KINSALE ENERGY

Kinsale Area Decommissioning Project

Report for the Purposes of Appropriate Assessment Screening and Article 12 Assessment Screening: Addendum no.2

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FOR ENVIRONMENTAL MANAGEMENT & SCIENCE

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Section 1

Introduction and Background

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1 Introduction and Background

1.1 Introduction

PSE Kinsale Energy Limited (Kinsale Energy) is progressing with the decommissioning of the Kinsale Area gas fields and facilities (incorporating the Kinsale Head gas fields and facilities and the Seven Heads gas field and facilities), which have come to the end of their productive life. Gas production from the wells ceased on 5 July 2020. Together the decommissioning of the entirety of the Kinsale Area gasfields and facilities is collectively referred to as the Kinsale Area Decommissioning Project (KADP).

The entire KADP plan consists of:

- Facilities preparation: disconnect and degas process plant and pipelines (all pipelines displaced with seawater).
- Wells: plug and abandon all platform and subsea wells and removal of any surface component of these wells, including wellhead structures and platform conductors.
- Platform topsides: complete removal in accordance with OSPAR Decision 98/3.
- Subsea structures: (e.g. manifolds, wellhead protection structures): full removal in accordance with OSPAR Decision 98/3, including the removal of connecting spool pieces, umbilical jumpers and associated protection materials.
- Platform jackets: complete removal in accordance with OSPAR Decision 98/3.
- Offshore pipelines and umbilicals: rock cover of freespans and pipeline ends.
- Export pipeline (offshore and onshore section): fill onshore section with grout and rock cover of freespans in offshore section.
- Decommissioning the Inch Terminal (full removal and reinstatement to agricultural use, as per the terms of the site planning permission, Cork County Council planning reference 2929/76).

Kinsale Energy is submitting further plans for decommissioning to the Minister for the Environment, Climate and Communications (formerly the Minister for Communications, Climate Action & Environment) (the "**Minister**") for approval pursuant to Section 13 of the Petroleum and Other Minerals Development Act 1960 as amended (1960 Act), as addenda to the existing plans of development relevant to the Kinsale Area and Seven Heads Petroleum Leases.

1.2 Consent application process

To reflect project scheduling requirements and to facilitate studies on the potential for any re-use options for the Kinsale Area facilities, a two stage consent application process for the Decommissioning Plans was originally proposed by Kinsale Energy.

Decommissioning Plans covering the first stage (**Consent Application no. 1**) were submitted on 28th June 2018 covering the following works:

- Facilities preparation: disconnect and degas process plant and pipelines (pipelines displaced with seawater, and inhibited seawater in the case of the 24" export pipeline and the 18" Seven Heads pipeline).
- Wells: plug and abandon all platform and subsea wells and removal of any surface component of these wells, including wellhead structures and platform conductors.
- Platform topsides: complete removal in accordance with OSPAR Decision 98/3.
- Subsea structures: (e.g. manifolds, wellhead protection structures): full removal in accordance with OSPAR Decision 98/3, including the removal of connecting spool pieces, umbilical jumpers and protection materials.

Consent Application no. 1 was approved on 26th April 2019.

For Kinsale Head only, a subsequent application (**Consent Application no. 2**) was submitted on 8th August 2019 to cover the removal of the Kinsale Alpha and Bravo jackets. Consent Application no. 2 was approved on 27th February 2020.

1.3 Current application

Consent applications are now being made for the remaining works required to complete the KADP (**Consent Application no. 3 for Kinsale Head Petroleum Lease** (OPL 1) and **Consent Application no. 2 for Seven Heads**).

At the time of Consent Application no. 2 (for OPL1), Section 5 of the Dumping at Sea Act did not yet apply to "offshore installations" and there were ongoing studies by third parties that might have identified a future re-use of one or more of the offshore pipelines. Accordingly, Consent Application no.2 was limited to a request for approval for the decommissioning of the Kinsale Head platform jackets only. Consent Application no. 2 did not address the offshore pipelines and umbilicals. As no further use has been identified for any of the offshore pipelines or umbilicals, these are now the subject of this consent application.

Kinsale Head Consent Application no. 3 includes for the following facilities:

- To leave *in situ* all infield pipelines and umbilicals associated with the Kinsale Head gas fields
- To leave *in situ* the 24" export pipeline (offshore and onshore section)
- To use engineering materials to protect the pipelines and umbilicals *in situ*

Seven Heads Consent Application no. 2 includes the following:

- To leave *in situ* all infield pipelines and umbilicals associated with the Seven Heads gas field
- To leave *in situ* 18" Seven Heads export pipeline and umbilical

To use engineering materials to protect the pipelines and umbilicals *in situ*

1.4 Document Purpose and Scope: Screening for Appropriate Assessment and Annex IV Addendum

In accordance with regulation 42 of the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) and Section 13A of the 1960 Act, an Appropriate Assessment Screening Report ("**AA Screening Report**") was prepared to accompany the Consent Application no. 1. The AA Screening Report was updated for Kinsale Head Consent Application no. 2 ("**AA Screening Report Addendum no. 1**"), and is again updated for Kinsale Head Consent Application no. 3 and Seven Heads Consent Application no. 2 ("**AA Screening Report Addendum no. 2**"). The AA Screening Report informs the competent authority, the Minister, in carrying out its screening for Appropriate Assessment as to whether or not the Project is likely to have any significant impacts on any European sites, either alone or in combination with other plans and projects, taking into account their conservation objectives in light of the best scientific knowledge in the field.

This AA Screening Report Addendum has been produced to reflect the additional relevant environmental information which has been published since February 2020. This document should be read in conjunction with the **AA Screening Report** and **AA Screening Report Addendum no. 1** which have also been submitted as part of this consent application. A version of AA Screening Report Addendum no. 2 was submitted in October 2021 and on 8th April 2022 the Department of the Environment, Climate and Communications requested that additional information be provided on two aspects. These were:

- The use of species-specific seabird foraging ranges to screen for breeding seabird populations of SPAs rather than the 100 km Zone of Influence (ZoI) previously used for all receptors.
- The rationale for not carrying certain species/features (such as otters) of certain designated sites through to the assessment.

This amended Addendum no. 2 addresses these two points, as well as updating other relevant information where changes have occurred since the original submission of Addendum no. 2.

The legislation and guidance documents previously described or listed in the AA Screening Report (**Section 2**), and the description of the project (**Section 3**) are unchanged, and so are not repeated in this document. No new relevant Natura 2000 sites have been proposed or designated since the AA Screening Report and AA Screening Report Addendum no. 1. With regard to Special Areas of Conservation (SACs), the zone of influence for the KADP has not changed, and those sites previously identified as relevant to the assessment, their status, and related information such as conservation objectives, have not changed. For Special Protection Areas (SPAs), a report on seabird foraging ranges has been published by Woodward *et.al*.(2019) which allows a species-specific zone of influence (ZoI) consideration to be made; in some instances this ZoI is larger than the 100km previously used and therefore some additional sites are identified as relevant to the assessment, and information on their status and conservation objectives is included.

Consistent with the AA Screening Report for the KADP, submitted as part of Consent Application no. 1, this addendum has been produced to cover all staged consent

applications, for both the Kinsale Head gas fields and Seven Heads gas field. Alongside the AA Screening Report and the AA Screening Report Addendum no. 1, this Addendum contains the information required by the consenting authority, the Minister, to undertake screening to determine if a full Appropriate Assessment (AA) of the KADP is required.

The addendum AA screening information is presented in this report as follows:

- AA Screening for likely significant effects (**Section 2**)
- AA Screening Statement (**Section 3**)

Addendum information to the AA Screening Report has also been provided which is relevant to the consideration of the potential effects on species listed under Annex IV of the Directive (termed Annex IV species). Annex IV species screening addendum information is presented in this report as follows:

- Screening for effects on Annex IV Species (**Section 4**)
- Annex IV Screening Conclusions (**Section 5**)

The screening assessments will consider the potential for significant effects to be caused by activities associated with the KADP in relation to both relevant Natura 2000 sites and Annex IV species, but only in the context of the updated environmental information referred to above.

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Kinsale Area Decommissioning Project

Section 2

AA Screening for likely significant effects

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2 AA Screening for likely significant effectsIdentification of relevant Natura 2000 Sites

As noted in **Section 1**, the KADP project description has not altered since Consent Application no. 1, and no new Natura 2000 sites have been proposed or designated within the Zone of Influence (ZoI) for SACs previously described in **Sections 4.1 and 4.2 of the AA Screening Report, and Section 2.3 and Appendix A of the AA Screening Report Addendum no. 1**.

The criterion used to screen in relevant SPAs has been revised as follows:

Criterion used: Screen in relevant SPAs for waterbird species sensitive to vessel disturbance (e.g. divers and seaducks) which are located within 4km of the proposed inshore operational area where activities take place within shallow coastal waters known to be used by such species. For seabirds, screen in relevant SPAs for which a moderately sensitive qualifying interest (e.g. razorbill, cormorant and guillemot) could theoretically be present in the operational area based on available foraging range data (e.g. Woodward *et al.* 2019).

The use of species-specific seabird foraging ranges to screen for breeding seabird populations of SPAs rather than the 100 km Zone of Influence (ZoI) previously used results in additional sites being considered relevant and these are described, along with the rationale, below.

Table 2.1 provides indicative foraging ranges (mean and mean maximum) for a variety of seabird species from a breeding colony to a foraging area, which have been used to identify relevant sites on the basis that related qualifying interests could interact with the proposed operational area. The mean maximum foraging range value has been used here to show possible connectivity to breeding colony SPAs, but bird density will not be continuous throughout this range. Other ways of representing foraging ranges (e.g. the mean, or percentage foraging area derived from kernel analyses) may therefore provide more useful information, where available. Whilst applying mean maximum foraging radius would encompass the majority of a population's home-range area, the overall size of the predicted foraging areas around the colony would potentially make it too large to be a useful management tool, without further refinement using habitat and bathymetric data (Soanes *et al.* 2016). Similarly, the assumption that seabirds are uniformly distributed out to some threshold distance from their colonies, such as their putative maximum foraging range, is unrealistic. Seabird density declines with distance from the colony with density-dependent competition, coastal morphology and habitat preferences (Wakefield *et al*. 2017), for example oceanographic features at which seabirds preferentially forage including shelf-edge fronts, upwelling and tidal-mixing fronts, offshore banks and internal waves, regions of stratification, and topographically complex coastal areas subject to strong tidal flow (Cox *et al.* 2018), resulting in highly non-uniform distributions. While Critchley *et al*. (2018) used a distance-weighted foraging radius approach to project distributions at sea for a wide range of seabird species during the breeding season, the authors recognised the limitations of not considering environmental variables that contribute to such non-uniform distributions noted above.

The selection of all sites within the mean maximum foraging range of the operational area is a useful but simplistic approach to identifying relevant sites. The approach taken here has been to review the initial selection of sites on this basis, and exclude those for which an interaction would be unrealistic, which primarily relates to sites for which fulmar has been identified as a qualifying interest in sites to the far north and west of Ireland. Fulmar are a highly pelagic seabird, and are highly unlikely to move large distances over land which could bring them to within the operational area. The potential mean maximum

foraging range for this species has therefore been applied across the marine area, including where birds could move around headlands. Relevant sites are shown in Figures 2.1 and 2.2.

