br)				
North Colonsay and Western Cliffs SPA	286.9	Guillemot (Br)	No LSE.	No LSE: Distributinal responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
		Kittiwake (Br)	No LSE.	LSE:	No LSE.	No

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
				Collision risk; and Distributional responses.		
		Chough (Br)	No LSE.	No LSE.	No LSE.	Yes: non-seabird species with no connectivity to the Array Area.
		Seabird assemblage (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No
Loch of Skene SPA	293.3	Greylag goose (Non-br)	No LSE.	LSE: Migratory collision risk.	No LSE.	No: SPA migratory pathways exceeding 10% coverage of Talisk Array Area and species migratory zone overlapping with Talisk Array Area.
		Goldeneye (Non-br)	No LSE.	No LSE: Migratory collision risk.	No LSE.	Yes: Although SPA migratory pathways exceed 10% coverage of Talisk Array Area species migratory zone does not overlap.
		Goosander (Non-br)				
Buchan Ness to Collieston Coast SPA	301.0	Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No
		Herring gull (Br)	No LSE.	No LSE: Collision risk.	No LSE.	Yes: Beyond species MMF+ISD. Therefore, no connectivity.
		Kittiwake (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No
		Seabird assemblage (Br)				
		Guillemot (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Beyond species MMF+ISD. Therefore, no connectivity.
		Shag (Br)				
Sumburgh Head SPA	302.3	Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
		Guillemot (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Arctic tern (Br)	No LSE.	No LSE: Collision risk.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
		Kittiwake (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No
		Seabird assemblage (Br)				
Mousa SPA	314.5	Arctic tern (Br)	No LSE.	No LSE: Collision risk.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
		Storm-petrel (Br)	LSE: Artificial light	LSE: Collision risk; Artificial light; and Distributional responses.	LSE: Artificial light	No
Fowlsheugh SPA	317.2	Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No
		Razorbill (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Guillemot (Br)				
		Herring gull (Br)	No LSE.	No LSE: Collision risk.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Kittiwake (Br)	No LSE.	No LSE: Collision risk; and Distributional responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Seabird assemblage (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No
	324.5	Great skua (Br)	No LSE.	LSE:	No LSE.	No

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
Ronas Hill – North Roe and Tingon SPA				Collision risk.		
		Red-throated diver (Br)	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	Yes: Although SPA migratory pathways exceed 10% coverage of Talisk Array Area, species migratory zone does not overlap.
Noss SPA	326.3	Great skua (Br)	<b>No LSE.</b>	<b>LSE:</b> Collision risk.	<b>No LSE.</b>	No
		Fulmar (Br)	<b>No LSE.</b>	<b>LSE:</b> Distributional responses.	<b>No LSE.</b>	No
		Gannet (Br)	<b>No LSE.</b>	<b>LSE:</b> Collision risk; and Distributional responses.	<b>No LSE.</b>	No
		Seabird assemblage (Br)				
		Kittiwake (Br)	<b>No LSE.</b>	<b>No LSE:</b> Collision risk; and Distributional responses.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Puffin (Br)	<b>No LSE.</b>	<b>No LSE:</b> Distributional responses.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Guillemot (Br)				
Outer Firth of Forth and St Andrews Bay Complex SPA	327.0	Gannet (Br)	<b>No LSE.</b>	<b>No LSE:</b> All impacts.	<b>No LSE.</b>	Yes: No functional connectivity to this SPA, which is designated to protect important habitat. Impacts will be considered to functionally linked SPA populations.
		Arctic tern (Br)				
		Black-headed gull (Non-br)				
		Common gull (Non-br)				
		Common scoter (Non-br)				
		Common tern (Br)				
		Eider (Non-br)				
		Goldeneye (Non-br)				

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
		Guillemot (Br and Non-br)				
		Herring gull (Br and Non-br)				
		Kittiwake (Br and Non-br)				
		Little gull (Non-br)				
		Long-tailed duck (Non-br)				
		Manx shearwater (Br)				
		Puffin (Br)				
		Razorbill (Non-br)				
		Red-breasted merganser (Non-br)				
		Red-throated diver (Non-br)				
		Seabird assemblage (Br and Non-br)				
		Shag (Br and Non-br)				
		Slavonian grebe (Non-br)				
		Velvet scoter (Non-br)				
		Waterfowl assemblage (Non-br)				
	333.3	Gadwall (Non-br)	No LSE.	LSE:	No LSE.	

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)				
			Construction	O&M	Decommissioning					
Loch Leven SPA and Ramsar		Pink-footed goose (Non-br)		Migratory collision risk.		No: SPA / Ramsar migratory pathways exceeding 10% coverage of Talisk Array Area and species migratory zone overlapping with Talisk Array Area.				
		Teal (Non-br)								
		Cormorant (Non-br)					<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	Yes: SPA migratory pathways do not exceed 10% coverage of Talisk Array Area.
		Goldeneye (Non-br)								
		Pochard (Non-br)								
		Shoveler (Non-br)								
		Tufted duck (Non-br)								
		Whooper swan (Non-br)								
Waterfowl assemblage (Non-br)										
Greers Isle SPA	337.2	Sandwich tern (Br)	<b>No LSE.</b>	<b>No LSE:</b> Collision risk.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.				
		Black-headed gull (Br)								
		Common gull (Br)								
Nólsoy Island Ramsar	343.5	Fulmar (Br)	<b>No LSE.</b>	<b>LSE:</b> Distributional responses.	<b>No LSE.</b>	No				
		Puffin (Br)	<b>No LSE.</b>	<b>No LSE:</b> Distributional responses.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity.				
		Guillemot (Br)								
		Kittiwake (Br)	<b>No LSE.</b>	<b>No LSE:</b> Collision risk; and Distributional responses.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity.				



Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
		Storm-petrel (Br)	<b>LSE:</b> Artificial light	<b>LSE:</b> Collision risk; Artificial light; and Distributional responses.	<b>LSE:</b> Artificial light	No
Lough Swilly SPA	344.8	Great crested grebe (Non-br) Grey heron (Non-br) Whooper swan (Non-br) Greylag goose (Non-br) Shelduck (Non-br) Wigeon (Non-br) Teal (Non-br) Mallard (Non-br) Shoveler (Non-br) Scaup (Non-br) Goldeneye (Non-br) Red-breasted merganser (Non-br) Coot (Non-br) Oystercatcher (Non-br) Knot (Non-br) Dunlin (Non-br) Curlew (Non-br)	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	Yes: SPA migratory pathways do not exceed 10% coverage of Talisk Array Area.

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)				
			Construction	O&M	Decommissioning					
		Redshank (Non-br)								
		Greenshank (Non-br)								
		Black-headed gull (Non-br)								
		Common gull (Non-br)								
		Greenland white-fronted goose (Non-br)								
		Common tern (Br)					No LSE.	No LSE: Collision risk.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
		Sandwich tern (Br)								
Fetlar SPA	352.1	Great skua (Br)	No LSE.	LSE: Collision risk.	No LSE.	No				
		Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No				
		Arctic skua (Br)	No LSE.	No LSE: Migratory collision risk.	No LSE.	Yes: SPA migratory pathways do not exceed 10% coverage of Talisk Array Area.				
		Arctic tern (Br)								
		Dunlin (Br)								
		Red-necked phalarope (Br)								
		Whimbrel (Br)								
		Seabird assemblage (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No				
	353.5	Gannet (Br)	No LSE.	No LSE:	No LSE.					

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
Forth Islands SPA				Collision risk; and Distributional responses.		Yes: Beyond species MMF+1SD if measured as distance around land. It is in a different BDMPS region for non-breeding season. Therefore, no connectivity.
		Arctic tern (Br)	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
		Common tern (Br)				
		Roseate tern (Br)				
		Sandwich tern (Br)				
		Herring gull (Br)	<b>No LSE.</b>	<b>No LSE:</b> Collision risk.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Lesser black-backed gull (Br)				
		Kittiwake (Br)	<b>No LSE.</b>	<b>No LSE:</b> Collision risk; and Distributional responses.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Seabird assemblage (Br)				
		Puffin (Br)				
		Razorbill (Br)				
		Guillemot (Br)				
		Cormorant (Br)				
Shag (Br)						
Imperial Dock Lock, Leith SPA	363.2	Common tern (Br)	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
Hermaness, Saxa Vord and Valla Field SPA	364.5	Great skua (Br)	<b>No LSE.</b>	<b>LSE:</b> Collision risk.	<b>No LSE.</b>	No
		Fulmar (Br)	<b>No LSE.</b>	<b>LSE:</b> Distributional responses.	<b>No LSE.</b>	No
		Gannet (Br)	<b>No LSE.</b>	<b>LSE:</b>	<b>No LSE.</b>	No

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
		Seabird assemblage (Br)		Collision risk; and Distributional responses.		
		Kittiwake (Br)	No LSE.	No LSE: Collision risk; and Distributional responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
		Guillemot (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
		Puffin (Br)				
		Shag (Br)				
		Red-throated diver (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. SPA migratory pathways do not exceed 10% coverage of Talisk Array Area.
Rathlin Island SPA	378.5	Puffin (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Peregrin (Br)	No LSE.	No LSE.	No LSE.	Yes: non-seabird species with no connectivity to the Array Area.
		Common gull (Br)	No LSE.	No LSE: Collision risk.	No LSE	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Lesser black-backed gull (Br)				
		Herring gull (Br)				
		Guillemot (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No: Beyond species MMF+1SD. However, BDMPS region pop. contributing more than 1% of relevant BDMPS region.
		Razorbill (Br)				
		Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No
		Kittiwake (Br)	No LSE.	LSE:	No LSE.	No: Beyond species MMF+1SD. However, BDMPS region pop. contributing more than 1% of relevant BDMPS region.
		Seabird assemblage (Br)				