Table 2.1: Indicative breeding season foraging ranges

Species	Mean maximum[1] (km)	Mean[2] (km)	Confidence[3]
Eider	21.5	3.2 ± 4.2	Poor
Red-throated diver	9	4.5	Low
Fulmar	542.3±657.9	134.6 ± 90.1	Good
Manx shearwater	1346.8±1018.7	136.1 ± 88.7	Moderate
Leach's storm petrel	n/a	657	Moderate
Gannet	315.2±194.2	120.4 ± 50	Highest
Cormorant	25.6 ± 8.3	7.1 ± 3.8	Moderate
Shag	13.2 ± 10.5	9.2 ± 4.9	Highest
Arctic skua	n/a	2 ± 0.7	Poor
Great skua	443.3 ± 487.9	67 ± 31.5	Uncertain
Black-headed gull	18.5	7	Uncertain
Common gull	50	n/a	Poor
Mediterranean gull	20	11.5	Uncertain
Herring gull	58.8 ± 26.8	14.9 ± 7.5	Good
Lesser black-backed gull	127 ± 109	43.3 ± 18.4	Highest
Kittiwake	156.1 ± 144.5	54.7 ± 50.4	Good
Sandwich tern	34.3 ± 23.2	9 ± 9.2	Moderate
Roseate tern	12.6 ± 10.6	4.1 ± 2.6	Moderate
Common tern	18.0 ± 8.9	6.4 ± 4.5	Good
Arctic tern	25.7 ± 14.8	6.1 ± 4.4	Good
Little tern	5	3.5	Moderate
Guillemot	73.2 ± 80.5 (55.5 ± 39.7)[4]	33.1 ± 36.5 (23.9 ± 21.1)[4]	Highest
Razorbill	88.7 ± 75.9 (73.8 ± 48.4)[4]	61.3 ± 33.4 (31.2 ± 17.3)[4]	Good
Puffin	137.1 ± 128.3 (119.6 ± 131.2)[4]	62.4 ± 34.4 (48.1 ± 28.3)[4]	Good

Source: Woodward et al. (2019). Notes: 1. The maximum range reported in each study averaged across studies. 2. The mean foraging range reported for each colony averaged across all colonies. For tracking studies, this was typically the mean foraging range from all central place foraging trips assessed at the colony. 3. Confidence levels were assigned as follows: highest (based on >5 direct studies with low variation between sites); good highest (based on >5 direct studies with wider variation between sites); moderate (between 2-5 direct studies); low (indirect measures or only one direct tracking study); uncertain (survey-based estimates); poor (few survey estimates or speculative data available). 4. May be affected by unusually high foraging ranges from Fair Isle due to reduced prey availability in study year. Ranges excluding Fair Isle data also provided.

The mean maximum foraging range for Manx shearwater is large (1,346.8 ± 1,018.7km), which when applied as a means to identify relevant sites results in a selection of sites located as far south as northern Spain (Figure 2.2). While the putative mean maximum foraging range of this species could theoretically result in individuals from very distant sites coming within the operational area, evidence suggests substantial variation in trip distance and range. For example, trips may vary by life stage (Fayet *et al.* 2015), and be substantially less during the chick-rearing period compared to the incubation period (Dean

et al. 2015; however, note regular far-ranging activity presented in Wischnewski *et al.* 2019). Tracks (Wischnewski *et al.* 2019, Fayet *et al.* 2015) and density distributions (Dean *et al.* 2013, 2015, Fayet *et al.* 2015) suggest that for UK and Irish colonies studied, longer trips were to offshore waters of the North Atlantic, with higher levels of activity closer to colonies (note the ten-fold difference in mean (136.1 ± 88.7km) and mean maximum (1,346.8 ± 1,018.7km) foraging range).

On the basis of this evidence, it is considered that the sites for Manx shearwater that are most relevant to this screening assessment are Saltee Islands SPA, Puffin Island SPA, Skelligs SPA, Blasket Island SPA, Lambay Island SPA, Deenish Island and Scariff Island SPA, Skomer, Skokholm and the Seas off Pembrokeshire SPA (UK), Aberdaron Coast and Bardsey Island SPA (UK), Copeland Islands SPA (UK), and the Irish Sea Front SPA (UK, and by association those SPAs related to this offshore aggregation which may include sites in Ireland, Northern Ireland, Scotland, Wales and England[1], some of which are already listed).

Table 2.2: SPAs identified for further consideration

Site code	Site name	Relevant qualifying interests	Diving species potentially sensitive to underwater noise?
IE0004002	Saltee Islands SPA	Northern fulmar	N
		Lesser black-backed gull	N
		Manx shearwater	Y
		Northern gannet	Y
		Atlantic puffin	Y
		Black-legged kittiwake	N
IE0004003	Puffin Island SPA	Northern fulmar	N
		Manx shearwater	Y
		Storm petrel	N
IE0004005	Cliffs of Moher SPA	Northern fulmar	N
IE0004007	Skelligs SPA	Northern fulmar	N
		Manx shearwater	Y
		Northern gannet	Y
		Storm petrel	N
IE0004008	Blasket Islands SPA	Northern fulmar	N
		Manx shearwater	Y
		Storm petrel	N
IE0004021	Old Head of Kinsale SPA	Northern fulmar	N
		Herring gull	N
		Black-legged kittiwake	N
		Common guillemot	Y
		Razorbill	Y
IE0004219	Courtmacsherry Bay SPA	Common gull	N

[1] https://data.jncc.gov.uk/data/0032da71-db02-44b5-b4e1-022d77ef7ee3/irish-sea-front-sas-departmental-brief.pdf

Site code	Site name	Relevant qualifying interests	Diving species potentially sensitive to underwater noise?
IE0004022	Ballycotton Bay SPA	Lesser black-backed gull	N
		Razorbill	Y
IE0004023	Ballymacoda Bay SPA	Black-legged kittiwake	N
IE0004028	Blackwater Estuary SPA	Herring gull	N
		Herring gull	N
IE0004030	Cork Harbour SPA	Lesser black-backed gull	N
		Common gull	N
IE0004032	Dungarvan Harbour SPA	Lesser black-backed gull	N
IE0004066	The Bull and The Cow Rocks SPA	Northern fulmar	N
		Northern gannet	Y
		Storm petrel	N
		Black-legged kittiwake	N
IE0004069	Lambay Island SPA	Northern fulmar	N
		Manx shearwater	Y
IE0004092	Tacumshin Lake SPA	Lesser black-backed gull	N
IE0004095	Kilcolman Bog SPA	Lesser black-backed gull	N
IE0004113	Howth Head Coast SPA	Northern fulmar	N
IE0004114	Illaunonearaun SPA	Northern fulmar	N
IE0004119	Loop Head SPA	Northern fulmar	N
IE0004117	Ireland's Eye SPA	Northern fulmar	N
		Northern gannet	Y
IE0004122	Skerries Islands SPA	Northern fulmar	N
IE0004125	Magharee Islands SPA	Northern fulmar	N
		Storm petrel	N
IE0004127	Wicklow Head SPA	Northern fulmar	N
IE0004153	Dingle Peninsula SPA	Northern fulmar	N
IE0004154	Iveragh Peninsula SPA	Northern fulmar	N
		Black-legged kittiwake	N
IE0004155	Beara Peninsula SPA	Northern fulmar	N
IE0004156	Sheep's Head to Toe Head SPA	Northern fulmar	N
IE0004175	Deenish Island and Scariff Island SPA	Northern fulmar	N
		Manx shearwater	Y
		Lesser black-backed gull	N
		Storm petrel	N

Site code	Site name	Relevant qualifying interests	Diving species potentially sensitive to underwater noise?
IE0004189	Kerry Head SPA	Northern fulmar	N
IE0004190	Galley Head to Duneen Point SPA	Northern fulmar	N
		Herring gull	N
IE0004191	Seven Heads SPA	Herring gull	N
IE0004192	Helvick Head to Ballyquin SPA	Northern fulmar	N
		Common guillemot	Y
		Razorbill	Y
		Black-legged kittiwake	N
		Herring gull	N
UK9014051	Skomer, Skokholm and the Seas off Pembrokeshire	Lesser black-backed gull	N
		Manx shearwater	Y
		Storm petrel	N
UK9014041	Grassholm SPA	Northern gannet	Y
UK9020328	Irish Sea Front	Manx shearwater	Y
UK9013121	Aberdaron Coast and Bardsey Island	Manx shearwater	Y
UK9020291	Copeland Islands	Manx shearwater	Y

Figure 2.1: SPAs identified for further assessment

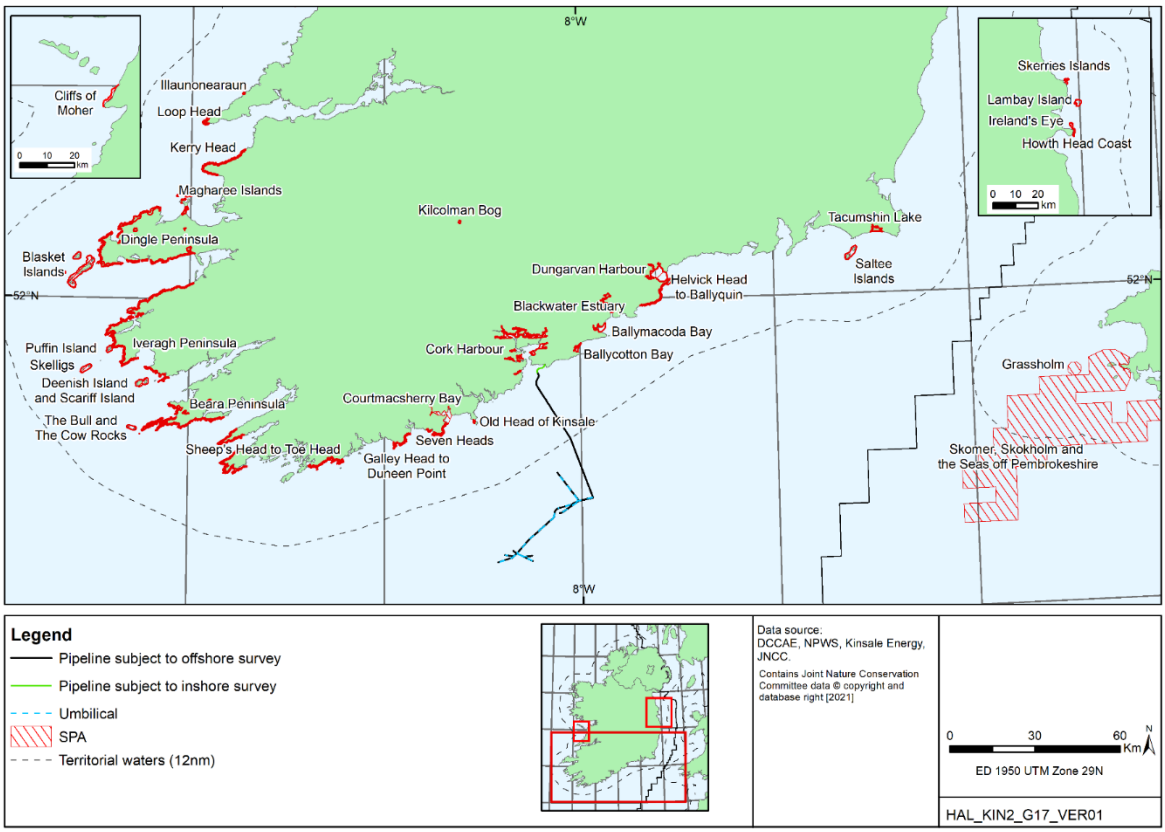
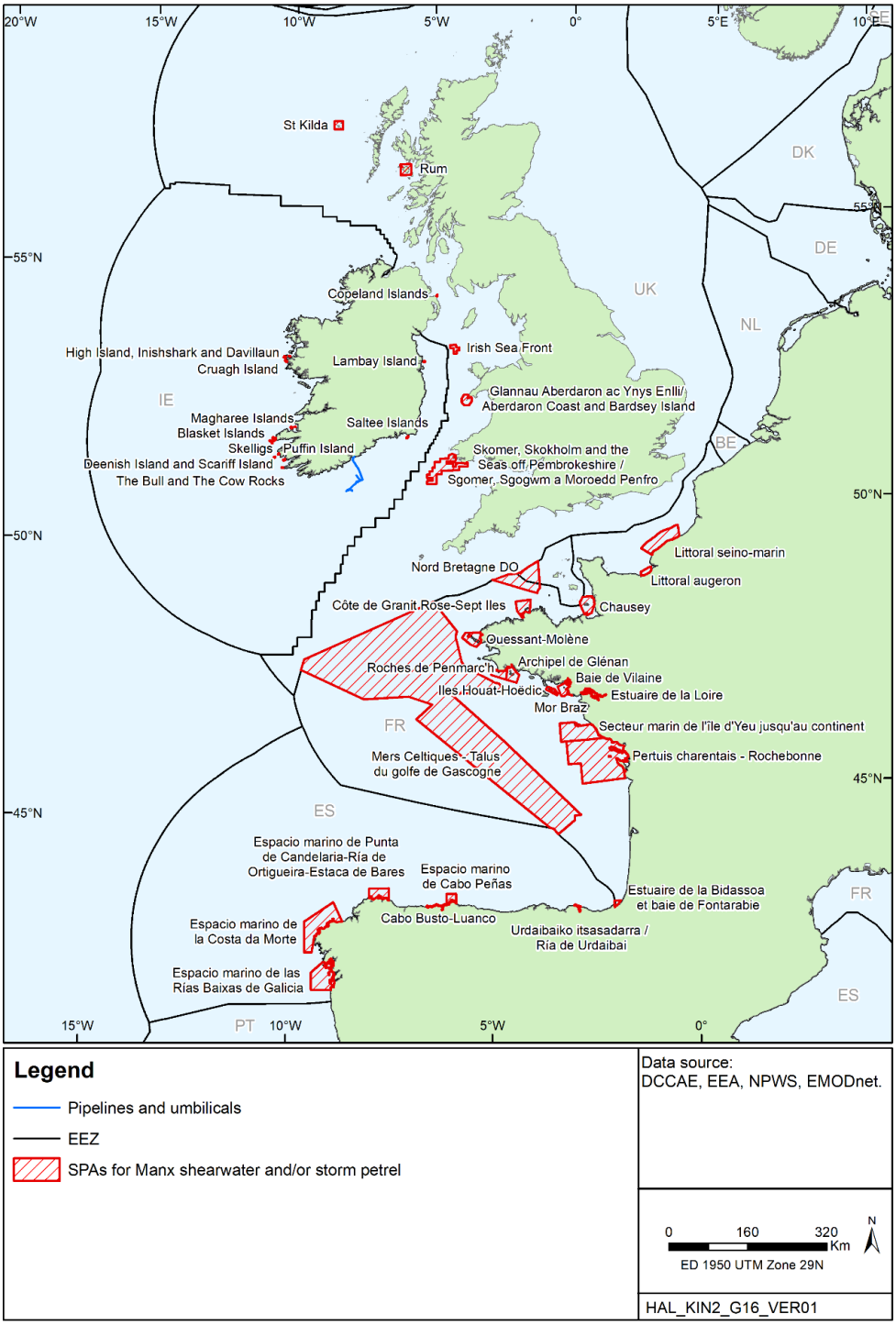


Figure 2.2: Sites identified using Manx shearwater mean maximum foraging range



2.2 Identification of Potential Sources of Effects

No additional sources of likely significant effect for the KADP alone were identified.

This section assesses the likelihood for significant negative direct, indirect and in-combination effects to the qualifying interests of relevant Natura 2000 sites based on

those methods previously presented. Those main sources of potential effect relevant to the Natura 2000 sites and their qualifying interests remain the same:

- the physical presence of vessels in field and in transit;
- underwater noise from vessels, cutting, rock placement and post-decommissioning survey (note that no explosive cutting is proposed);
- physical disturbance from rig placement, rig and vessel anchoring, and infrastructure removal and rock placement;
- discharges to sea;
- accidental events;
- waste recycling, reuse and disposal;
- atmospheric emissions;
- noise associated with the demolition of Inch terminal; and
- dust emissions associated with the terminal demolition works.

2.3 Consideration of Likely Significant Effects

Table 2.3 includes those sites originally identified for assessment in the AA Screening Report and the additional SPA sites identified on the basis of the updated criterion defining the ZoI for breeding seabird features (Section 2.1). Also indicated are the relevant qualifying features of the sites linked to the sources of potentially significant effect (physical presence and noise) from the proposed activities covered by Consent Application no. 3 for Kinsale Head Petroleum Lease (OPL 1) and Consent Application no. 2 for Seven Heads. Those sites identified are then considered below. No additional SACs have been identified for further consideration.

Table 2.3: Sites identified for further consideration

Site code	Site name	Relevant qualifying interests	Physical presence	Underwater noise
IE0004002	Saltee Islands SPA	Northern fulmar	✓	×
		Lesser black-backed gull	✓	×
		Manx shearwater	✓	✓
		Northern gannet	✓	✓
		Atlantic puffin	✓	✓
		Black-legged kittiwake	✓	×
IE0004003	Puffin Island SPA	Northern fulmar	✓	×
		Manx shearwater	✓	✓
		Storm petrel	✓	×
IE0004005	Cliffs of Moher SPA	Northern fulmar	✓	×
IE0004007	Skelligs SPA	Northern fulmar	✓	×
		Manx shearwater	✓	✓
		Northern gannet	✓	✓

Site code	Site name	Relevant qualifying interests	Physical presence	Underwater noise
		Storm petrel	✓	×
IE0004008	Blasket Islands SPA	Northern fulmar	✓	×
		Manx shearwater	✓	✓
		Storm petrel	✓	×
IE0004021	Old Head of Kinsale SPA	Northern fulmar	✓	×
		Herring gull	✓	×
		Black-legged kittiwake	✓	×
		Common guillemot	✓	×
		Razorbill	✓	✓
IE0004022	Ballycotton Bay SPA	Lesser black-backed gull	✓	×
		Common gull	✓	×
IE0004023	Ballymacoda Bay SPA	Lesser black-backed gull	✓	×
		Common gull	✓	×
IE0004028	Blackwater Estuary SPA	Lesser black-backed gull	✓	×
		Common gull	✓	×
IE0004219	Courtmacsherry Bay SPA	Common gull	✓	×
IE0004030	Cork Harbour SPA	Lesser black-backed gull	✓	×
		Common gull	✓	×
IE0004032	Dungarvan Harbour SPA	Lesser black-backed gull	✓	×
IE0004066	The Bull and The Cow Rocks SPA	Northern fulmar	✓	×
		Northern gannet	✓	×
		Storm petrel	✓	×
		Black-legged kittiwake	✓	×
IE0004069	Lambay Island SPA	Northern fulmar	✓	×
		Manx shearwater	✓	✓
IE0004092	Tacumshin Lake SPA	Lesser black-backed gull	✓	×
		Lesser black-backed gull	✓	×
IE0004095	Kilcolman Bog SPA	Lesser black-backed gull	✓	×
IE0004113	Howth Head Coast SPA	Northern fulmar	✓	×
IE0004114	Illaunonearaun SPA	Northern fulmar	✓	×
IE0004119	Loop Head SPA	Northern fulmar	✓	×
IE0004117	Ireland's Eye SPA	Northern fulmar	✓	×
		Northern gannet	✓	✓
IE0004122	Skerries Islands SPA	Northern fulmar	✓	×
IE0004125	Magharee Islands SPA	Northern fulmar	✓	×
		Storm petrel	✓	×
IE0004127	Wicklow Head SPA	Northern fulmar	✓	×
IE0004153	Dingle Peninsula SPA	Northern fulmar	✓	×
IE0004154	Iveragh Peninsula SPA	Northern fulmar	✓	×

Site code	Site name	Relevant qualifying interests	Physical presence	Underwater noise
		Black-legged kittiwake	✓	×
IE0004155	Beara Peninsula SPA	Northern fulmar	✓	×
IE0004156	Sheep's Head to Toe Head SPA	Northern fulmar	✓	×
IE0004175	Deenish Island and Scariff Island SPA	Northern fulmar	✓	×
		Manx shearwater	✓	✓
		Lesser black-backed gull	✓	×
		Storm petrel	✓	×
IE0004189	Kerry Head SPA	Northern fulmar	✓	×
IE0004190	Galley Head to Duneen Point SPA	Northern fulmar	✓	×
		Herring gull	✓	×
IE0004191	Seven Heads SPA	Herring gull	✓	×
IE0004192	Helvick Head to Ballyquin SPA	Northern fulmar	✓	×
		Common guillemot	✓	✓
		Razorbill	✓	✓
		Black-legged kittiwake	✓	×
		Herring gull	✓	×
UK9014051	Skomer, Skokholm and the Seas off Pembrokeshire SPA	Lesser black-backed gull	✓	×
		Manx shearwater	✓	✓
		Storm petrel	✓	×
UK9014041	Grassholm SPA	Northern gannet	✓	✓
UK9013121	Aberdaron Coast and Bardsey Island	Manx shearwater	✓	✓
UK9020291	Copeland Islands	Manx shearwater	✓	✓
UK9020328	Irish Sea Front	Manx shearwater	✓	✓

2.3.1 Effects of physical presence of vessels on birds

The physical presence of the vessels may potentially cause displacement and/or other behavioural responses in birds. Most species from relevant SPAs within foraging range of the operational area have been judged to have a low to moderate sensitivity to disturbance by shipping traffic; these include northern gannet, fulmar, common guillemot, kittiwake, Manx shearwater and gulls (Garthe & Hüppop 2004, MMO 2018, Fliessbach *et al.* 2019). While rafting birds which are qualifying interests of sites may move in response to vessels in transit, such effects would be of low magnitude, short duration and transient, and will represent negligible additional disturbance over other vessel traffic including that of fishing, cargo and tanker traffic. For example, a shipping study based on Automatic Identification System (AIS) data completed for IOSEA4 (DCENR 2011) indicated that generally up to 300-750 vessels per year were present in waters off the south coast of Ireland

and in the vicinity of the operational area (see other data sources including MMO 2014 and subsequent data updates, and EMODnet 2019[2]).

Physical disturbance of seaduck and other waterbird flocks by vessel traffic is possible, but the distance from the activities at which flushing of birds could take place (~4km) is less than the minimum distance from the proposed activities (at least 5.5km, Cork Harbour SPA). The coastal nature of the foraging activities of waterbirds further limits the potential for interaction between such birds and the offshore aspects of the activities, however, there is the potential for interaction with certain wintering features associated with Cork Harbour SPA (cormorant, red-breasted merganser), though this could be avoided depending on activity timing (i.e. by not undertaking work in the wintering period). The presence of activities inshore will be of short duration, temporary and incremental to the relatively low density of shipping in the area, which is generally recreational or for inshore fisheries.

In view of the available evidence on the potential for the proposed activities to generate disturbance to qualifying bird interests of relevant sites for which a potential interaction was identified, significant effects are not considered to be likely.

2.3.2 Effects of underwater noise on diving birds

Information on the underwater hearing abilities of diving birds and evidence of the effects of underwater anthropogenic noise is very limited. Direct effects from underwater acoustic surveys on diving birds could potentially occur through physical damage, given exposure to sufficiently high amplitudes, or through behavioural disturbance. Deeper-diving species which spend longer periods of time underwater (e.g. auks) may be most at risk of exposure, but all species which routinely submerge in pursuit of prey and benthic feeding opportunities in marine and estuarine habitats (i.e. also including divers *Gavia spp*., grebes, diving ducks, cormorant, shag, gannet, and Manx shearwater) may be exposed to anthropogenic noise.

Tests of hearing in a range of diving species suggest a hearing range of approximately 500Hz to 4kHz, with similar results obtained in air and underwater (Crowell 2014, Crowell *et al.* 2015, Hansen *et al*. 2017). McCauley (1994) inferred from vocalisation ranges that the threshold of perception for low frequency seismic noise in some species (e.g. penguins, considered as a possible proxy for auk species) would be high, hence individuals might be adversely affected only in close proximity to the source.

Very high amplitude low frequency underwater noise may result in acute trauma to diving seabirds, with several studies reporting mortality of diving birds in close proximity (i.e. tens of metres) to underwater explosions (e.g. Yelverton *et al*. 1973, Stemp 1985, Danil & St Leger 2011). However, mortality of seabirds has not been reported during extensive seismic operations in the North Sea and elsewhere.