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
				Collision risk; and Distributional responses.		
Illancrone and Noishkeeragh SPA	378.8	Arctic tern (Br); and	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	Yes: SPA migratory pathways do not exceed 10% coverage of Talisk Array Area.
		Little tern (Br).				
		Barnacle goose (Non-br)				
		Common tern (Br)				
Fala Flow SPA and Ramsar	386.6	Pink-footed goose (Non-br)	<b>No LSE.</b>	<b>LSE:</b> Migratory collision risk.	<b>No LSE.</b>	No: Ramsar migratory pathways exceeding 10% coverage of Talisk Array Area and species migratory zone overlapping with Talisk Array Area.
Horn Head to Fanad Head SPA	389.7	Guillemot (Br)	<b>No LSE.</b>	<b>No LSE:</b> Distributional responses.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
		Shag (Br)				
		Cormorant (Br)				
		Razorbill (Br)	<b>No LSE.</b>	<b>LSE:</b> Distributional responses.	<b>No LSE.</b>	No: Beyond species MMF+1SD. However, BDMPS region pop. contributing more than 1% of relevant BDMPS region.
		Kittiwake (Br)	<b>No LSE.</b>	<b>LSE:</b> Collision risk; and Distributional responses.	<b>No LSE.</b>	No: Beyond species MMF+1SD. However, BDMPS region pop. contributing more than 1% of relevant BDMPS region.
		Fulmar (Br)	<b>No LSE.</b>	<b>LSE:</b> Distributional responses.	<b>No LSE.</b>	No
		Barnacle goose (Non-br)	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	Yes: SPA migratory pathways do not exceed 10% coverage of Talisk Array Area.
Greenland white-fronted goose (Non-br)						

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
Ailsa Craig SPA	391.4	Peregrine (Br)	No LSE.	No LSE.	No LSE.	Yes: non-seabird species with no connectivity to the Array Area.
		Chough (Br)				
		Herring gull (Br)	No LSE.	LSE: Collision risk.	No LSE.	No: Beyond species MMF+1SD. However, BDMPS region pop. contributing more than 1% of relevant BDMPS region.
		Lesser black-backed gull (Br)	No LSE.	No LSE: Collision risk.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Guillemot (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Gannet (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No
		Seabird assemblage (Br)				
Tory Island SPA	398.2	Kittiwake (Br)	No LSE.	No LSE: Collision risk; and Distributional responses.	No LSE.	Yes: Non-breeding features of designated sites beyond the MMF±1SD (Woodward <i>et al.</i> , 2019) that constitute <1% of the relevant BDMPS regional population (Appendix 1) have been screened out.
		Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No
		Corncrake (Br)	No LSE.	No LSE: Migratory collision risk.	No LSE.	Yes: SPA migratory pathways do not exceed 10% coverage of Talisk Array Area.
		Razorbill (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
West Donegal Coast SPA	416.7	Puffin (Br)				
		Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No
		Kittiwake (Br)	No LSE.	No LSE:	No LSE.	Yes: Non-breeding features of designated sites beyond the MMF±1SD (Woodward <i>et al.</i> , 2019) that constitute <1% of the

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
				Collision risk; and Distributional responses.		relevant BDMPS regional population (Appendix 1) have been screened out.
		Herring gull (Br)	<b>No LSE.</b>	<b>No LSE:</b> Collision risk.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Razorbill (Br)	<b>No LSE.</b>	<b>No LSE:</b> Distributional responses.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Cormorant (Br)				
		Shag (Br)				
		Chough (Br)	<b>No LSE.</b>	<b>No LSE.</b>	<b>No LSE.</b>	Yes: non-seabird species with no connectivity to the Array Area.
		Peregrine (Br)				
Northumberland Marine SPA	426.0	Seabird assemblage (Br)	<b>No LSE.</b>	<b>No LSE:</b> Collision risk; and Distributional responses.	<b>No LSE.</b>	Yes: No functional connectivity to this SPA, which is designated to protect important habitat. Impacts will be considered to functionally linked SPA populations.
		Arctic tern (Br)	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	
		Common tern (Br)				
		Little tern (Br)				
		Sandwich tern (Br)				
		Roseate tern (Br)				
		Guillemot (Br)	<b>No LSE.</b>	<b>No LSE:</b> Distributional responses.	<b>No LSE.</b>	
Puffin (Br)						
Lough Neagh and Lough Beg SPA	434.1	Golden plover (Non-br)	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	Yes: SPA migratory pathways do not exceed 10% coverage of Talisk Array Area.
		Berwick's swan (Non-br)				
		Whooper swan (Non-br)				
		Goldeneye (Non-br)				

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
		Great crested grebe (Br)				
		Pochard (Non-br)				
		Scaup (Non-br)				
		Shelduck (Non-br)				
		Tufted duck (Non-br)				
		Waterbird assemblage (Non-br)				
		Common tern (Br)				
Copeland Island SPA	451.30	Arctic tern (Br)	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration
		Manx shearwater (Br)	<b>LSE:</b> Artificial light	<b>LSE:</b> Collision risk; Artificial light; and Distributional responses.	<b>LSE:</b> Artificial light	No
Carlingford Lough SPA (Northern Ireland (NI))	454.6	Common tern (Br)	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
		Sandwich tern (Br)				
		Light-bellied brent goose (Non-br)	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	Yes: SPA migratory pathways do not exceed 10% coverage of Talisk Array Area.
Lough Derg (Donegal) SPA	462.8	Lesser clack-backed gull (Br).	<b>No LSE.</b>	<b>No LSE:</b> Collision risk.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Herring gull (Br).				
	463.0	Common tern (Br)	<b>No LSE.</b>	<b>No LSE:</b>	<b>No LSE.</b>	



Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
Strangford Lough SPA		Sandwich tern (Br)		Migratory collision risk.		Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
		Arctic tern (Br)				
		Light-bellied brent goose (Non-br)	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	Yes: SPA migratory pathways do not exceed 10% coverage of Talisk Array Area.
		Bar-tailed godwit (Non-br; assemblage)				
		Redshank (Non-br)				
		Shelduck (Non-br; assemblage)				
		Knot (Non-br)				
		Waterbird assemblage (Non-br)				
Coquet Island SPA	479.5	Arctic tern (Br)	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
		Common tern (Br)				
		Sandwich tern (Br)				
		Roseate tern (Br)				
		Seabird assemblage (Br)				
Ardboline Island and Horse Island SPA	505.2	Cormorant (Non-br)	<b>No LSE.</b>	<b>LSE:</b> Distributional responses.	<b>No LSE.</b>	No: Beyond species MMF+1SD. However, BDMPS region pop. contributing more than 1% of relevant BDMPS region.
		Barnacle goose (Non-br)		<b>No LSE:</b> Migratory collision risk.		Yes: SPA migratory pathways do not exceed 10% coverage of Talisk Array Area.
	518.2	Common tern (Br);	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)	
			Construction	O&M	Decommissioning		
Morecambe Bay and Duddon Estuary SPA		Little tern (Br);				No: Beyond species MMF+1SD. However, BDMPS region pop. contributing more than 1% of relevant BDMPS region.	
		Sandwich tern (Br); and					
		Herring gull (Br); and	No LSE.	LSE: Collision risk.	No LSE.		
		Lesser black-backed gull (Non-br and Br).					
		Bar-tailed godwit (Non-br)	No LSE.	No LSE: Migratory collision risk.	No LSE.		Yes: SPA migratory pathways do not exceed 10% coverage of Talisk Array Area.
		Black-tailed godwit (Non-br)					
		Curlew (Non-br)					
		Dunlin (Non-br)					
		Golden plover (Non-br)					
		Grey plover (Non-br)					
		Knot (Non-br)					
		Little egret (Non-br)					
		Mediterranean gull (Non-br)					
		Oystercatcher (Non-br)					
		Pink-footed goose (Non-br)					
Pintail (Non-br)							
Redshank (Non-br)							
Ringed plover (Non-br)							

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)	
			Construction	O&M	Decommissioning		
		Ruff (Non-br)					
		Sanderling (Non-br)					
		Seabird assemblage (Br)					
		Shelduck (Non-br)					
		Turnstone (Non-br)					
		Waterbird assemblage (Non-br)					
		Whooper swan (Non-br)					
Liverpool Bay SPA	553.8	Little gull (Non-br)	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.	
		Common tern (Br)					
		Little tern (Br)					
		Red-throated diver (Non-br)	<b>No LSE.</b>	<b>No LSE:</b> Distributional responses.	<b>No LSE.</b>		Yes: SPA migratory pathways do not exceed 10% coverage of Talisk Array Area.
		Common scoter (Non-br)	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk; and Distributional responses.	<b>No LSE.</b>		
Waterbird assemblage (Non-br)							
Duvillaun Islands SPA	562.33	Fulmar (Br)	<b>No LSE.</b>	<b>LSE:</b> Distributional responses.	<b>No LSE.</b>	No	
		Storm-petrel (Br)	<b>LSE:</b> Artificial light	<b>LSE:</b> Collision risk; Artificial light; and	<b>LSE:</b> Artificial light	No	

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
				Distributional responses.		
		Barnacle goose (Non-br)	No LSE.	No LSE: Migratory collision risk.	No LSE.	Yes: SPA migratory pathways do not exceed 10% coverage of Talisk Array Area.
Lambay Island SPA	581.3	Lesser black-backed gull (Br)	No LSE.	LSE: Collision risk.	No LSE.	No: Beyond species MMF+1SD. However, BDMPS region pop. contributing more than 1% of relevant BDMPS region.
		Herring gull (Br)				
		Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No
		Razorbill (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No: Beyond species MMF+1SD. However, BDMPS region pop. contributing more than 1% of relevant BDMPS region.
		Guillemot (Br)				
		Puffin (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Cormorant (Br)				
		Shag (Br)				
Kittiwake (Br)	No LSE.	No LSE: Collision risk; and Distributional responses.	No LSE.	Yes: Non-breeding features of designated sites beyond the MMF±1SD (Woodward <i>et al.</i> , 2019) that constitute <1% of the relevant BDMPS regional population (Appendix 1) have been screened out.		