[2] https://www.emodnet-humanactivities.eu/search-results.php?dataname=Vessel+Density+ and https://www.emodnet-humanactivities.eu/search-results.php?dataname=Route+density+%28source%3A+EMSA%29

With the exception of Pichegru *et al*. (2017), which relates to penguins, there are no published reports of changes in abundance or distribution of diving birds concurrent with seismic or other acoustic survey activity. A study investigated seabird abundance in Hudson Strait (Atlantic seaboard of Canada) during seismic surveys over three years (Stemp 1985). Comparing periods of shooting and non-shooting, no significant difference was observed in abundance of thick-billed murre (Brünnich's guillemot), or fulmar or kittiwake.

While seabird responses to approaching vessels are highly variable (e.g. Fliessbach *et al*. 2019), flushing disturbance would be expected to displace most diving seabirds from close proximity to the survey vessel and any towed equipment, thereby limiting their exposure to the highest sound pressures generated. Similarly, any behavioural disturbance of seabirds due to the survey activities is most likely to be temporary displacement associated with the physical presence of the vessel, comparable to that experienced by routine shipping traffic (see above).

While acknowledging limited data and the importance of the Kinsale area to several species of diving birds which are qualifying interests of relevant SPAs (i.e. guillemot, razorbill, northern gannet and Manx shearwater), a consideration of the lack of reported effects of seismic survey on diving birds, the comparatively lower amplitude and higher frequency source characteristics of the potential sources in the planned survey associated with pipeline rock placement, in addition to the small spatial footprint and short duration of the planned operations, leads to the conclusion that significant effects on diving birds are not considered to be likely.

2.4 Consideration of Potential In-Combination Effects

A number of projects have been proposed since the publication of the AA Screening Report and AA Screening Report Addendum no. 1 which are of relevance to Kinsale Head Consent Application no. 3 and Seven Heads Consent Application no. 2. However, none are considered to be a source of potential likely significant in-combination effects either for the decommissioning of the offshore facilities or the Inch Terminal.

Two Foreshore Licences have been applied for in relation to offshore wind farm site investigation work in the territorial waters off Cork (see Figure 2.3). The application most of relevance to the KADP is for the Emerald project, though there is some overlap with the Inis Ealga project area in close proximity to shore. While the applicant for the Emerald project has indicated their intention to complete site investigation works in offshore waters which would cover the Kinsale Area, no application has yet been made. The proposed schedules for the inshore surveys associated with Emerald and Inis Ealga both indicate a five year window from the date of consent to completion. The indicative schedule in their respective applications suggest activities starting in 2021, or likely taking place 2022-2023. As neither application has been approved, there is the potential for the timescale within which works take place to be later than proposed. There is the potential for interaction between the timings of these surveys and work associated with the decommissioning of the export pipeline, but in view of the approach to decommissioning in this area (rock placement on export pipeline freespans), the duration and scale of the works (up to 16 days for all KADP pipelines, see AA Screening Report Section 3.4.4.1) are such that there is considerable scope to avoid interactions.

The Minister has not made a decision in relation to either application as to whether the proposed activities would result in a likely significant effect on a Natura 2000 site alone or in-combination with any other project. The applicant for the Emerald site investigation identifies a likely significant effect for vibration and underwater noise only for the Twaite shad (Blackwater River SAC), but no adverse effects were concluded. That for Inis Ealga identifies likely significant effects from vessel disturbance for features of Mid-Waterford Coast SPA and Helvick Head to Ballyquin SPA, with a conclusion that adverse effects would not result, subject to mitigation. When considered in the context of the sources of effect from the KADP in relation to the above sites, as set out in Appendix A to the AA Screening Report Addendum no. 1, likely significant in-combination effects with either set of site investigation works have not been identified.

The wind farm proposals associated with the above site investigations are at a conceptual stage; no consent application for either development has been made, and no approvals have been granted. In the absence of project information, including indicative design parameters and schedule, a meaningful assessment of the development stages of these wind farms cannot be undertaken.

The Barryroe oil discovery and the potential for further exploration and development was assessed in the in-combination effects section of the AA Screening Report. Since that time, an application was made to conduct a site survey within the Barryroe licence area (EL 1/11), which was completed in September 2019. Subsequently, a further survey application was made in August 2019 for an area covering a proposed appraisal well ('K'), which overlaps parts of the Seven Heads field. The survey was completed in November 2021 and thus interactions are not considered possible with the KADP activities.

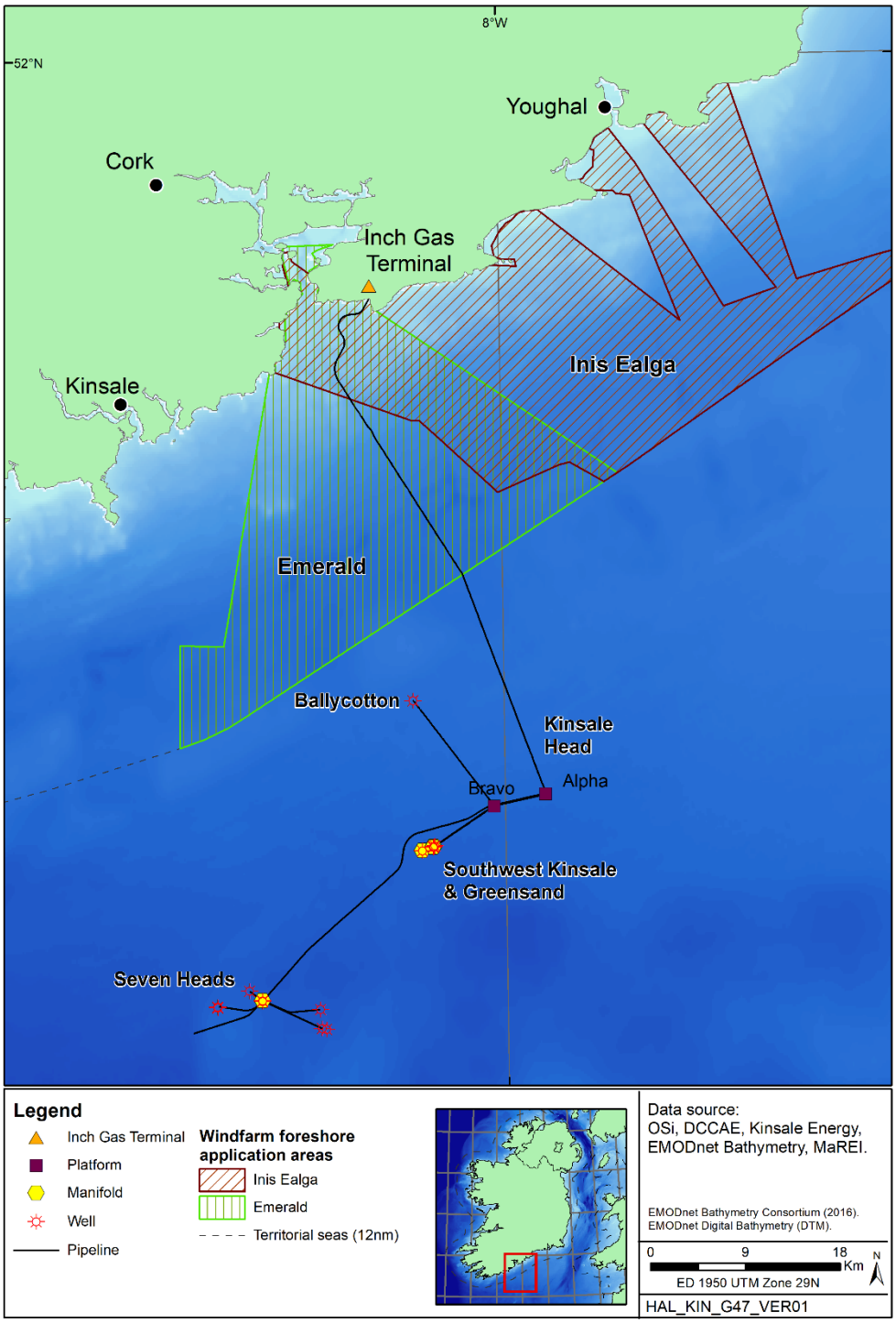
As noted in the AA Screening Report, while there are a number of exploration licence areas in the vicinity of the Kinsale Area, project plans for additional exploration are not known or are uncertain[3], and therefore no in-combination effects are predicted at this time.

Kinsale Energy will maintain awareness and dialogue with the developers of both wind farms, and any further proposals in relation to the Barryroe field, to ensure that activities do not proceed in a matter which could lead to cumulative impacts.

It is concluded that no further sources of likely significant in-combination effect have been identified. Consequently, the conclusion of the AA Screening Report remains unchanged.

[3] Noting the position set out in the Policy Statement for Petroleum Exploration and Production Activities as part of Ireland's Transition to a Low Carbon Economy, that future licensing rounds will not cover oil exploration, but would be allowed for gas only as a transition fuel.

Figure 2.3: Foreshore Licence applications relevant to offshore wind site investigations



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Section 3

AA Screening Statement and Conclusion

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3 AA Screening Statement and Conclusion

In keeping with Article 6(3) of the Habitats Directive, as the KADP is not directly connected with or necessary to the management of any Natura 2000 site, an assessment has been undertaken to determine whether the KADP could result in likely significant effects for any relevant site, alone or in-combination with other plans or projects. It has been concluded that the activities associated with the proposed KADP (see **Section 3 of the AA Screening Report**) will not result in likely significant effects (alone or in-combination) on the Conservation Objectives of any relevant Natura 2000 site within the Zones of Influence considered (as defined in **AA Screening Report Addendum no. 1** and Section 2.1 of this Addendum). This is in view of:

- the assessment presented in the AA Screening Report,
- that information and additional assessment presented in **Section 2** of the **AA Screening Report Addendum no. 1,** which reflects relevant updates provided as part of Kinsale Head Consent Application no. 2,
- additional information including in relation to in-combination effects with other plans and programmes, which were not found to be a source of likely significant effect.

Consistent with the AA Screening Report, the additional assessment made in this addendum has not taken into account any mitigation measures designed to avoid or reduce the harm of the project on any site.

The conclusion of the AA Screening Report, updated to reflect the information presented in this addendum, and the AA Screening Report Addendum no 1, is that the activities associated with the proposed KADP are not considered to result in likely significant effects (alone or in-combination) on the Conservation Objectives of any relevant Natura 2000 site. The competent authority will make the final determination in this regard.

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Section 4

Annex IV Species Screening for likely effects

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4 Annex IV Species Screening for likely effects

4.1 Introduction

A limited amount of updated environmental information is available for some relevant Annex IV Species, which is presented below.

4.1.1 Cetaceans

Since the publication AA Screening Report Addendum no. 1, data is available for two further annual Celtic Sea Herring Acoustic Surveys (CSHAS) covering 2019 and 2020 (O'Donnell *et al.* 2019, 2020). In the 2019 and 2020 CSHAS, 107 and 126 hours of visual survey effort, respectively, by dedicated marine mammal observers recorded a similar diversity and relative abundance of marine mammals to that in previous years. Common dolphins were observed throughout coastal and offshore waters, and were by far the most frequently sighted and most numerous species (141 sightings, including a total of 1,672 individuals in 2019 and 240 sightings, including a total of 2,174 individuals in 2020. Fin whales were the second most numerous (3 sightings of 3 individuals, and 11 sightings, including a total of 12 individuals, respectively). Sightings were also made of harbour porpoise, bottlenose dolphin, humpback and minke whale. Figures from these most recent surveys have been incorporated into 4.1 below, which summarises CSHAS data for the last 13 years.

The 2019 and 2020 CSHAS sightings data are consistent with that presented in the AA Screening and AA Screening Report Addendum no. 1, and as no additional sources of likely significant effect for these, or any other Annex IV species, have been identified, the conclusions of these former assessments are considered to remain the same.

Table 4.1: Cetacean sightings recorded during the annual Celtic Sea Herring Acoustic Surveys

Species	Celtic Sea Herring Acoustic Surveys (CSHAS) 2008-2020	
	Number of years observed (of a maximum of 13)	Total number of sightings (individuals)
Toothed cetaceans		
Common dolphin	12	1,230 (15,877)
Harbour porpoise	11	48 (263)*
Bottlenose dolphin	6	8 (40)
Risso's dolphin	4	6 (14)
Killer whale	1	1 (3)
Pilot whale	0	0 (0)
Unidentified dolphin	*na*	*81 (674)*
Baleen whales		
Fin whale	13	139 (237)
Minke whale	12	83 (94)
Humpback whale	7	19 (26)
Unidentified whale	*11*	75 (95)

Species	Celtic Sea Herring Acoustic Surveys (CSHAS) 2008-2020	
	Number of years observed (of a maximum of 13)	Total number of sightings (individuals)
Total	***na***	***1,690 (17,323)***

*Notes: See main text for a description of the two data sources. * Total harbour porpoise sightings in the CSHASs were heavily influenced by data from the 2016 cruise report where 22 sightings, representing 191 individuals, were reported in the Celtic Deep (>100km southeast of Kinsale); excluding 2016 data yields a total of 19 harbour porpoise sightings totalling 57 individuals.*
Source: Nolan et al. (2014), O'Donnell et al. (2008, 2011, 2012, 2013, 2015, 2016, 2017, 2018, 2019, 2020) Saunders et al. (2009, 2010)

4.1.2 Marine turtles

As indicated in the original Appropriate Assessment Screening and Article 12 Assessment Screening, most turtle sightings occur in the summer, peaking in August. The 2014 Celtic Sea Herring Acoustic Survey (Cronin & Barton 2014) made four sightings of leatherback turtle, three of them approximately 70km south of Cork Harbour, although no confirmed sightings of this species were made in subsequent surveys (O'Donnell *et al.* 2016, 2017, 2018, 2019, 2020). Aerial surveys for the ObSERVE project from 2015-2016 recorded a handful of leatherback turtle sightings at the southern limits of Irish offshore waters in summer; none were observed in the operational area (Rogan *et al*. 2018).

The physical presence of vessels and equipment during the survey activities are anticipated to cause no more than temporary and localised low-level behavioural responses in Annex IV species, similar to those induced by wider shipping operations in the area. The risk of impacts to Annex IV marine turtles from the planned activities is considered to be negligible, and significant effects are not considered to be likely.

4.1.3 Otters

As indicated in Section 7.2.5 of the original Appropriate Assessment Screening and Article 12 Assessment Screening, no evidence of otters was found in the Inch Terminal site and it was determined that no suitable habitat exists within the landownership boundary. Potential habitat for otter may exist in the streams to the east and west of the site and in the coastal habitats to the south. In considering the distance from the Inch Terminal site to the streams and coastal areas with potential otter habitats, the localised, temporary nature and scale of the proposed terminal demolition and associated pipeline works, no significant impact on otters is considered likely.

The closest site for which otters are a designated feature, the Blackwater River (Cork/Waterford) SAC, is a minimum of 26km from the proposed activities and consequently no significant impact on the otter feature or their supporting habitats is considered likely.

4.2 Consideration of Potential In-Combination Effects with Other Plans and Projects in the Area

A number of projects have been proposed since the publication of the AA Screening Report or AA Screening Report Addendum no. 1 which are of relevance to Kinsale Head Consent Application no. 3 and Seven Heads Consent Application no. 2.

Two Foreshore Licences have been applied for in relation to offshore wind farm site investigation work in the territorial waters off Cork (see Figure 2.3). The application most of relevance to the KADP is for the Emerald project, though there is some overlap with the Inis Ealga project area in close proximity to shore. While the applicant for the Emerald project has indicated their intention to complete site investigation works in offshore waters which would cover the Kinsale Area, no application has yet been made. The proposed schedules for the inshore surveys associated with Emerald and Inis Ealga both indicate a five year window from the date of consent to completion. The indicative schedule in their respective applications suggest activities starting in 2021, or likely taking place 2022-2023. As neither application has been approved, there is the potential for the timescale within which works take place to be later than proposed. There is the potential for interaction between the timings of these surveys and work associated with the decommissioning of the export pipeline, but in view of the approach to decommissioning in this area (rock placement on freespans), the duration and scale of the works (16 days for all Kinsale pipelines based on selected option, see AA Screening Report Section 3.4.4.1) are such that there is considerable scope to avoid interactions.

The wind farm proposals associated with the site investigations are at a conceptual stage; no consent application for either development has been made, and no approvals have been granted. In the absence of project information, including indicative design parameters and schedule, a meaningful assessment of the development stages of these wind farms cannot be undertaken.

The Barryroe oil discovery and the potential for further exploration and development was assessed in the in-combination effects section of the Article 12 screening contained in the AA Screening Report. Since that time, an application was made to conduct a site survey within the Barryroe licence area (EL 1/11), which was completed in September 2019. Subsequently, a further survey application was made in August 2019 for an area covering a proposed appraisal well ('K'), which overlaps parts of the Seven Heads field. The survey was completed in November 2021 and thus interactions are not considered possible with KADP activities.

As noted in the AA Screening Report, while there are a number of exploration licence areas in the vicinity of the Kinsale Area, project plans for additional exploration are not known or are uncertain[4], and therefore no in-combination effects are predicted at this time.

It is concluded that no further sources of likely significant in-combination effect have been identified in relation to Annex IV species. Consequently, the conclusion of the IV Species Screening remains unchanged.

[4] Noting the position set out in the Policy Statement for Petroleum Exploration and Production Activities as part of Ireland's Transition to a Low Carbon Economy, that future licensing rounds will not cover oil exploration, but would be allowed for gas only as a transition fuel.

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Section 5

Annex IV Species Screening Conclusions

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5 Annex IV Species Screening Conclusions

Whilst Annex IV species may be present in the vicinity of the proposed KADP, the localised scale and duration of the works will not result in the deliberate disturbance or destruction of any of the species listed in Annex IV of the Habitats Directive which may be present in the study area.

In light of the findings of the Annex IV assessment in the AA Screening Report, the update provided in AA Screening Report Addendum no. 1, and in the context of the information presented here (see **Section 4**), it can be concluded that it is not considered necessary to undertake any further Annex IV Species (European Protected Species) Impact Assessment. The competent authority will make the final determination in this regard.

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Section 6

References

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Kinsale Area Decommissioning Project

Appendix 1

List of Special Protection Areas

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APPENDIX 1: NATURA 2000 SITE INFORMATION

This Appendix tabulates the qualifying interests for each Special Protection Area for which a potential interaction has been identified (Table 2.3) and those features of relevance to the proposed works. Additional information on site conservation objectives is also provided, which along with the qualifying interests inform a consideration of the nature of the interaction with the potential sources of likely significant effect.

Special Protection Areas (SPAs)

Site Name: Ballymacoda Bay SPA **Site Code: 0004023**
Site information
Relevant qualifying interests: Wigeon (*Anas penelope*), teal (*Anas crecca*), ringed plover (*Charadrius hiaticula*), golden plover (*Pluvialis apricaria*), grey plover (*Pluvialis squatarola*), lapwing (*Vanellus vanellus*), sanderling (*Calidris alba*), dunlin (*Calidris alpina*), black-tailed godwit (*Limosa limo*sa), bar-tailed godwit (*Limosa lapponica*), curlew (*Numenius arquata*), redshank (*Tringa totanus*), turnstone (*Arenaria interpres*), black-headed gull (*Chroicocephalus ridibundus*), common gull (*Larus canus*), lesser black-backed gull (*Larus fuscus*), kittiwake (*Rissa tridactyla),* Wetland & Waterbirds **Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area:** lesser black-backed gull (*Larus fuscus*), kittiwake (*Rissa tridactyla),* **Summary Conservation objectives:** • To maintain the favourable conservation condition of those qualifying interests listed above in Ballymacoda Bay SPA, including the wetland habitat as a resource for the regularly occurring migratory birds that utilise it. **Feature attributes and targets defining favourable conservation status:** https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004023.pdf
Closest distance to the activities: 21km
Consideration of site interest features against potential sources of likely significant effect
The physical presence of vessels As noted in Section 2.3, physical disturbance of seaduck and other waterbird flocks by vessel traffic is possible, but the distance from vessels at which flushing of birds could take place is significantly less than the minimum distance of the proposed activities (21km) such that there is no foreseeable interaction. Gull species, while having the potential to forage within range of the operational area (see Woodward *et al.* 2019), are regarded to have a low sensitivity to shipping traffic (Garthe & Hüppop 2004, Fliessbach *et al.* 2019). There is either no potential for interaction in the case of waterbirds, or the qualifying interest which could interact is not sensitive to the proposed activities. However, in view of the potential for interaction, the latter is considered in Section 2.3. **Underwater noise from vessel and activities** None of the qualifying interests are diving seabirds which are likely to be most at risk of any underwater noise effects, and therefore no interactions with the operations are considered to be possible.

Site Name: Ballycotton Bay SPA
Site Code: 004022

Site information

Relevant qualifying interests: Teal (*Anas crecca*); ringed plover (*Charadrius hiaticula*); golden plover (*Pluvialis apricaria*); grey plover (*Pluvialis squatarola*); lapwing (*Vanellus vanellus*); black-tailed godwit (*Limosa limosa*); bar-tailed godwit (*Limosa lapponica*); curlew (*Numenius arquata*); turnstone (*Arenaria interpres*); common gull (*Larus canus*); lesser black-backed gull (*Larus fuscus*); razorbill (*Alca torda*), Wetland & Waterbirds

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: razorbill (*Alca torda*), lesser black-backed gull (*Larus fuscus*) – note this is a wintering feature of the site

Summary Conservation objectives:

- To maintain the favourable conservation condition of those qualifying interests listed above in Ballycotton Bay SPA, including the wetland habitat as a resource for the regularly occurring migratory birds that utilise it.

Feature attributes and targets defining favourable conservation status:
https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004022.pdf

Closest distance to the activities: 11km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
As noted in Section 2.3, physical disturbance of seaduck and other waterbird flocks by vessel traffic is possible, but the distance from vessels at which flushing of birds could take place is significantly less than the minimum distance of the proposed activities (11km) such that there is no foreseeable interaction. Gull species, while having the potential to forage within range of the operational area (see Woodward *et al.* 2019), are regarded to have a low sensitivity to shipping traffic (Garthe & Hüppop 2004, Fliessbach *et al.* 2019). It should also be noted that lesser black-backed gull is listed as a wintering feature for this site, lessening the potential for any interaction with the qualifying interest due to the proposed activity timing (April-September). There is either no potential for interaction in the case of waterbirds, or the qualifying interest which could interact is not sensitive to the proposed activities. However, in view of the potential for interaction, the latter is considered in Section 2.3.

Underwater noise from vessel and activities
There is the potential for interactions between diving seabird species (guillemot, razorbill) which are potentially sensitive to underwater noise, and the operations. This is considered further in Section 2.3.

Site Name: Courtmacsherry Bay SPA
Site Code: IE0004219

Site information

Relevant qualifying interests: great northern diver (*Gavia immer*), shelduck (*Tadorna tadorna*), wigeon (*Anas penelope*), red-breasted merganser (*Mergus serrator*), golden plover (*Pluvialis apricaria*), lapwing (*Vanellus vanellus*), dunlin (*Calidris alpina*), black-tailed godwit (*Limosa limosa*), bar-tailed godwit (*Limosa lapponica*), curlew (*Numenius arquata*), black-headed gull (*Chroicocephalus ridibundus*), common gull (*Larus canus*), wetland and waterbirds.

Site Name: Courtmacsherry Bay SPA
Site Code: IE0004219

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: common gull (*Larus canus*)

Summary Conservation objectives:

- To maintain the favourable conservation condition of those qualifying interests listed above in Ballymacoda Bay SPA, including the wetland habitat as a resource for the regularly occurring migratory birds that utilise it.