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
		Greylag goose (Non-br)	No LSE.	No LSE: Migratory collision risk.	No LSE.	Yes: SPA migratory pathways do not exceed 10% coverage of Talisk Array Area.
Clare Island SPA	585.9	Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No
		Kittiwake (Br)	No LSE.	No LSE: Collision risk; and Distributional responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
		Common gull (Br)	No LSE.	No LSE: Collision risk.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
		Shag (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
		Guillemot (Br)				
		Razorbill (Br)				
		Chough (Br)	No LSE.	No LSE.	No LSE.	Yes: non-seabird species with no connectivity to the Array Area.
Anglesey Terns / Morwenoliaid Ynys MÃƒn SPA	586.6	Common tern (Br)	No LSE.	No LSE: Collision risk.	No LSE.	Yes: Beyond species MMF+1SD. BDMPS region pop. contributing more than 1% of relevant BDMPS region. However, no overlap on migration.
		Sandwich tern (Br)				
		Arctic tern (Br)				
		Roseate tern (Br)	No LSE.	No LSE: Collision risk.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
Humber Estuary Ramsar	588.2	Bar-tailed godwit (Non-br)	No LSE.	LSE: Migratory collision risk.	No LSE.	Screened in due to Ramsar migratory pathways exceeding 10% coverage of Talisk Array Area and species migratory zone overlapping with Talisk Array Area.
		Dunlin (Non-br)				
		Golden plover (Non-br)				

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
		Knot (Non-br)				
		Redshank (Non-br)				
		Shelduck (Non-br)				
		Black-tailed godwit (Non-br)	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	Yes: Ramsar migratory pathways do not exceed 10% coverage of Talisk Array Area.
		Waterbird assemblage (Non-br)				
Ribble and Alt Estuaries SPA	589.4	Common tern (Br)	<b>No LSE.</b>	<b>No LSE:</b> Collision risk.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. BDMPS region pop. contributing more than 1% of relevant BDMPS region. However, no overlap on migration.
		Lesser black-backed gull (Br)	<b>No LSE.</b>	<b>LSE:</b> Collision risk.	<b>No LSE.</b>	No: Beyond species MMF+1SD. However, BDMPS region pop. contributing more than 1% of relevant BDMPS region.
		Bar-tailed godwit (Non-br)	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	Yes: SPA migratory pathways do not exceed 10% coverage of Talisk Array Area.
		Berwick's swan (Non-br)				
		Black-tailed godwit (Non-br)				
		Dunlin (Non-br)				
		Golden plover (Non-br)				
		Grey plover (Non-br)				
		Knot (Non-br)				
		Oystercatcher (Non-br)				
		Pink-footed goose (Non-br)				

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
		Pintail (Non-br)				
		Redshank (Non-br)				
		Ringed plover (Non-br)				
		Ruff (Br)				
		Sanderling (Non-br)				
		Seabird assemblage (Br)				
		Shelduck (Non-br)				
		Teal (Non-br)				
		Waterbird assemblage (Non-br)				
		Whooper swan (Non-br)				
		Wigeon (Non-br)				
High Island, Inishshark and Davillaun SPA	610.1	Fulmar (Br)	<b>No LSE.</b>	<b>LSE:</b> Distributional responses.	<b>No LSE.</b>	No
		Arctic tern (Br)	<b>No LSE.</b>	<b>No LSE:</b> Collision risk.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
		Barnacle goose (Non-br)	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	Yes: SPA migratory pathways do not exceed 10% coverage of Talisk Array Area.
Mersey Narrows and North Wirral Foreshore SPA	622.4	Common tern (Br)	<b>No LSE.</b>	<b>No LSE:</b> Collision risk.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
		Little gull (Non-br)				
		Bar-tailed godwit (Non-br)	<b>No LSE.</b>	<b>No LSE:</b> Migratory collision risk.	<b>No LSE.</b>	Yes: SPA migratory pathways do not exceed 10% coverage of Talisk Array Area.

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
Flamborough & Filey Coast SPA	622.9	Knot (Non-br)	No LSE.	No LSE: Collision risk; and Distributional responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Waterbird assemblage (Non-br)				
		Gannet (Br)				
		Kittiwake (Br)				
		Seabird assemblage (Br)				
		Razorbill (Br)				
Humber Estuary SPA and Ramsar	654.5	Guillemot (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity.
		Little tern (Br);	No LSE.	No LSE: Migratory collision risk.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
		Bar-tailed godwit (Non-br);	No LSE.	LSE: Migratory collision risk.	No LSE.	No: SPA migratory pathways exceeding 10% coverage of Talisk Array Area and species migratory zone overlapping with Talisk Array Area.
		Black-tailed godwit (Non-br)				
		Dunlin (Non-br);				
		Golden plover (Non-br);				
		Knot (Non-br);				
		Redshank (Non-br); and				
		Shelduck (Non-br).				
Avocet (Br and Non-br)	No LSE.	No LSE: Migratory collision risk.	No LSE.	Yes: Although SPA migratory pathways exceed 10% coverage of Talisk Array Area, species migratory zone does not overlap.		
Bittern (Br and Non-br);						



Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
		Marsh harrier (Br); Ruff (Non-br); and Waterbird assemblage (Non-br).				
		Hen harrier ( <i>Circus cyaneus</i> ) (Non-br)	No LSE.	No LSE.	No LSE.	Yes: non-seabird species with no connectivity to the Array Area.
Glannau Aberdaron ac Ynys Enlli/ Aberdaron Coast and Bardsey Island SPA	660.8	Manx shearwater (Br)	LSE: Artificial light	LSE: Collision risk; Artificial light; and Distributional responses.	LSE: Artificial light	No: Breeding population contributing more than 1% of relevant BDMPS region.
		Chough (Br and Non-br)	No LSE.	No LSE.	No LSE.	Yes: non-seabird species with no connectivity to the Array Area.
Cliffs of Moher SPA	662.1	Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No
		Kittiwake (Br)	No LSE.	No LSE: Collision risk; and Distributional responses.	No LSE.	Yes: Features of designated sites beyond the MMF±1SD (Woodward <i>et al.</i> , 2019) that constitute <1% of the relevant BDMPS regional population (Appendix 1) have been screened out.
		Guillemot (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Features of designated sites beyond the MMF±1SD (Woodward <i>et al.</i> , 2019) that constitute <1% of the relevant BDMPS regional population (Appendix 1) have been screened out.
		Razorbill (Br)				
		Puffin (Br)				
Chough (Br)	No LSE.	No LSE: Migratory collision risk.	No LSE.	Yes: SPA migratory pathways do not exceed 10% coverage of Talisk Array Area.		
Kerry Head SPA	724.4	Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
		Chough (Br)	No LSE.	No LSE.	No LSE.	Yes: non-seabird species with no connectivity to the Array Area.
Saltee Islands SPA	731.5	Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No
		Gannet (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No: Beyond species MMF+1SD. However, BDMPS region pop. contributing more than 1% of relevant BDMPS region.
		Puffin (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Features of designated sites beyond the MMF±1SD (Woodward <i>et al.</i> , 2019) that constitute <1% of the relevant BDMPS regional population (Appendix 1) have been screened out.
		Cormorant (Br)				
		Shag (Br)				
		Lesser black-backed gull (Br)	No LSE.	No LSE: Collision risk.	No LSE.	Yes: Features of designated sites beyond the MMF±1SD (Woodward <i>et al.</i> , 2019) that constitute <1% of the relevant BDMPS regional population (Appendix 1) have been screened out.
		Herring gull (Br)				
		Kittiwake (Br)	No LSE.	No LSE: Collision risk; and Distributional responses.	No LSE.	Yes: Features of designated sites beyond the MMF±1SD (Woodward <i>et al.</i> , 2019) that constitute <1% of the relevant BDMPS regional population (Appendix 1) have been screened out.
		Guillemot (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No: Beyond species MMF+1SD. However, BDMPS region pop. contributing more than 1% of relevant BDMPS region.
Razorbill (Br)						
Dingle Peninsula SPA	748.7	Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No
		Peregrine (Br)	No LSE.	No LSE.	No LSE.	Yes: non-seabird species with no connectivity to the Array Area.
		Chough (Br)				
	774.7	Fulmar (Br)	No LSE.	LSE:	No LSE.	No

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
Iveragh Peninsula SPA				Distributional responses.		
		Kittiwake (Br)	No LSE.	No LSE: Collision risk; and Distributional responses.	No LSE.	Yes: Features of designated sites beyond the MMF±1SD (Woodward <i>et al.</i> , 2019) that constitute <1% of the relevant BDMPS regional population (Appendix 1) have been screened out.
		Guillemot (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Features of designated sites beyond the MMF±1SD (Woodward <i>et al.</i> , 2019) that constitute <1% of the relevant BDMPS regional population (Appendix 1) have been screened out.
		Peregrine (Br)	No LSE.	No LSE.	No LSE.	Yes: non-seabird species with no connectivity to the Array Area.
		Chough (Br)				
Skomer, Skokholm and the Seas off Pembrokeshire SPA	775.3	Manx shearwater (Br)	LSE: Artificial light	LSE: Collision risk; Artificial light; and Distributional responses.	LSE: Artificial light	No
		Red-billed chough (Br)	No LSE.	No LSE.	No LSE.	Yes: non-seabird species with no connectivity to the Array Area.
		Short-eared owl (Br)				
		Storm-petrel (Br)	No LSE.	No LSE: Distributional responses; and Collision risk.	No LSE.	Yes: Features of designated sites beyond the MMF±1SD (Woodward <i>et al.</i> , 2019) that constitute <1% of the relevant BDMPS regional population (Appendix 1) have been screened out.
		Puffin (Br)	No LSE.	No LSE: Distributional responses; and Entanglement.	No LSE.	Yes: Features of designated sites beyond the MMF±1SD (Woodward <i>et al.</i> , 2019) that constitute <1% of the relevant BDMPS regional population (Appendix 1) have been screened out.

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
Basket Island SPA		Lesser black-backed gull (Br)	No LSE.	LSE: Collision risk	No LSE.	No: Beyond species MMF+1SD. However, BDMPS region pop. contributing more than 1% of relevant BDMPS region.
		Seabird assemblage (Br)	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No: Beyond species MMF+1SD. However, BDMPS region pop. contributing more than 1% of relevant BDMPS region.
	776.4	Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No
	Manx shearwater (Br)	LSE: Artificial light	LSE: Collision risk; Artificial light; and Distributional responses.	LSE: Artificial light	No	
	Storm-petrel (Br)				No	
	Lesser black-backed gull (Br)	No LSE.	No LSE: Collision risk.	No LSE.	Yes: Features of designated sites beyond the MMF±1SD (Woodward <i>et al.</i> , 2019) that constitute <1% of the relevant BDMPS regional population (Appendix 1) have been screened out.	
	Herring gull (Br)					
	Arctic tern (Br)					
	Kittiwake (Br)	No LSE.	No LSE: Collision risk; and Distributional responses.	No LSE.	Yes: Features of designated sites beyond the MMF±1SD (Woodward <i>et al.</i> , 2019) that constitute <1% of the relevant BDMPS regional population (Appendix 1) have been screened out.	
	Razorbill (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Features of designated sites beyond the MMF±1SD (Woodward <i>et al.</i> , 2019) that constitute <1% of the relevant BDMPS regional population (Appendix 1) have been screened out.	
Puffin (Br)						
Shag (Br)						
Chough (Br)	No LSE.	No LSE.	No LSE.	Yes: non-seabird species with no connectivity to the Array Area.		