Feature attributes and targets defining favourable conservation status:
https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004023.pdf

Closest distance to the activities: 31km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
While common gull have the potential to forage within range of the operational area (see Woodward *et al.* 2019), they are not regarded to have a high sensitivity to shipping traffic (Garthe & Hüppop 2004, Fliessbach *et al.* 2019). However, in view of the potential for interaction, this is considered further in Section 2.3.

Underwater noise from vessel and activities
None of the qualifying interests are diving seabirds which are likely to be most at risk of any underwater noise effects, and therefore no interactions with the operations are considered to be possible.

Site Name: Blackwater Estuary SPA
Site Code: 004028

Site information

Relevant qualifying interests: Wigeon (*Anas penelope*), golden plover (*Pluvialis apricaria*), lapwing (*Vanellus vanellus*), dunlin (*Calidris alpina*), black-tailed godwit (*Limosa limosa*), bar-tailed godwit (*Limosa lapponica*), curlew (*Numenius arquata*), redshank (*Tringa totanus*), herring gull (*Larus argentatus*), Wetland & waterbirds

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: herring gull (*Larus argentatus*), lesser black-backed gull (*Larus fuscus*)

Summary Conservation objectives:

- To maintain the favourable conservation condition of those qualifying interests listed above in Blackwater Estuary SPA, including the wetland habitat as a resource for the regularly occurring migratory birds that utilise it.

Feature attributes and targets defining favourable conservation status:
https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004028.pdf

Closest distance to the activities: 28km

Consideration of site interest features against potential sources of likely significant effect

As noted in Section 2.3, physical disturbance of seaduck and other waterbird flocks by vessel traffic is possible, but the distance from vessels at which flushing of birds could take place is significantly less than the minimum distance of the proposed activities (28km) such that there is no foreseeable interaction. Gull species, while having the potential to forage within range of the operational area (see Woodward *et al.* 2019), are

Site Name: Blackwater Estuary SPA
Site Code: 004028

regarded to have a low sensitivity to shipping traffic (Garthe & Hüppop 2004, Fliessbach *et al.* 2019). There is either no potential for interaction in the case of waterbirds, or the qualifying interest which could interact is not sensitive to the proposed activities. However, in view of the potential for interaction, the latter is considered in Section 2.3.

Underwater noise from vessel and activities
None of the qualifying interests are diving seabirds which are likely to be most at risk of any underwater noise effects, and therefore no interactions with the operations are considered to be possible.

Site Name: Cork Harbour SPA
Site Code: 004030

Site information

Relevant qualifying interests: Little grebe (*Tachybaptus ruficollis*), great crested grebe (*Podiceps cristatus*), cormorant (*Phalacrocorax carbo*), grey heron (*Ardea cinerea*), shelduck (*Tadorna tadorna*), wigeon (*Anas penelope*), teal (*Anas crecca*), pintail (*Anas acuta*), shoveler (*Anas clypeata*), red-breasted merganser (*Mergus serrator*), oystercatcher (*Haematopus ostralegus*), golden plover (*Pluvialis apricaria*), grey plover (*Pluvialis squatarola*), Lapwing (*Vanellus vanellus*), dunlin (*Calidris alpina*), Black-tailed Godwit (*Limosa limosa*), bar-tailed godwit (*Limosa lapponica*), curlew (*Numenius arquata*), redshank (*Tringa totanus*), black-headed gull (*Chroicocephalus ridibundus*), common gull (*Larus canus*), lesser black-backed gull (*Larus fuscus*), common tern (*Sterna hirundo*), Wetland & Waterbirds

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: common gull (*Larus canus*), lesser black-backed gull (*Larus fuscus*), cormorant (*Phalacrocorax carbo*)

Summary Conservation objectives:

- To maintain the favourable conservation condition of those qualifying interests listed above in Cork Harbour SPA, including the wetland habitat as a resource for the regularly occurring migratory birds that utilise it.

Feature attributes and targets defining favourable conservation status:
https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004030.pdf

Closest distance to the activities: 5km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
As noted in Section 2.3, physical disturbance of seaduck and other waterbird flocks by vessel traffic is possible, but the distance from vessels at which flushing of birds could take place is less than the minimum distance of the proposed operations (5km). The coastal nature of the foraging activities of waterbirds further limits the potential for interaction between such birds and the offshore aspects of the activities, however, there is the potential for interaction with certain wintering features associated with Cork Harbour SPA (e.g. cormorant, red-breasted merganser), though this could be avoided depending on activity timing. Gull species, while having the potential to forage within range of the operational area (see Woodward *et al.* 2019), are regarded to have a low sensitivity to shipping traffic (Garthe & Hüppop 2004, Fliessbach *et al.* 2019). There is either limited potential for interaction in the case of waterbirds, or the qualifying interest which could interact is not sensitive to the proposed activities. In view of the potential

Site Name: Cork Harbour SPA
Site Code: 004030

for interaction with sensitive qualifying interests of the site, the latter is considered in Section 2.3.

Underwater noise from vessel and activities
There is the potential for interactions between a diving species (cormorant, red-breasted merganser) which are potentially sensitive to underwater noise, and the activities, which is considered further in Section 2.3.

Site Name: Dungarvan Harbour SPA
Site Code: 004032

Site information

Relevant qualifying interests: Great crested grebe (*Podiceps cristatus*), light-bellied brent goose (*Branta bernicla hrota*), shelduck (*Tadorna tadorna*), red-breasted merganser (*Mergus serrator*), oystercatcher (*Haematopus ostralegus*), golden plover (*Pluvialis apricaria*), grey plover (*Pluvialis squatarola*), lapwing (*Vanellus vanellus*), knot (*Calidris canutus*), dunlin (*Calidris alpina*), black-tailed godwit (*Limosa limosa*), bar-tailed godwit (*Limosa lapponica*), curlew (*Numenius arquata*), redshank (*Tringa totanus*), turnstone (*Arenaria interpres*), Wetland & Waterbirds

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: lesser black-backed gull (*Larus fuscus*)

Summary Conservation objectives:

- To maintain the favourable conservation condition of those qualifying interests listed above in Dungarvan Harbour SPA, including the wetland habitat as a resource for the regularly occurring migratory birds that utilise it.

Feature attributes and targets defining favourable conservation status:
https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004032.pdf

Closest distance to the activities: 47km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
As noted in Section 2.3, physical disturbance of seaduck and other waterbird flocks by vessel traffic is possible, but the distance from vessels at which flushing of birds could take place is significantly less than the minimum distance of the proposed operations (47km) such that there is no foreseeable interaction. Gull species, while having the potential to forage within range of the operational area (see Woodward *et al.* 2019), are regarded to have a low sensitivity to shipping traffic (Garthe & Hüppop 2004, Fliessbach *et al.* 2019). There is either no potential for interaction in the case of waterbirds, or the qualifying interest which could interact is not sensitive to the proposed activities. However, in view of the potential for interaction, the latter is considered in Section 2.3.

Underwater noise from vessel and activities
None of the qualifying interests are diving seabirds which are likely to be most at risk of any underwater noise effects, and therefore no interactions with the operations are considered to be possible.

Site Name: Galley Head to Duneen Point SPA
Site Code: 004190

Site information

Relevant qualifying interests: Chough (*Pyrrhocorax pyrrhocorax*), northern fulmar (*Fulmarus glacialis*), herring gull (*Larus argentatus*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: herring gull (*Larus argentatus*), northern fulmar (*Fulmarus glacialis*)

Summary Conservation objectives:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above).

Feature attributes and targets defining favourable conservation status:
Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004190.pdf

Closest distance to the activities: 48km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
Fulmar and herring gull, while having the potential to forage within range of the operational area (see Woodward *et al.* 2019), are regarded to have a low sensitivity to shipping traffic (Garthe & Hüppop 2004, Fliessbach *et al.* 2019). However, in view of the potential for interaction, this is considered further in Section 2.3.

Underwater noise from vessel and activities
None of the qualifying interests are diving seabirds which are likely to be most at risk of any underwater noise effects, and therefore no interactions with the operations are considered to be possible.

Site Name: Helvick Head to Ballyquin SPA
Site Code: 004192

Site information

Relevant qualifying interests: Cormorant (*Phalacrocorax carbo*), peregrine (*Falco peregrinus*), herring gull (*Larus argentatus*), kittiwake (*Rissa tridactyla),* chough (*Pyrrhocorax pyrrhocorax*), northern fulmar (*Fulmarus glacialis*), great black-backed gull (*Larus marinus*), shag (*Phalacrocorax aristotelis),* guillemot (*Uria aalge*), razorbill (*Alca torda*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: northern fulmar (*Fulmarus glacialis*), guillemot (*Uria aalge*), razorbill (*Alca torda*), kittiwake (*Rissa tridactyla*)

Summary Conservation objectives:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above)

Feature attributes and targets defining favourable conservation status:
Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004192.pdf

Closest distance to the activities: 39km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels

Site Name: Helvick Head to Ballyquin SPA
Site Code: 004192

While fulmar, common guillemot, razorbill and kittiwake have the potential to forage within range of the operational area (see Woodward *et al.* 2019), they are not regarded to have a high sensitivity to shipping traffic (Garthe & Hüppop 2004, Fliessbach *et al.* 2019). However, in view of the potential for interaction, this is considered further in Section 2.3.

Underwater noise from vessel and activities
There is the potential for interactions between a diving seabird species (guillemot, razorbill) which is potentially sensitive to underwater noise, and the operational activities, which is considered further in Section 2.3.

Site Name: Old Head of Kinsale SPA
Site Code: 004021

Site information

Relevant qualifying interests: Kittiwake (*Rissa tridactyla*), guillemot (*Uria aalge*), shag (*Phalacrocorax aristotelis),* northern fulmar (*Fulmarus glacialis*), herring gull (*Larus argentatus*), razorbill (*Alca torda*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: northern fulmar (*Fulmarus glacialis*), guillemot (*Uria aalge*), herring gull (*Larus argentatus*), razorbill (*Alca torda*)

Summary Conservation objectives:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above)

Feature attributes and targets defining favourable conservation status:
Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004021.pdf

Closest distance to the activities: 25km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
Fulmar, herring gull, common guillemot and razorbill have the potential to forage within range of the operational area (see Woodward *et al.* 2019), and are of low to moderate sensitivity to shipping traffic (Garthe & Hüppop 2004, Fliessbach *et al.* 2019). In view of the potential for interaction, this is considered further in Section 2.3.

Underwater noise from vessel and activities
There is the potential for interactions between diving seabird species (guillemot, razorbill) which are potentially sensitive to underwater noise, and the operational activities. This is considered further in Section 2.3.

Site Name: Seven Heads SPA
Site Code: 004191

Site information

Relevant qualifying interests: Chough (*Pyrrhocorax pyrrhocorax*), herring gull (*Larus argentatus*), peregrine (*Falco peregrinus*), cormorant (*Phalacrocorax carbo*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: herring gull (*Larus argentatus*)

Summary Conservation objectives:

Site Name: Seven Heads SPA
Site Code: 004191

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above)

Feature attributes and targets defining favourable conservation status:
Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004191.pdf

Closest distance to the activities: 34km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
Herring gull has the potential to forage within range of the operational area (see Woodward *et al.* 2019) but has a low to sensitivity to shipping traffic (Garthe & Hüppop 2004, Fliessbach *et al.* 2019). In view of the potential for interaction, this is considered further in Section 2.3.

Underwater noise from vessel and activities
Herring gull is not a diving seabird likely to be most at risk of any underwater noise effects, and therefore no interactions with the operations are considered to be possible.

Site Name: Sheep's Head to Toe Head SPA
Site Code: 004156

Site information

Relevant qualifying interests: Chough (*Pyrrhocorax pyrrhocorax*), herring gull (*Larus argentatus*), peregrine (*Falco peregrinus*), shag (*Phalacrocorax aristotelis),* northern fulmar (*Fulmarus glacialis*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: northern fulmar (*Fulmarus glacialis*)

Summary Conservation objectives:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above)

Feature attributes and targets defining favourable conservation status:
Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004156.pdf

Closest distance to the activities: 65km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
Fulmar, while having the potential to forage within range of the operational area (see Woodward *et al.* 2019), are regarded to have a low sensitivity to shipping traffic (Garthe & Hüppop 2004, Fliessbach *et al.* 2019). However, in view of the potential for interaction, this is considered further in Section 2.3.

Underwater noise from vessel and activities
None of the qualifying interests are diving seabirds which are likely to be most at risk of any underwater noise effects, and therefore no interactions with the operations are considered to be possible.

Site Name: Saltee Islands SPA
Site Code: 004002

Site information

Relevant qualifying interests: Razorbill (*Alca torda*), peregrine (*Falco peregrinus*), Atlantic puffin (*Fratercula arctica*), northern fulmar (*Fulmarus glacialis*), lesser black-backed gull (*Larus fuscus*), cormorant (*Phalacrocorax carbo*), Manx shearwater (*Puffinus puffinus*), red-billed chough (*Pyrrhocorax pyrrhocorax*), black-legged kittiwake (*Rissa tridactyla*), northern gannet (*Morus bassanus*), guillemot (*Uria aalge*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: northern fulmar (*Fulmarus glacialis*), lesser black-backed gull (*Larus fuscus*), Manx shearwater (*Puffinus puffinus*), northern gannet (*Morus bassanus*), black-legged kittiwake (*Rissa tridactyla*), Atlantic puffin (*Fratercula arctica*),

Summary Conservation objectives:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above)

Feature attributes and targets defining favourable conservation status:
Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004002.pdf

Closest distance to the activities: 112km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
Fulmar, lesser black-backed gull, Manx shearwater, northern gannet, puffin and kittiwake have the potential to forage within range of the operational area (see Woodward *et al.* 2019). Sensitivity to vessel movements is considered to be low to moderate (puffin) for those species (see Garthe & Hüppop 2004, MMO 2018, Fliessbach *et al.* 2019), but in view of the potential for interaction, this is considered further in Section 2.3.

Underwater noise from vessel and activities
There is the potential for interactions between diving seabird species (Manx shearwater, northern gannet, puffin) which are potentially sensitive to underwater noise, and the operational activities. This is considered further in Section 2.3.

Site Name: Puffin Island SPA
Site Code: 004003

Site information

Relevant qualifying interests: Razorbill (*Alca torda*), Atlantic puffin (*Fratercula arctica*), northern fulmar (*Fulmarus glacialis*), European storm-petrel (*Hydrobates pelagicus*), herring gull (*Larus argentatus*), lesser black-backed gull (*Larus fuscus*), Manx shearwater (*Puffinus puffinus*), red-billed chough (*Pyrrhocorax pyrrhocorax*), black-legged kittiwake (*Rissa tridactyla*), guillemot (*Uria aalge*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: northern fulmar (*Fulmarus glacialis*), Manx shearwater (*Puffinus puffinus*), European storm-petrel (*Hydrobates pelagicus*)

Summary Conservation objectives:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above)

Site Name: Puffin Island SPA
Site Code: 004003

Feature attributes and targets defining favourable conservation status:
Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004003.pdf

Closest distance to the activities: 150km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
Fulmar, Manx shearwater and European storm-petrel, have the potential to forage within range of the operational area (see Woodward *et al.* 2019). Sensitivity to vessel movements is considered to be low for those species (see Garthe & Hüppop 2004, MMO 2018, Fliessbach *et al.* 2019), but in view of the potential for interaction, this is considered further in Section 2.3.

Underwater noise from vessel and activities
There is the potential for interactions between diving seabird species (Manx shearwater) which are potentially sensitive to underwater noise, and the operational activities. This is considered further in Section 2.3.

Site Name: Cliffs of Moher SPA
Site Code: 004005

Site information

Relevant qualifying interests: razorbill (*Alca torda*), peregrine falcon (*Falco peregrinus*), Atlantic puffin (*Fratercula arctica*), northern fulmar (*Fulmarus glacialis*), red-billed chough (*Pyrrhocorax pyrrhocorax*), black-legged kittiwake (*Rissa tridactyla*), common guillemot (*Uria aalge*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: northern fulmar (*Fulmarus glacialis*)

Summary Conservation objectives:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above)

Feature attributes and targets defining favourable conservation status:
Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004005.pdf

Closest distance to the activities: 310km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
Fulmar, while having the potential to forage within range of the operational area (see Woodward *et al.* 2019), are regarded to have a low sensitivity to shipping traffic (Garthe & Hüppop 2004, Fliessbach *et al.* 2019). However, in view of the potential for interaction, this is considered further in Section 2.3.

Underwater noise from vessel and activities
None of the qualifying interests are diving seabirds which are likely to be most at risk of any underwater noise effects, and therefore no interactions with the operations are considered to be possible.

Site Name: Skelligs SPA
Site Code: 004007

Site information

Relevant qualifying interests: razorbill (*Alca torda*), peregrine falcon (*Falco peregrinus*), Atlantic puffin (*Fratercula arctica*), northern fulmar (*Fulmarus glacialis*), European storm-petrel (*Hydrobates pelagicus*), Manx shearwater (*Puffinus puffinus*), red-billed chough (*Pyrrhocorax pyrrhocorax*), black-legged kittiwake (*Rissa tridactyla*), northern gannet (*Morus bassanus*), common guillemot (*Uria aalge*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: northern fulmar (*Fulmarus glacialis*), northern gannet (*Morus bassanus*), Manx shearwater (*Puffinus puffinus*), European storm-petrel (*Hydrobates pelagicus*),

Summary Conservation objectives:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above)

Feature attributes and targets defining favourable conservation status:
Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004007.pdf

Closest distance to the activities: 160km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
Fulmar, Manx shearwater, northern gannet and European storm-petrel have the potential to forage within range of the operational area (see Woodward *et al.* 2019). Sensitivity to vessel movements is considered to be low for those species (see Garthe & Hüppop 2004, MMO 2018, Fliessbach *et al.* 2019), but in view of the potential for interaction, this is considered further in Section 2.3.

Underwater noise from vessel and activities
There is the potential for interactions between diving seabird species (Manx shearwater, northern gannet) which are potentially sensitive to underwater noise, and the operational activities. This is considered further in Section 2.3.

Site Name: Blasket Islands SPA
Site Code: 004008

Site information

Relevant qualifying interests: razorbill (*Alca torda*), peregrine falcon (*Falco peregrinus*), Atlantic puffin (*Fratercula arctica*), northern fulmar (*Fulmarus glacialis*), European storm-petrel (*Hydrobates pelagicus*), common gull (*Larus canus*), lesser black-backed gull (*Larus fuscus*), leach's storm-petrel (*Oceanodroma leucorhoa*), Manx shearwater (*Puffinus puffinus*), red-billed chough (*Pyrrhocorax pyrrhocorax*), black-legged kittiwake (*Rissa tridactyla*), Arctic tern (*Sterna paradisaea*), guillemot (*Uria aalge*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: northern fulmar (*Fulmarus glacialis*), Manx shearwater (*Puffinus puffinus*), European storm-petrel (*Hydrobates pelagicus*)

Summary Conservation objectives:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above)

Site Name: Blasket Islands SPA **Site Code: 004008**
Feature attributes and targets defining favourable conservation status: Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004008.pdf
Closest distance to the activities: 187km
Consideration of site interest features against potential sources of likely significant effect
The physical presence of vessels Fulmar, European storm-petrel and Manx shearwater have the potential to forage within range of the operational area (see Woodward *et al.* 2019). Sensitivity to vessel movements is considered to be low for those species (see Garthe & Hüppop 2004, MMO 2018, Fliessbach *et al.* 2019), but in view of the potential for interaction, this is considered further in Section 2.3. **Underwater noise from vessel and activities** There is the potential for interactions between diving seabird species (Manx shearwater) which are potentially sensitive to underwater noise, and the operational activities. This is considered further in Section 2.3.

Site Name: The Bull and The Cow Rocks SPA **Site Code: 004066**
Site information
Relevant qualifying interests: razorbill (*Alca torda*), Atlantic puffin (*Fratercula arctica*), northern fulmar (*Fulmarus glacialis*), European storm-petrel (*Hydrobates pelagicus*), herring gull (*Larus argentatus*), cormorant (*Phalacrocorax carbo carbo*), black-legged kittiwake (*Rissa tridactyla*), northern gannet (*Morus bassanus*), guillemot (*Uria aalge*) **Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area:** northern fulmar (*Fulmarus glacialis*), northern gannet (*Morus bassanus*), European storm-petrel (*Hydrobates pelagicus*), black-legged kittiwake (*Rissa tridactyla*) **Summary Conservation objectives:** • To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above) **Feature attributes and targets defining favourable conservation status:** Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004066.pdf
Closest distance to the activities: 136km
Consideration of site interest features against potential sources of likely significant effect
The physical presence of vessels Fulmar, northern gannet, black-legged kittiwake and European storm petrel have the potential to forage within range of the operational area (see Woodward *et al.* 2019). Sensitivity to vessel movements is considered to be low for those species (see Garthe & Hüppop 2004, MMO 2018, Fliessbach *et al.* 2019), but in view of the potential for interaction, this is considered further in Section 2.3. **Underwater noise from vessel and activities** There is the potential for interactions between diving seabird species (northern gannet) which are potentially sensitive to underwater noise, and the operational activities. This is considered further in Section 2.3.

Site Name: Lambey Island SPA
Site Code: 004069

Site information

Relevant qualifying interests: razorbill (*Alca torda*), greylag goose (*Anser anser*), ruddy turnstone (*Arenaria interpres*), brent goose (*Branta bernicla*), purple sandpiper (*Calidris maritima*), peregrine falcon (*Falco peregrinus*), Atlantic puffin (*Fratercula arctica*), northern fulmar (*Fulmarus glacialis*), Eurasian oystercatcher (Haematopus ostralegus), lesser black-backed gull (*Larus fuscus*), Eurasian curlew (*Numenius arquata*), cormorant (*Phalacrocorax carbo carbo*), Manx shearwater (*Puffinus puffinus*), black-legged kittiwake (*Rissa tridactyla*), common shelduck (*Tadorna tadorna*), guillemot (*Uria aalge*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: northern fulmar (*Fulmarus glacialis*), Manx shearwater (*Puffinus puffinus*)

Summary Conservation objectives:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above)

Feature attributes and targets defining favourable conservation status:
Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004069.pdf

Closest distance to the activities: 282km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
Fulmar and Manx shearwater have the potential to forage within range of the operational area (see Woodward *et al.* 2019). Sensitivity to vessel movements is considered to be low for those species (see Garthe & Hüppop 2004, MMO 2018, Fliessbach *et al.* 2019), but in view of the potential for interaction, this is considered further in Section 2.3.

Underwater noise from vessel and activities
There is the potential for interactions between diving seabird species (Manx shearwater) which are potentially sensitive to underwater noise, and the operational activities. This is considered further in Section 2.3.