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
Grassholm SPA	778.1	Gannet (Br).	No LSE.	LSE: Collision risk; and Distributional responses.	No LSE.	No: Beyond species MMF+1SD. However, BDMPS region pop. contributing more than 1% of relevant BDMPS region.
Puffin Island SPA	804.3	Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No
		Manx shearwater (Br)	LSE: Artificial light	LSE: Collision risk; Artificial light; and Distributional responses.	LSE: Artificial light	No
		Storm-petrel (Br)				No
		Lesser black-backed gull (Br)	No LSE.	No LSE: Collision risk.	No LSE.	Yes: Features of designated sites beyond the MMF±1SD (Woodward <i>et al.</i> , 2019) that constitute <1% of the relevant BDMPS regional population (Appendix 1) have been screened out.
		Razorbill (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Features of designated sites beyond the MMF±1SD (Woodward <i>et al.</i> , 2019) that constitute <1% of the relevant BDMPS regional population (Appendix 1) have been screened out.
Puffin (Br)						
Deenish Island and Scariff Island SPA	811.4	Fulmar (Br)	No LSE.	LSE: Distributional responses	No LSE.	No
		Manx shearwater (Br)	LSE: Artificial light	LSE: Collision risk; Artificial light; and Distributional responses.	LSE: Artificial light	No
		Storm-petrel (Br)				No

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
		Lesser black-backed gull (Br)	No LSE.	No LSE: Collision risk.	No LSE.	Yes: Features of designated sites beyond the MMF±1SD (Woodward <i>et al.</i> , 2019) that constitute <1% of the relevant BDMPS regional population (Appendix 1) have been screened out.
		Arctic tern (Br)	No LSE.	No LSE: Migratory collision risk.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration.
Beara Peninsula SPA	812.7	Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No
		Chough (Br)	No LSE.	No LSE.	No LSE.	Yes: non-seabird species with no connectivity to the Array Area.
Skelligs SPA	812.7	Fulmar (Br)	No LSE.	LSE: Distributional responses.	No LSE.	No
		Manx shearwater (Br)	LSE: Artificial light	LSE: Collision risk; Artificial light; and Distributional responses.	LSE: Artificial light	No
		Storm-petrel (Br)	LSE: Artificial light	LSE: Collision risk; Artificial light; and Distributional responses.	LSE: Artificial light	No
		Gannet (Br)	No LSE.	No LSE: Collision risk; and Distributional responses.	No LSE.	Yes: Features of designated sites beyond the MMF±1SD (Woodward <i>et al.</i> , 2019) that constitute <1% of the relevant BDMPS regional population (Appendix 1) have been screened out.
		Kittiwake (Br)				
		Guillemot (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Features of designated sites beyond the MMF±1SD (Woodward <i>et al.</i> , 2019) that constitute <1% of the relevant BDMPS
		Puffin (Br)				

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
						regional population (Appendix 1) have been screened out.
Alde-Ore Estuary SPA and Ramsar	822.2	Lesser black-backed gull (Br)	No LSE.	No LSE: Collision risk.	No LSE.	Yes: Features of designated sites beyond the MMF±1SD (Woodward <i>et al.</i> , 2019) and outside of the relevant BDMPS regional population.
		Sandwich tern (Br)	No LSE.	No LSE: Collision risk.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity. No overlap on migration
		Little tern (Br)				
		Avocet (Br and Non-br)	No LSE.	No LSE: Migratory collision risk.	No LSE.	Yes: Although SPA migratory pathways exceed 10% coverage of Talisk Array Area species migratory zone does not overlap.
		Ruff (Non-br)				
		Marsh harrier (Br)	No LSE.	No LSE.	No LSE.	Yes: non-seabird species with no connectivity to the Array Area.
		Redshank (Non-br)	No LSE.	LSE: Migratory collision risk.	No LSE.	No: SPA/Ramsar migratory pathways exceeding 10% coverage of Talisk Array Area and species migratory zone overlapping with Talisk Array Area.
		Waterbird assemblage (Non-br)				
		Wetland bird assemblage (Br)				
Isles of Scilly SPA	971.9	Great black-backed gull (Br)	No LSE.	No LSE: Collision risk.	No LSE.	Yes: Features of designated sites beyond the MMF±1SD (Woodward <i>et al.</i> , 2019) and outside of the relevant BDMPS regional population.
		Lesser black-backed gull (Br)	No LSE.	LSE: Collision risk.	No LSE.	No: Beyond species MMF+1SD. However, BDMPS region pop. contributing more than 1% of relevant BDMPS region.
		Shag (Br)	No LSE.	No LSE: Distributional responses.	No LSE.	Yes: Beyond species MMF+1SD. Therefore, no connectivity.

Designated site	Distance to Array Area <sup>6</sup> (km)	Relevant features (Br: Breeding; Non-br: Non-breeding)	Impact pathways			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
		Storm-petrel (Br)	<b>LSE:</b> Artificial light	<b>LSE:</b> Collision risk; Artificial light; and Distributional responses.	<b>LSE:</b> Artificial light	No: Beyond species MMF+1SD. However, BDMPS region pop. contributing more than 1% of relevant BDMPS region.
		Seabird assemblage (Br)	<b>No LSE.</b>	<b>No LSE:</b> Collision risk; and Distributional responses.	<b>No LSE.</b>	Yes: Beyond species MMF+1SD. Therefore, no connectivity.



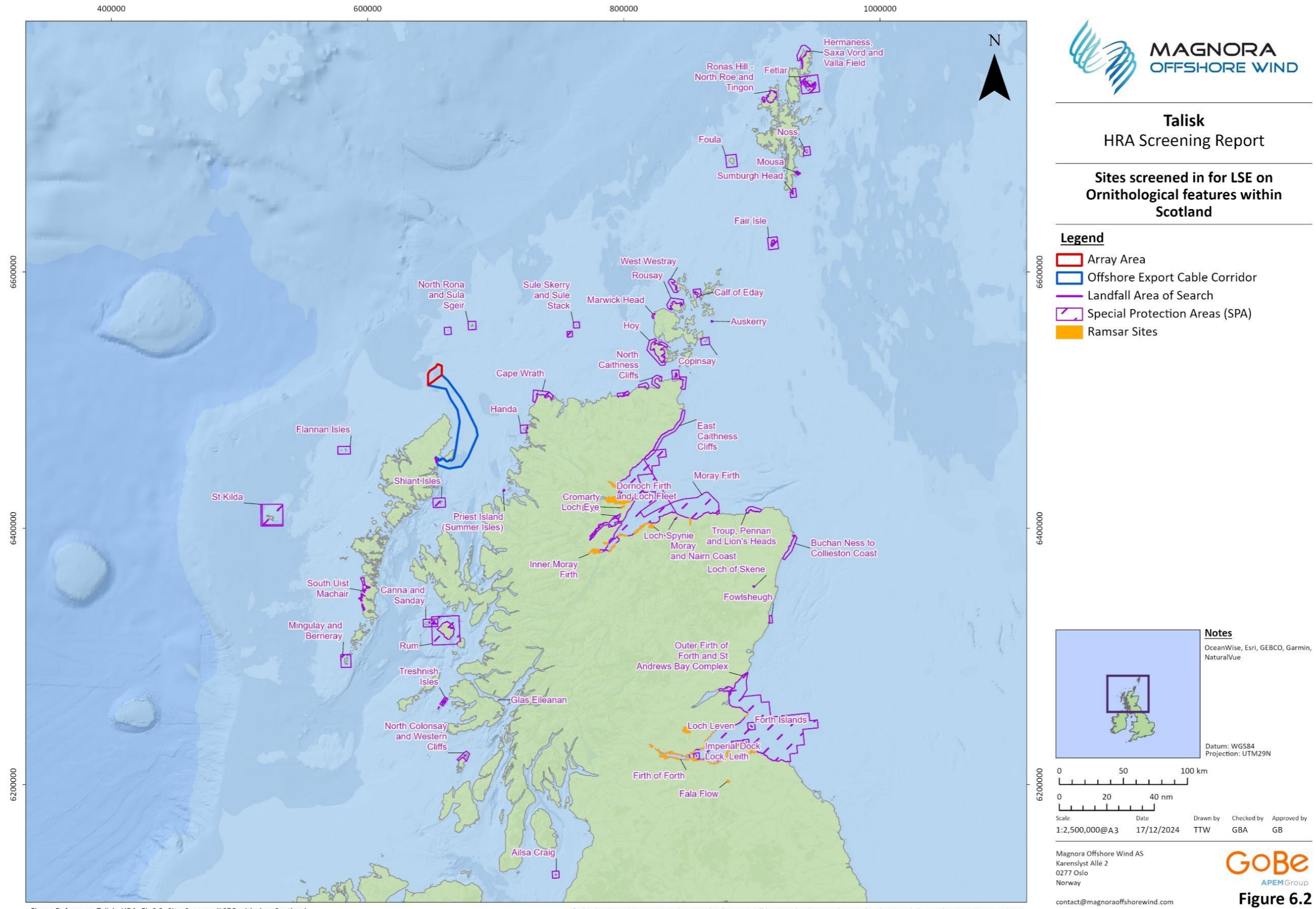
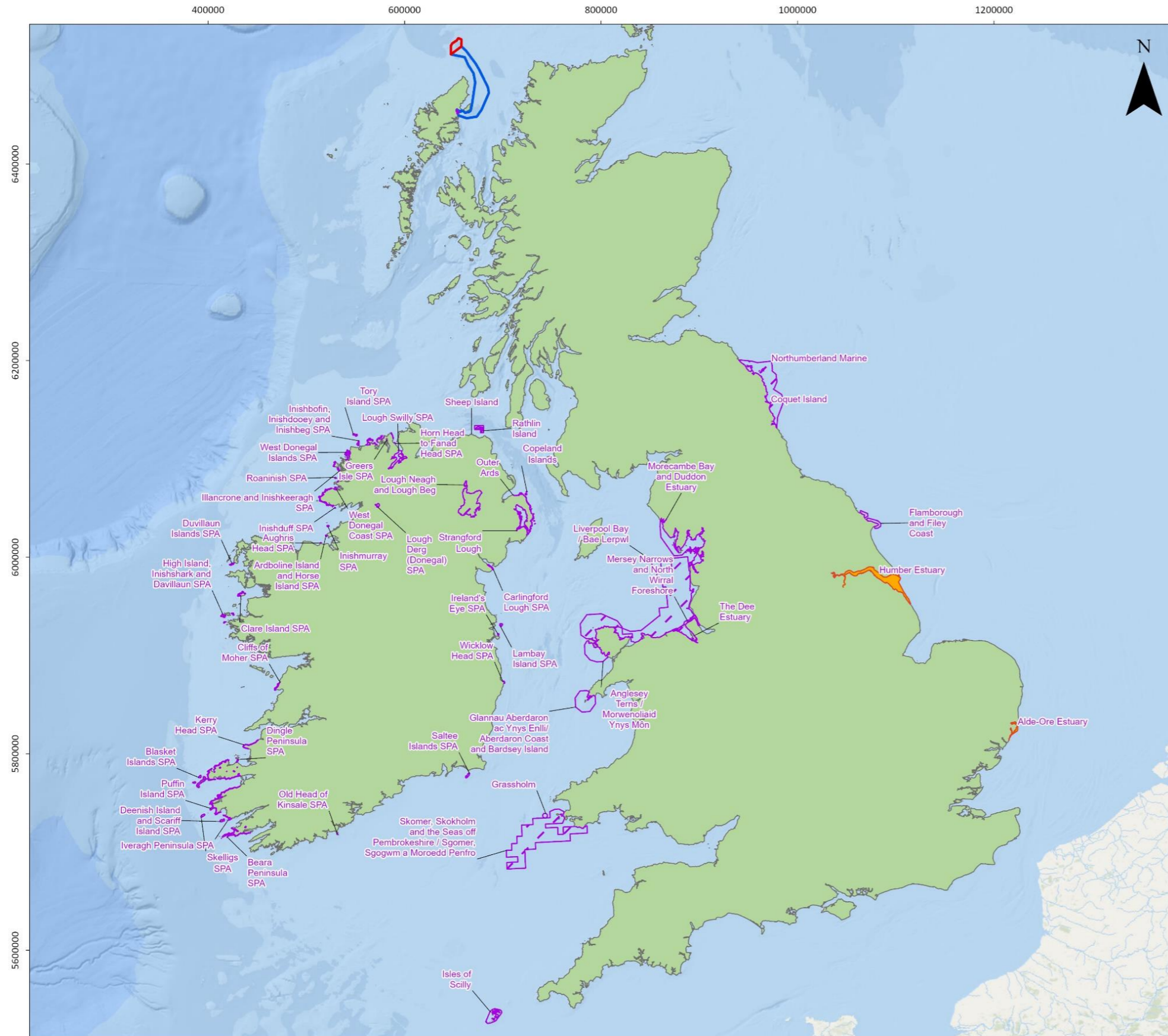


Figure 6.2 Sites screened in for LSE on Ornithological features within Scotland.



**Talisk**  
HRA Screening Report

Sites screened in for LSE on  
Ornithological features within  
the UK and wider EU

**Legend**

- Array Area
- Offshore Export Cable Corridor
- Landfall Area of Search
- Special Protection Areas (SPA)
- Ramsar Sites

**Notes**  
Esri, GEBCO, Garmin, NaturalVue

Datum: WGS84  
Projection: UTM29N

0 100 200 km  
0 40 80 nm

Scale: 1:3,750,000@A3 Date: 17/12/2024 Drawn by: TTTW Checked by: GBA Approved by: GB

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**Figure 6.3**

Figure Reference: Talisk\_HRA\_Fig6.3\_SitesScreenedLSEOrnithologyUKEU

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Figure 6.3 Sites screened in for LSE on Ornithological features within the UK and wider EU.

## 6.5 Fish and Shellfish Ecology

### Impacts

- 6.5.1 The impacts scoped into the screening assessment are detailed in Table 5.7. The only impact considered for Fish and Shellfish Ecology features relates to mortality, injury (TTS), behavioral impacts and auditory masking arising from noise and vibration.

### Screening of sites

- 6.5.2 The Langavat SAC is located approximately 63.5km from the Offshore ECC and 20.17km from the Array Area, falling within the 100km range for assessing potential impacts from UWN. The Little Gruinard River SAC is situated 47.45km from the Offshore ECC (less than 100km), but 112.87km away from the Array Area (more than 100km). Since the Array Area is where piling operations could potentially occur, and it lies outside the range of potential UWN impacts, it has been excluded from screening. Consequently, only Langavat SAC is considered to have the potential for impact due to the UWN during the construction and decommissioning phases of the Proposed Offshore Development (Table 6.3).
- 6.5.3 The screening results of the Proposed Offshore Development for the Fish and Shellfish Ecology receptor group are listed in Table 6.3 and shown in Figure 6.4.

Table 6.3 Screening results of the Proposed Offshore Development for Fish and Shellfish Ecology receptors.

Designated site	Relevant features	Closest distance to Array Area (km)	Potential for LSE (Phase of development)			Can LSE be screened out? (yes/no)
			Construction	O&M	Decommissioning	
Langavat SAC	Atlantic salmon (Annex II)	63.5	LSE: Mortality, injury (TTS), behavioral impacts and auditory masking arising from noise and vibration	N/A	LSE: Mortality, injury (TTS), behavioral impacts and auditory masking arising from noise and vibration	No

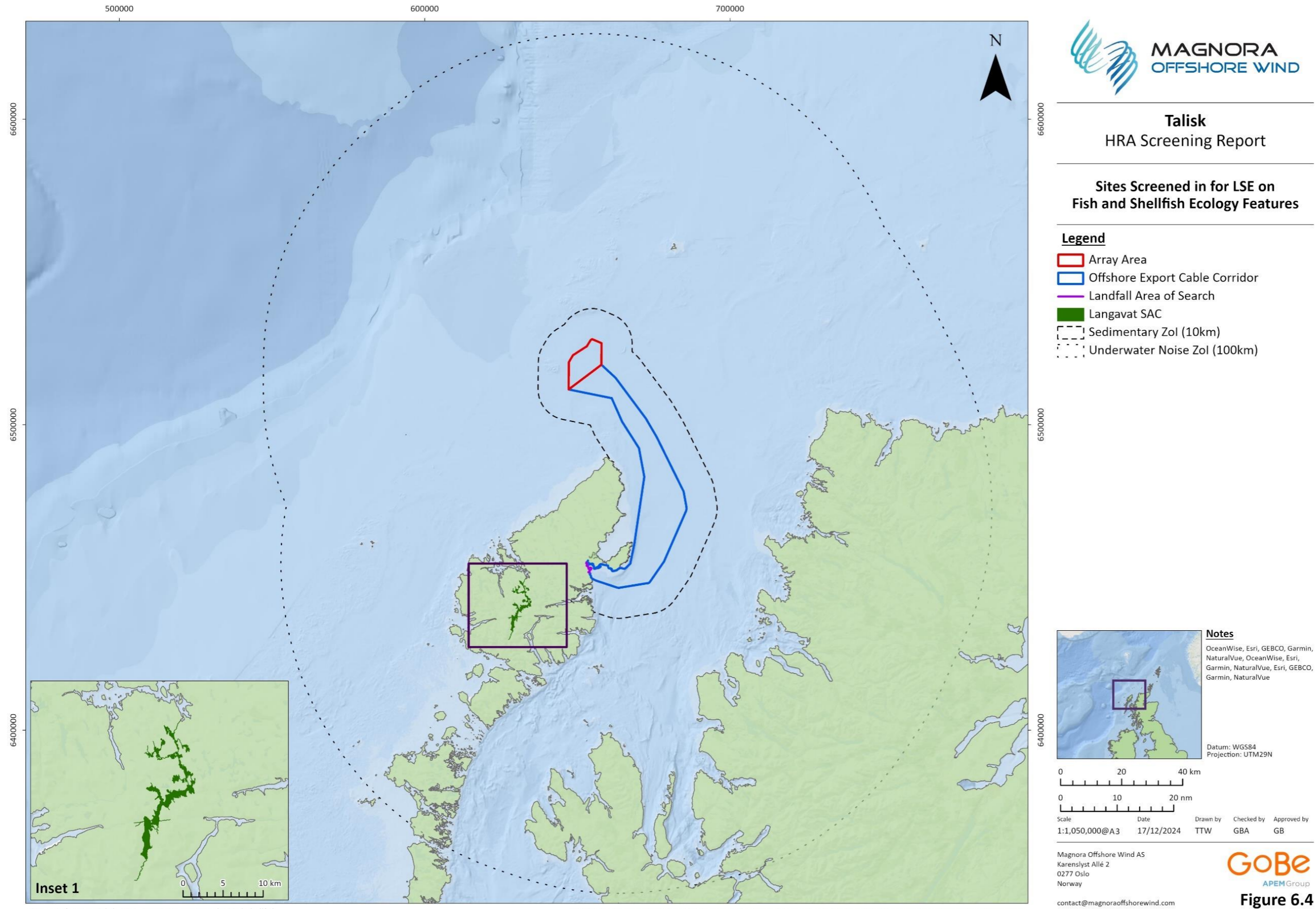


Figure 6.4 Sites screened in for LSE on Fish and Shellfish Ecology features.

## 6.6 Marine Physical Processes

- 6.6.1 There are no European sites with QIs related to Marine Physical Processes that have a connectivity to the Proposed Offshore Development. All relevant designated sites are located more than 10km away from the Proposed Offshore Development and, therefore, are not considered further in the Screening for LSE.

## 7. Conclusion to HRA Screening

- 7.1.1 No sites were identified within the screening ranges applied for QIs related to Benthic Subtidal and Intertidal Ecology and Marine Physical Processes; and it is determined there will be no pathway for effect and therefore no LSE from the Proposed Offshore Development for any designated site or QI, alone or in-combination with other plans or projects.
- 7.1.2 Sites with potential for LSE, alone or in-combination with other plans or projects (i.e., it has not been possible to determine no LSE at this stage) are presented below for Marine Mammals, Offshore Ornithology, and Fish and Shellfish Ecology (Table 7.1).
- 7.1.3 After this report has been published and a Scoping Opinion / HRA Screening Opinion has been received, consultation will be undertaken prior to the drafting of the Report to Inform Appropriate Assessment (RIAA) as Stage 2 of the HRA process. During the EIA, the Proposed Offshore Development will also be further refined to allow a more focused, detailed, and realistic appraisal to be completed. Relevant stakeholders will be involved in this process, and all consultees will be involved at relevant stages throughout the development of the RIAA. Once the consultation stage is completed, any comments received will be considered and used to inform the RIAA as the next stage in the process. The conclusions of the Offshore HRA Screening Report will be reviewed throughout the project to ensure they remain valid and ensure a robust RIAA.

Table 7.1 Summary of sites screened in for further assessment.

Designated site	Relevant QI	Project phase		
		Construction	O&M	Decommissioning
<b>Marine Mammals</b>				
Inner Hebrides and the Minches SAC	Harbour porpoise	UWN; Vessel Disturbance; Collision Risk; Accidental Pollution; Changes to prey; and Habitat loss.	UWN; Vessel Disturbance; Collision Risk; Changes to prey; Entanglement; Barrier Effect; and Habitat loss.	UWN; Vessel Disturbance; Collision Risk; Accidental Pollution; Changes to prey; and Habitat loss.
<b>Offshore Ornithology</b>				
Lewis Peatlands SPA	Red-throated diver	Distributional responses.	Distributional responses.	Distributional responses.
North Rona and Sula Sgeir SPA	Gannet; and Seabird assemblage	N/A	Collision risk; Distributional responses; and Entanglement.	N/A
	Puffin; Guillemot; and Razorbill.	N/A	Distributional responses; and Entanglement.	N/A
	Fulmar.	N/A	Distributional responses.	N/A
	Kittiwake.	N/A	Collision risk; and Distributional responses.	N/A
	Greater black-backed gull.	N/A	Collision risk.	N/A
	Storm-petrel	Artificial light.	Distributional responses; Collision risk; and Artificial light.	Artificial light.
	Leach's petrel	Artificial light.	Artificial light.	Artificial light.

Designated site	Relevant QI	Project phase		
		Construction	O&M	Decommissioning
Cape Wrath SPA	Puffin; Guillemot; and Razorbill.	N/A	Distributional responses; and Entanglement.	N/A
	Fulmar.	N/A	Distributional responses.	N/A
	Kittiwake.	N/A	Collision risk; and Distributional responses.	N/A
	Seabird assemblage.	N/A	Collision risk; Entanglement; and Distributional responses.	N/A
Handa SPA	Guillemot; and Razorbill.	N/A	Distributional responses; and Entanglement.	N/A
	Fulmar	N/A	Distributional responses.	N/A
	Great skua.	N/A	Collision risk.	N/A
	Kittiwake.	N/A	Collision risk; and Distributional responses.	N/A
	Seabird assemblage.	N/A	Collision risk; Distributional responses; and Entanglement.	N/A
Flannan Isles SPA	Puffin; Guillemot; and Razorbill.	N/A	Distributional responses; and Entanglement.	N/A
	Fulmar.	N/A	Distributional responses.	N/A
	Kittiwake.	N/A	Collision risk; and Distributional responses.	N/A
	Leach's petrel.	Artificial light.	Artificial light.	Artificial light.
	Seabird assemblage	N/A	Collision risk; Distributional responses; and Entanglement	N/A
Shiant Isles SPA	Puffin; Guillemot; and Razorbill.	N/A	Distributional responses; and Entanglement.	N/A
	Fulmar.	N/A	Distributional responses.	N/A
	Kittiwake.	N/A	Collision risk; and Distributional responses.	N/A
	Seabird assemblage.	N/A	Collision risk; Distributional responses; and Entanglement.	N/A
Priest Island (Summer Isles) SPA	Storm-petrel.	Artificial light.	Distributional responses; Collision risk; and Artificial light.	Artificial light.
Sule Skerry and Sule Stack SPA	Puffin.	N/A	Distributional responses; and	N/A



Designated site	Relevant QI	Project phase		
		Construction	O&M	Decommissioning
			Entanglement.	
	Gannet; and Seabird assemblages.	N/A	Collision risk; and Distributional responses.	N/A
	Storm-petrel.	Artificial light.	Distributional responses; Collision risk; and Artificial light.	Artificial light.
	Leach's petrel.	Artificial light.	Artificial light.	Artificial light.
Dornoch Firth and Loch Fleet Ramsar	Greylag goose; Dunlin; and Oystercatcher.	N/A	Migratory collision risk.	N/A
North Caithness Cliffs SPA	Puffin ; and Fulmar.	N/A	Distributional responses.	N/A
	Kittiwake; and Seabird assemblage.	N/A	Collision risk; and Distributional responses.	N/A
Moray and Nairn Coast Ramsar	Greylag goose; Pink-footed goose; and Redshank.	N/A	Migratory collision risk.	N/A
St Kilda SPA	Puffin; and Fulmar.	N/A	Distributional responses.	N/A
	Great skua.	N/A	Collision risk.	N/A
	Kittiwake; Gannet; and Seabird assemblage.	N/A	Collision risk; and Distributional responses.	N/A
	Manx shearwater; and Storm-petrel.	Artificial light.	Artificial light; Collision risk; and Distributional responses.	Artificial light.
	Leach's petrel	Artificial light.	Artificial light.	Artificial light.
Dornoch Firth and Loch Fleet SPA	Dunlin; Greylag goose; and Oystercatcher.	N/A	Migratory collision risk.	N/A
South Uist Machair and Lochs SPA	Little tern.	N/A	Migratory collision risk.	N/A
Hoy SPA	Puffin; and Fulmar.	N/A	Distributional responses.	N/A
	Great skua.	N/A	Collision risk.	N/A
	Kittiwake; and Seabird assemblage.	N/A	Collision risk; and Distributional responses.	N/A
Moray Firth SPA	Great northern diver; and Red-breasted merganser.	N/A	Migratory collision risk.	N/A
Marwick Head SPA	Kittiwake; and Seabird assemblage.	N/A	Collision risk; and Distributional responses.	N/A
East Caithness Cliffs SPA	Kittiwake; and Seabird assemblage.	N/A	Collision risk; and Distributional responses.	N/A

Designated site	Relevant QI	Project phase		
		Construction	O&M	Decommissioning
Loch Eye Ramsar and Loch Eye SPA	Greylag goose.	N/A	Migratory collision risk.	N/A
Rum SPA	Kittiwake; and Seabird assemblage.	N/A	Collision risk; and Distributional responses.	N/A
	Manx shearwater.	Artificial light	Distributional responses; Collision risk; and Artificial light.	Artificial light
Rousay SPA	Kittiwake; and Seabird assemblage.	N/A	Collision risk; and Distributional responses.	N/A
	Fulmar.	N/A	Distributional responses.	N/A
Canna and Sanday SPA	Puffin	N/A	Distributional responses.	N/A
	Kittiwake; and Seabird assemblage.	N/A	Collision risk; and Distributional responses.	N/A
West Westray SPA	Kittiwake; and Seabird assemblage.	N/A	Collision risk; and Distributional responses.	N/A
	Fulmar.	N/A	Distributional responses.	N/A
Moray and Nairn Coast SPA	Dunlin; Greylag goose; Oystercatcher; and Pink-footed goose.	N/A	Migratory collision risk.	N/A
Copinsay SPA	Kittiwake; and Seabird assemblage.	N/A	Collision risk; and Distributional responses.	N/A
	Fulmar.	N/A	Distributional responses.	N/A
Calf of Eday SPA	Kittiwake; and Seabird assemblage.	N/A	Collision risk; and Distributional responses.	N/A
	Fulmar.	N/A	Distributional responses.	N/A
Auskerry SPA	Storm-petrel.	Artificial light.	Distributional responses; Collision risk; and Artificial light.	Artificial light.
Mingulay and Berneray SPA	Kittiwake; and Seabird assemblage.	N/A	Collision risk; and Distributional responses.	N/A
	Puffin; and Fulmar.	N/A	Distributional responses.	N/A
Treshnish Isles SPA	Storm-petrel.	Artificial light.	Distributional responses; Collision risk; and Artificial light.	Artificial light.
Troup, Pennan and Lion's Heads SPA	Kittiwake; and Seabird assemblage.	N/A	Collision risk; and Distributional responses.	N/A

Designated site	Relevant QI	Project phase		
		Construction	O&M	Decommissioning
	Fulmar.	N/A	Distributional responses.	N/A
Firth of Forth SPA and Ramsar	Pink-footed goose; Redshank; Common scoter; Golden plover; Knot; Oystercatcher; Red-breasted merganser; Shelduck; Widgeon; and Dunlin.	N/A	Migratory collision risk.	N/A
Fair Isle SPA	Gannet; Kittiwake; and Seabird assemblage.	N/A	Collision risk; and Distributional responses.	N/A
	Fulmar.	N/A	Distributional responses.	N/A
	Great skua.	N/A	Collision risk.	N/A
Foula SPA	Kittiwake; and Seabird assemblage.	N/A	Collision risk; and Distributional responses.	N/A
	Fulmar.	N/A	Distributional responses.	N/A
	Leach's petrel.	Artificial light.	Artificial light.	Artificial light.
	Great skua.	N/A	Collision risk.	N/A
North Colonsay and Western Cliffs SPA	Kittiwake; and Seabird assemblage.	N/A	Collision risk; and Distributional responses.	N/A
Loch of Skene SPA	Greylag goose.	N/A	Migratory collision risk.	N/A
Buchan Ness to Collieston Coast SPA	Fulmar	N/A	Distributional responses.	N/A
	Kittiwake; and Seabird assemblage.	N/A	Collision risk; and Distributional responses.	N/A
Sumburgh Head SPA	Kittiwake; and Seabird assemblage.	N/A	Collision risk; and Distributional responses.	N/A
	Fulmar.	N/A	Distributional responses.	N/A
Mousa SPA	Storm-petrel.	Artificial light.	Artificial light; Collision risk; and Distributional responses.	Artificial light.
Fowlsheugh SPA	Fulmar.	N/A	Distributional responses.	N/A
	Seabird assemblage.	N/A	Collision risk; and Distributional responses.	N/A
Ronas Hill – North Roe and Tington SPA	Great skua.	N/A	Collision risk.	N/A
Noss SPA	Gannet; and	N/A	Collision risk; and	N/A

Designated site	Relevant QI	Project phase		
		Construction	O&M	Decommissioning
	Seabird assemblage.		Distributional responses.	
	Great skua.	N/A	Collision risk.	N/A
	Fulmar.	N/A	Distributional responses.	N/A
Loch Leven Ramsar and Loch Leven SPA	Gadwall; Pink-footed goose; and Teal.	N/A	Migratory collision risk.	N/A
Nólsoy Island Ramsar	Fulmar.	N/A	Distributional responses.	N/A
	Storm-petrel.	Artificial light.	Distributional responses; Collision risk; and Artificial light.	Artificial light.
Fetlar SPA	Great skua.	N/A	Collision risk.	N/A
	Seabird assemblage.	N/A	Collision risk; and Distributional responses.	N/A
	Fulmar.	N/A	Distributional responses.	N/A
Hermaness, Saxa Vord and Valla Field SPA	Gannet; and Seabird assemblage.	N/A	Collision risk; and Distributional responses.	N/A
	Great skua.	N/A	Collision risk.	N/A
	Fulmar.	N/A	Distributional responses.	N/A
Rathlin Island SPA	Fulmar; Guillemot; and Razorbill.	N/A	Distributional responses.	N/A
	Kittiwake; and Seabird assemblage	N/A	Collision risk; and Distributional responses.	N/A
Fala Flow Ramsar and Fala Flow SPA	Pink-footed goose.	N/A	Migratory collision risk.	N/A
Horn Head to Fanad Head SPA	Fulmar; and Razorbill.	N/A	Distributional responses.	N/A
	Kittiwake.	N/A	Collision risk; and Distributional responses.	N/A
Ailsa Craig SPA	Gannet; and Seabird assemblage.	N/A	Collision risk; and Distributional responses.	N/A
	Herring gull.	N/A	Collision risk.	N/A
Tory Island SPA	Fulmar.	N/A	Distributional responses.	N/A
West Donegal Coast SPA	Fulmar.	N/A	Distributional responses.	N/A
Copeland Island SPA	Manx shearwater.	Artificial light.	Distributional responses; Collision risk; and Artificial light.	Artificial light.
Ardboline Island and Horse Island SPA	Cormorant	N/A	Distributional responses.	N/A
Morecambe Bay and Duddon Estuary SPA	Herring gull; and Lesser black-backed gull.	N/A	Collision risk.	N/A

Designated site	Relevant QI	Project phase		
		Construction	O&M	Decommissioning
Duvillaun Islands SPA	Fulmar.	N/A	Distributional responses.	N/A
	Storm-petrel.	Artificial light.	Collision risk; Artificial light; and Distributional responses.	Artificial light.
Lambay Island SPA	Herring gull; and Lesser black-backed gull.	N/A	Collision risk.	N/A
	Fulmar; Razorbill; and Guillemot.	N/A	Distributional responses.	N/A
Clare Island SPA	Fulmar.	N/A	Distributional responses.	N/A
Humber Estuary Ramsar	Bar-tailed godwit; Dunlin; Golden plover; Knot; Redshank; and Shelduck.	N/A	Migratory collision risk.	N/A
Ribble and Alt Estuaries SPA	Lesser black-backed gull.	N/A	Collision risk.	N/A
High Island, Inishshark and Davillaun SPA	Fulmar.	N/A	Distributional responses.	N/A
Humber Estuary SPA	Bar-tailed godwit; Black-tailed godwit; Dunlin; Golden plover; Knot; Redshank; and Shelduck.	N/A	Migratory collision risk.	N/A
Glannau Aberdaron ac Ynys Enlli/ Aberdaron Coast and Bardsey Island SPA	Manx shearwater.	Artificial light.	Distributional responses; Collision risk; and Artificial light.	Artificial light.
Cliffs of Moher SPA	Fulmar.	N/A	Distributional responses.	N/A
Kerry Head SPA	Fulmar.	N/A	Distributional responses.	N/A
Saltee Islands SPA	Fulmar; Guillemot; and Razorbill.	N/A	Distributional responses.	N/A
	Gannet.	N/A	Collision risk; and Distributional responses.	N/A
Dingle Peninsula SPA	Fulmar.	N/A	Distributional responses.	N/A
Iveragh Peninsula SPA	Fulmar.	N/A	Distributional responses.	N/A
Skomer, Skokholm and the Seas off Pembrokeshire SPA	Manx shearwater.	Artificial light	Distributional responses; Collision risk; and Artificial light.	Artificial light.
	Lesser black-backed gull.	N/A	Collision risk.	N/A

Designated site	Relevant QI	Project phase		
		Construction	O&M	Decommissioning
	Seabird assemblage.	N/A	Collision risk; and Distributional responses.	N/A
Basket Island SPA	Fulmar.	N/A	Distributional responses.	N/A
	Manx shearwater; and Storm-petrel.	Artificial light	Distributional responses; Collision risk; and Artificial light.	Artificial light.
Grassholm SPA	Gannet.	N/A	Collision risk; and Distributional responses.	N/A
Puffin Island SPA	Fulmar.	N/A	Distributional responses.	N/A
	Manx shearwater; and Storm-petrel.	Artificial light	Distributional responses; Collision risk; and Artificial light.	Artificial light.
Deenish Island and Scariff Island SPA	Fulmar.	N/A	Distributional responses.	N/A
	Manx shearwater; and Storm-petrel.	Artificial light	Distributional responses; Collision risk; and Artificial light.	Artificial light.
Beara Peninsula SPA	Fulmar.	N/A	Distributional responses.	N/A
Skelligs SPA	Fulmar.	N/A	Distributional responses.	N/A
	Manx shearwater; and Storm-petrel.	Artificial light	Distributional responses; Collision risk; and Artificial light.	Artificial light.
Alde-Ore Estuary Ramsar and Alde-Ore Estuary SPA	Redshank; and Waterbird assemblage.	N/A	Migratory collision risk.	N/A
Isles of Scilly SPA	Lesser black-backed gull.	N/A	Collision risk.	N/A
	Storm-petrel.	Artificial light.	Collision risk; Artificial light; and Distributional responses.	Artificial light.
<b>Fish and Shellfish Ecology</b>				
Langavat SAC	Atlantic Salmon (Annex II)	Mortality, injury (TTS), behavioral impacts and auditory masking arising from noise and vibration.	N/A	Mortality, injury (TTS), behavioral impacts and auditory masking arising from noise and vibration.

N/A indicates where no LSE were identified for designated sites and features at a certain phase of development.

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## Appendix 1 – SPA Connectivity in the Non-Breeding Season

- 8.1.1 The potential for connectivity with other SPA populations of seabird species during the non-breeding season is determined on the basis of the contribution of these SPA populations to the relevant BDMPS population (Table A.1) and total number of adult birds in the BDMPS population (Table A.2).

Table A.1: The percentage contribution of different SPA populations to the lowest non-breeding BDMPS population relevant to the Array Area (based on all birds), as derived from Furness (2015). Where no BDMPS SPA population value was available in Furness (2015), it is stated where the number is taken from to calculate percentage contribution.

SPA	Species																
	Arctic tern	Puffin	Kittiwake	Guillemot	Common tern	Shag	Great black-backed gull	Cormorant	Great skua	Herring gull	Lesser black-backed gull	Little tern	Manx shearwater	Fulmar	Gannet	Razorbill	Sandwich tern
Ailsa Craig SPA	-	-	0.14	0.92	-	-	-	-	-	0.15	0.89	-	-	-	9.94	-	-
Anglesey Terns / Morwenoliad Ynys Môn SPA	11.99 <sup>7</sup>	-	-	-	1.64 <sup>7</sup>	-	-	-	-	-	-	-	-	-	-	-	49.25 <sup>7</sup>
Arboline Island and Horse Island SPA	-	-	-	-	-	-	-	4.43 <sup>8</sup>	-	-	-	-	-	-	-	-	-
Aughris Head SPA	-	-	0.11 <sup>9</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Canna and Sanday SPA	-	0.62	0.24	0.69	-	1.36	-	-	-	0.07	-	-	-	-	-	-	-
Cape Wrath SPA	-	1.05	2.99	4.80	-	-	-	-	-	-	-	-	-	0.76	-	1.22	-
Carlingford Lough SPA	-	-	-	-	0.37	-	-	-	-	-	-	-	-	-	-	-	-
Copeland Islands SPA	3.50 <sup>10</sup>	-	-	-	-	-	-	-	-	-	-	-	0.44 <sup>10</sup>	-	-	-	-
Cromarty Firth SPA	-	-	-	-	0.21	-	-	-	-	-	-	-	-	-	-	-	-

<sup>7</sup> From SMP 2015 counts (AON)

<sup>8</sup> From SMP counts

<sup>9</sup> From 1997 SMP counts

<sup>10</sup> From 2013 counts (AOT) for Copeland Islands SPA Master site

SPA	Species																
	Arctic tern	Puffin	Kitiwake	Guillemot	Common tern	Shag	Great black-backed gull	Cormorant	Great skua	Herring gull	Lesser black-backed gull	Little tern	Manx shearwater	Fulmar	Gannet	Razorbill	Sandwich tern
Flannan Isles SPA	-	10.24	0.40	1.72	-	-	-	-	-	-	-	-	-	2.63	-	0.62	-
Aberdaron Coast and Bardsey Island SPA	-	-	-	-	-	-	-	-	-	-	-	-	2.05	-	-	-	-
Glas Eileanan SPA	-	-	-	-	0.07	-	-	-	-	-	-	-	-	-	-	-	-
Grassholm SPA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.39	-	-
Greers Isle SPA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.03
Handa SPA	-	-	0.54	6.67	-	-	-	-	3.83	-	-	-	-	0.67	-	3.03	-
Horn Head to Fanad Head SPA	-	-	1.11 <sup>11</sup>	0.77 <sup>11</sup>	-	0.59 <sup>11</sup>	-	-	-	-	-	-	-	0.71 <sup>11</sup>	-	2.64 <sup>11</sup>	-
Illancrone and Inishkeeragh SPA	0.63 <sup>12</sup>	-	-	-	-	-	-	-	-	-	-	1.62	-	-	-	-	-
Imperial Dock Lock, Leith SPA	-	-	-	-	2.53	-	-	-	-	-	-	-	-	-	-	-	-
Inishbofin, Inishdooney and Inishbeg SPA	0.12 <sup>13</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

<sup>11</sup> From 1999 site synopsis count data

<sup>12</sup> From 1995 site synopsis count data

<sup>13</sup> From 1995 site synopsis count data

SPA	Species																	
	Arctic tern	Puffin	Kitiwake	Guillemot	Common tern	Shag	Great black-backed gull	Cormorant	Great skua	Herring gull	Lesser black-backed gull	Little tern	Manx shearwater	Fulmar	Gannet	Razorbill	Sandwich tern	
Inishduff SPA	-	-	-	-	-	0.62 <sup>14</sup>	-	-	-	-	-	-	-	-	-	-	-	
Inishmurray SPA	0.32 <sup>12</sup>	-	-	-	-	0.33 <sup>15</sup>	-	-	-	0.21 <sup>15</sup>	-	-	-	-	-	-	-	
Inishtrahull SPA	-	-	-	-	-	0.13 <sup>16</sup>	-	-	-	-	-	-	-	-	-	-	-	
Inner Moray Firth SPA	-	-	-	-	0.00	-	-	-	-	-	-	-	-	-	-	-	-	
Ireland's Eye SPA	-	-	0.12	0.39	-	-	-	-	-	0.46	-	-	-	-	-	0.47	-	
Isles of Scilly SPA	-	0.05 <sup>17</sup>	0.01 <sup>17</sup>	0.03 <sup>17</sup>	0.04 <sup>17</sup>	-	-	-	-	0.54 <sup>17</sup>	16.52	-	0.06 <sup>17</sup>	0.09 <sup>17</sup>	-	0.14 <sup>17</sup>	-	
Lambay Island SPA	-	-	0.96	5.27	-	-	-	-	-	1.05	1.68	-	-	-	-	2.15	-	
Larne Lough SPA	-	-	-	-	0.71	-	-	-	-	-	-	-	-	-	-	-	4.78	
Liverpool Bay SPA	-	-	-	-	0.56 <sup>18</sup>	-	-	-	-	-	-	16.24 <sup>18</sup>	-	-	-	-	-	
Lough Derg (Donegal) SPA	-	-	-	-	-	-	-	-	-	0.12 <sup>19</sup>	2.43 <sup>19</sup>	-	-	-	-	-	-	
Lough Neagh and Lough Beg SPA	-	-	-	-	0.24	-	-	-	-	-	-	-	-	-	-	-	-	

<sup>14</sup> From 1985 site synopsis count data

<sup>15</sup> From SMP Database Inishmurray 2014 count

<sup>16</sup> From SMP Inishtrahull Island SPA (Master) 2015 AON count

<sup>17</sup> From SMP 2015 counts

<sup>18</sup> From citation count

<sup>19</sup> From SMP 1999 count data

SPA	Species																
	Arctic tern	Puffin	Kitiwake	Gullmot	Common tern	Shag	Great black-backed gull	Cormorant	Great skua	Herring gull	Lesser black-backed gull	Little tern	Manx shearwater	Fulmar	Gannet	Razorbill	Sandwich tern
Lough Swilly SPA	-	-	-	-	0.28 <sup>20</sup>	-	-	-	-	-	-	-	-	-	-	-	4.79 <sup>20</sup>
Mersey Narrows and North Wirral Foreshore SPA	-	-	-	-	0.55 <sup>21</sup>	-	-	-	-	-	-	-	-	-	-	-	-
Mingulay and Berneray SPA	-	2.05	0.64	2.37	-	0.62	-	-	-	-	-	-	-	3.25	-	5.92	-
Morecambe Bay and Dunddon Estuary SPA	0.19 <sup>21</sup>	-	-	-	0.00 <sup>21</sup>	-	-	-	-	2.00	24.23	7.75	-	-	-	-	0.02
North Colonsay and Western Cliffs SPA	-	-	1.61	2.37	-	-	-	-	-	-	-	-	-	-	-	-	-
North Rona and Sula Sgeir SPA	-	3.57	0.36	0.88	-	-	1.11	-	-	-	-	-	-	1.80	3.38	0.64	-
Old Head of Kinsale SPA	-	-	0.21	0.36	-	-	-	-	-	-	-	-	-	-	-	-	-
Outer Ards SPA	0.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rathlin Island SPA	-	0.46	2.29	15.34	-	0.11 <sup>22</sup>	-	-	-	0.03	0.52	-	-	0.55	-	9.02	-

<sup>20</sup> From Site Synopsis count 2001

<sup>21</sup> From 2015 SMP count

<sup>22</sup> From 2015 RSPB count

SPA	Species																
	Arctic tern	Puffin	Kitiwake	Guillemot	Common tern	Shag	Great black-backed gull	Cormorant	Great skua	Herring gull	Lesser black-backed gull	Little tern	Manx shearwater	Fulmar	Gannet	Razorbill	Sandwich tern
Ribble and Alt Estuaries SPA	-	-	-	-	0.34	-	-	-	-	-	40.17	-	-	-	-	-	-
Roanish SPA	-	-	-	-	-	-	-	-	-	0.40 <sup>23</sup>	-	-	-	-	-	-	-
Rum SPA	-	-	0.23	0.29	-	-	-	-	-	-	-	-	15.18	-	-	-	-
Saltee Islands SPA	-	-	0.30	2.27	-	-	-	-	-	0.13	0.64	-	-	-	1.73	1.91	-
Sheep Island SPA	-	-	-	-	-	-	-	3.18	-	-	-	-	-	-	-	-	-
Shiant Isles SPA	-	42.80	0.16	0.90	-	2.71	-	-	-	-	-	-	-	1.58	-	2.49	-
Skomer, Skokholm and the Seas off Pembrokeshire SPA	-	15.84	0.30	2.86	-	-	46.84	-	-	-	-	-	44.28	-	-	3.52	-
South Uist Machair and Lochs SPA	-	-	-	-	-	-	-	-	-	-	-	2.12	-	-	-	-	-
St Kilda SPA	-	93.42	0.28	2.76	-	-	-	-	5.14	-	-	-	0.61	23.75	21.84	1.00	-
Strangford Lough SPA	0.46	-	-	-	1.09	-	-	-	-	-	-	-	-	-	-	-	14.33
Sule Skerry and Sule Stack SPA	-	39.05	-	1.34	-	1.07	-	-	-	-	-	-	-	-	1.68	-	-
The Dee Estuary SPA	-	-	-	-	0.51	-	-	-	-	-	-	15.74	-	-	-	-	-

<sup>23</sup> From 2016 SMP count

SPA	Species																
	Arctic tern	Puffin	Kitiwake	Guillemot	Common tern	Shag	Great black-backed gull	Cormorant	Great skua	Herring gull	Lesser black-backed gull	Little tern	Manx shearwater	Fulmar	Gannet	Razorbill	Sandwich tern
Tory Island SPA	-	0.02 <sup>24</sup>	-	-	-	-	-	-	-	-	-	-	-	0.17 <sup>24</sup>	-	0.21 <sup>24</sup>	-
West Donegal Coast SPA	-	-	0.30	-	-	0.46	-	2.01	-	0.26	-	-	-	0.68	-	0.19	-
West Donegal Islands SPA	-	-	-	-	-	0.37	-	-	-	0.10	-	-	-	-	-	-	-
Wicklow Head SPA	-	-	0.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-

<sup>24</sup> From 2015 SMP count



Table A.2: The total number of adult birds, and all birds (adults and immatures), in the BDMPS Population Relevant to the Array Area, as Derived from Furness (2015).

Species	Numbers of adult birds in BDMPS population*	Numbers of all birds (adults and immatures) in BDMPS population*
Arctic tern	48,538	71,398
Puffin	249,896	304,557
Kittiwake	375,711 – 498,970	691,526 – 911,586
Guillemot	656,156	1,139,220
Common tern	40,216	64,659
Shag	16,152	37,263
Great black-backed gull	14,238	34,380
Cormorant	3,777	7,049
Great skua	1,380 – 16,498	1,398 – 25,090
Herring gull	87,134	173,299
Lesser black-backed gull	36,029 – 110,708	41,159 – 163,305
Little tern	1,194	1,602
Manx shearwater	992,300	1,580,895
Fulmar	363,383 – 490,041	556,367 – 828,194
Gannet	318,001 – 391,540	545,954 – 661,888
Razorbill	179,183 – 316,928	341,422 – 606,914
Sandwich tern	7,189	10,761

\*A range is given for species with multiple non-breeding periods, encompassing the minimum and maximum BDMPS population size.

8.1.2 The data in Table A.1 and Table A.2 demonstrate that these other SPA populations generally represent a small part of the overall BDMPS population of the species. In some cases, the SPA populations (adult birds only) may contribute to less than 1% of the wider BDMPS population, even when calculated in relation to the adult component of the BDMPS population (as in Table A.1) as opposed to entire BDMPS population. Given the assumption of even mixing of birds from different populations (and age classes), it is unlikely that there will be any substantive degree of connectivity between most of these SPA populations and the Array Area during the non-breeding season because of the low likelihood that the birds using the Array Area will derive from these populations. Therefore, for the SPA populations of these seabird species which do not have breeding season connectivity, it is considered that the potential for connectivity is limited to those SPA populations which comprise 1% or more of the adult component of the relevant BDMPS population. On this basis, potential connectivity in the non-breeding season (only) is limited to the following SPA populations:

- Ailsa Craig SPA (Gannet);
- Anglesey Terns / Morwenoliaid Ynys Môn SPA (Arctic tern, Common tern, Sandwich tern);
- Arboline Island and Horse Island SPA (Cormorant);
- Canna and Sanday SPA (Shag);
- Cape Wrath SPA (Puffin, Kittiwake, Guillemot, Razorbill);
- Copeland Islands SPA (Arctic tern);
- Flannan Isles SPA (Puffin, Guillemot, Fulmar);
- Aberdaron Coast and Bardsey Island SPA (Manx shearwater);
- Grassholm SPA (Gannet);
- Handa SPA (Guillemot, Great skua, Razorbill);

- Horn Head to Fanad Head SPA (Kittiwake, Razorbill);
- Illancrone and Inishkeeragh SPA (Little tern);
- Imperial Dock Lock, Leith SPA (Common tern);
- Isles of Scilly SPA (Lesser black-backed gull);
- Lambay Island SPA (Guillemot, Herring gull, Lesser black-backed gull, Razorbill);
- Larne Lough SPA (Sandwich tern);
- Liverpool Bay SPA (Little tern);
- Lough Derg (Donegal) SPA (Lesser black-backed gull);
- Lough Swilly SPA (Sandwich tern);
- Mingulay and Berneray SPA (Puffin, Guillemot, Fulmar, Razorbill);
- Morecambe Bay and Dunndon Estuary SPA (Herring gull, Lesser black-backed gull, Little tern);
- North Colonsay and Western Cliffs SPA (Kittiwake, Guillemot);
- North Rona and Sula Sgeir SPA (Puffin, Great black-backed gull, Fulmar, Gannet);
- Rathlin Island SPA (Kittiwake, Guillemot, Razorbill);
- Ribble and Alt Estuaries SPA (Lesser black-backed gull);
- Rum SPA (Manx shearwater);
- Saltee Islands SPA (Guillemot, Gannet, Razorbill);
- Sheep Island SPA (Cormorant);
- Shiant Isles SPA (Puffin, Shag, Fulmar, Razorbill);
- Skomer, Skokholm and the Seas off Pembrokeshire SPA (Puffin, Guillemot, Great black-backed gull, Manx shearwater, Razorbill);
- South Uist Machair and Lochs SPA (Little tern);
- St Kilda SPA (Puffin, Guillemot, Great skua, Fulmar, Gannet, Razorbill);
- Strangford Lough SPA (Common tern, Sandwich tern);
- Sule Skerry and Sule Stack SPA (Puffin, Guillemot, Shag, Gannet); and
- West Donegal Coast SPA (Cormorant).



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