Site Name: Tacumshin Lake SPA
Site Code: 004092

Site information

Relevant qualifying interests: reed warbler (*Acrocephalus scirpaceus*), northern pintail (*Anas acuta*), northern shoveler (*Anas clypeata*), Eurasian teal (*Anas crecca*), Eurasian wigeon (*Anas penelope*), mallard (*Anas platyrhynchos*), garganey (*Anas querquedula*), gadwall (*Anas strepera*), Greenland white-fronted goose (*Anser albifrons flavirostris*), common pochard (*Aythya ferina*), tufted duck (*Aythya fuligula*), brent goose (*Branta bernicla*), dunlin (*Calidris alpina*), curlew sandpiper (*Calidris ferruginea*), little stint (*Calidris minuta*), Eurasian marsh harrier (*Circus aeruginosus*), tundra swan (*Cygnus columbianus bewickii*), whooper swan (*Cygnus cygnus*), common coot (*Fulica atra*), lesser black-backed gull (*Larus fuscus*), black-headed gull (*Larus ridibundus*), black-tailed godwit (*Limosa limosa*), Eurasian curlew (*Numenius arquata*), ruff (*Philomachus pugnax*), European golden plover (*Pluvialis apricaria*), grey plover (*Pluvialis squatarola*), common shelduck (*Tadorna tadorna*), spotted redshank (*Tringa erythropus*), wood sandpiper (*Tringa glareola*), common greenshank (*Tringa*

Site Name: Tacumshin Lake SPA
Site Code: 004092

nebularia), green sandpiper (*Tringa ochropus*), common redshank (*Tringa totanus*), northern lapwing (*Vanellus vanellus*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: lesser black-backed gull (*Larus fuscus*) – note this is a wintering feature of the site

Summary Conservation objectives:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above)

Feature attributes and targets defining favourable conservation status:
Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004069.pdf

Closest distance to the activities: 124km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
As noted in Section 2.3, physical disturbance of seaduck and other waterbird flocks by vessel traffic is possible, but the distance from vessels at which flushing of birds could take place is significantly less than the minimum distance of the proposed activities (124km) such that there is no foreseeable interaction. Gull species, while having the potential to forage within range of the operational area (see Woodward *et al.* 2019), are regarded to have a low sensitivity to shipping traffic (Garthe & Hüppop 2004, Fliessbach *et al.* 2019). It should also be noted that this species is listed as a wintering feature, lessening the potential for any interaction with the qualifying interest due to the proposed activity timing. There is either no potential for interaction in the case of waterbirds, or the qualifying interest which could interact is not sensitive to the proposed activities. However, in view of the potential for interaction, the latter is considered in Section 2.3.

Underwater noise from vessel and activities
None of the qualifying interests are diving seabirds which are likely to be most at risk of any underwater noise effects, and therefore no interactions with the operations are considered to be possible.

Site Name: Kilcolman Bog SPA
Site Code: 004095

Site information

Relevant qualifying interests: northern pintail (*Anas acuta*), northern shoveler (*Anas clypeata*), Eurasian teal (*Anas crecca*), Eurasian wigeon (*Anas penelope*), mallard (*Anas platyrhynchos*), common pochard (*Aythya ferina*), tufted duck (*Aythya fuligula*), whooper swan (*Cygnus cygnus*), common coot (*Fulica atra*), lesser black-backed gull (*Larus fuscus*), black-headed gull (*Larus ridibundus*), European golden plover (*Pluvialis apricaria*), northern lapwing (*Vanellus vanellus*); Wetland and Waterbirds

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: lesser black-backed gull (*Larus fuscus*) – note this is a wintering feature of the site

Summary Conservation objectives:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above)

Site Name: Kilcolman Bog SPA
Site Code: 004095

- To maintain or restore the favourable conservation condition of the wetland habitat at Kilcolman Bog SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.

Feature attributes and targets defining favourable conservation status:
Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004095.pdf

Closest distance to the activities: 124km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
As noted in Section 2.3, physical disturbance of seaduck and other waterbird flocks by vessel traffic is possible, but the distance from vessels at which flushing of birds could take place is significantly less than the minimum distance of the proposed operations (124km) such that there is no foreseeable interaction. Gull species, while having the potential to forage within range of the operational area (see Woodward *et al.* 2019), are regarded to have a low sensitivity to shipping traffic (Garthe & Hüppop 2004, Fliessbach *et al.* 2019). It should also be noted that lesser black-backed gull is listed as a wintering feature for this site, lessening the potential for any interaction with the qualifying interest due to the proposed activity timing (April-September). There is either no potential for interaction in the case of waterbirds, or the qualifying interest which could interact is not sensitive to the proposed activities. However, in view of the potential for interaction, the latter is considered in Section 2.3.

Underwater noise from vessel and activities
None of the qualifying interests are diving seabirds which are likely to be most at risk of any underwater noise effects, and therefore no interactions with the operations are considered to be possible.

Site Name: Howth Head Coast SPA
Site Code: 004113

Site information

Relevant qualifying interests: razorbill (*Alca torda*), peregrine (*Falco peregrinus*), northern fulmar (*Fulmarus glacialis*), black-legged kittiwake (*Rissa tridactyla*), common guillemot (*Uria aalge*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: northern fulmar (*Fulmarus glacialis*)

Summary Conservation objectives:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above)

Feature attributes and targets defining favourable conservation status:
Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004113.pdf

Closest distance to the activities: 270km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
Fulmar, while having the potential to forage within range of the operational area (see Woodward *et al.* 2019), are regarded to have a low sensitivity to shipping traffic

Site Name: Howth Head Coast SPA
Site Code: 004113

(Garthe & Hüppop 2004, Fliessbach *et al.* 2019). However, in view of the potential for interaction, this is considered further in Section 2.3.

Underwater noise from vessel and activities
None of the qualifying interests are diving seabirds which are likely to be most at risk of any underwater noise effects, and therefore no interactions with the operations are considered to be possible.

Site Name: Illaunonearaun SPA
Site Code: 004114

Site information

Relevant qualifying interests: Barnacle goose (*Branta leucopsis*), northern fulmar (*Fulmarus glacialis*), herring gull (*Larus argentatus*), lesser black-backed gull (*Larus fuscus*), cormorant (*Phalacrocorax carbo carbo*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: northern fulmar (*Fulmarus glacialis*)

Summary Conservation objectives:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above)

Feature attributes and targets defining favourable conservation status:
Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004114.pdf

Closest distance to the activities: 269km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
Fulmar, while having the potential to forage within range of the operational area (see Woodward *et al.* 2019), are regarded to have a low sensitivity to shipping traffic (Garthe & Hüppop 2004, Fliessbach *et al.* 2019). However, in view of the potential for interaction, this is considered further in Section 2.3.

Underwater noise from vessel and activities
None of the qualifying interests are diving seabirds which are likely to be most at risk of any underwater noise effects, and therefore no interactions with the operations are considered to be possible.

Site Name: Loop Head SPA
Site Code: 004119

Site information

Relevant qualifying interests: Razorbill (*Alca torda*), peregrine (*Falco peregrinus*), northern fulmar (*Fulmarus glacialis*), red-billed chough (*Pyrrhocorax pyrrhocorax*), black-legged kittiwake (*Rissa tridactyla*), common guillemot (*Uria aalge*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: northern fulmar (*Fulmarus glacialis*)

Summary Conservation objectives:

Site Name: Loop Head SPA
Site Code: 004119

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above)

Feature attributes and targets defining favourable conservation status:
Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004119.pdf

Closest distance to the activities: 260km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
Fulmar, while having the potential to forage within range of the operational area (see Woodward *et al.* 2019), are regarded to have a low sensitivity to shipping traffic (Garthe & Hüppop 2004, Fliessbach *et al.* 2019). However, in view of the potential for interaction, this is considered further in Section 2.3.

Underwater noise from vessel and activities
None of the qualifying interests are diving seabirds which are likely to be most at risk of any underwater noise effects, and therefore no interactions with the operations are considered to be possible.

Site Name: Ireland's Eye SPA
Site Code: 004117

Site information

Relevant qualifying interests: razorbill (*Alca torda*), peregrine (*Falco peregrinus*), Atlantic puffin (*Fratercula arctica*), northern fulmar (*Fulmarus glacialis*), cormorant (*Phalacrocorax carbo carbo*), black-legged kittiwake (*Rissa tridactyla*), northern gannet (*Morus bassanus*), common guillemot (*Uria aalge*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: northern fulmar (*Fulmarus glacialis*), northern gannet (*Morus bassanus*)

Summary Conservation objectives:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above)

Feature attributes and targets defining favourable conservation status:
Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004117.pdf

Closest distance to the activities: 274km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
Fulmar and gannet, while having the potential to forage within range of the operational area (see Woodward *et al.* 2019), are regarded to have a low sensitivity to shipping traffic (Garthe & Hüppop 2004, Fliessbach *et al.* 2019). However, in view of the potential for interaction, this is considered further in Section 2.3.

Underwater noise from vessel and activities
There is the potential for interactions between diving seabird species (northern gannet) which are potentially sensitive to underwater noise, and the operational activities. This is considered further in Section 2.3.

Site Name: Skerries Islands SPA
Site Code: 004122

Site information

Relevant qualifying interests: Eurasian wigeon (*Anas penelope*), mallard (*Anas platyrhynchos*), ruddy turnstone (Arenaria interpres), short-eared owl (*Asio flammeus*), brent goose (*Branta bernicla*), purple sandpiper (*Calidris maritima*), ringed plover (*Charadrius hiaticula*), northern fulmar (*Fulmarus glacialis*), common snipe (*Gallinago gallinago*), Eurasian oystercatcher (*Haematopus ostralegus*), Eurasian curlew (*Numenius arquata*), cormorant (*Phalacrocorax carbo carbo*), European golden plover (*Pluvialis apricaria*), grey plover (*Pluvialis squatarola*), northern lapwing (*Vanellus vanellus*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: northern fulmar (*Fulmarus glacialis*)

Summary Conservation objectives:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above)

Feature attributes and targets defining favourable conservation status:
Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004122.pdf

Closest distance to the activities: 294km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
Fulmar, while having the potential to forage within range of the operational area (see Woodward *et al.* 2019), are regarded to have a low sensitivity to shipping traffic (Garthe & Hüppop 2004, Fliessbach *et al.* 2019). However, in view of the potential for interaction, this is considered further in Section 2.3.

Underwater noise from vessel and activities
None of the qualifying interests are diving seabirds which are likely to be most at risk of any underwater noise effects, and therefore no interactions with the operations are considered to be possible.

Site Name: Magharee Islands SPA
Site Code: 004125

Site information

Relevant qualifying interests: Barnacle goose (*Branta leucopsis*), northern fulmar (*Fulmarus glacialis*), common gull (*Larus canus*), lesser black-backed gull (*Larus fuscus*), cormorant (*Phalacrocorax carbo carbo*), red-billed chough (*Pyrrhocorax pyrrhocorax*), little tern (*Sterna albifrons*), common tern (*Sterna hirundo*), Arctic tern (*Sterna paradisaea*), European storm-petrel (*Hydrobates pelagicus*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: northern fulmar (*Fulmarus glacialis*), European storm-petrel (*Hydrobates pelagicus*)

Summary Conservation objectives:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above)

Feature attributes and targets defining favourable conservation status:

Site Name: Magharee Islands SPA **Site Code: 004125**
Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004125.pdf
Closest distance to the activities: 238km
Consideration of site interest features against potential sources of likely significant effect
The physical presence of vessels Fulmar and European storm-petrel, while having the potential to forage within range of the operational area (see Woodward *et al.* 2019), are regarded to have a low sensitivity to shipping traffic (Garthe & Hüppop 2004, Fliessbach *et al.* 2019). However, in view of the potential for interaction, this is considered further in Section 2.3. **Underwater noise from vessel and activities** None of the qualifying interests are diving seabirds which are likely to be most at risk of any underwater noise effects, and therefore no interactions with the operations are considered to be possible.

Site Name: Wicklow Head SPA **Site Code: 004127**
Site information
Relevant qualifying interests: Razorbill (*Alca torda*), peregrine falcon (*Falco peregrinus*), northern fulmar (*Fulmarus glacialis*), black-legged kittiwake (*Rissa tridactyla*), common whitethroat (*Sylvia communis*), common guillemot (*Uria aalge*) **Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area:** northern fulmar (*Fulmarus glacialis*) **Summary Conservation objectives:** • To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above) **Feature attributes and targets defining favourable conservation status:** Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004127.pdf
Closest distance to the activities: 227km
Consideration of site interest features against potential sources of likely significant effect
The physical presence of vessels Fulmar, while having the potential to forage within range of the operational area (see Woodward *et al.* 2019), are regarded to have a low sensitivity to shipping traffic (Garthe & Hüppop 2004, Fliessbach *et al.* 2019). However, in view of the potential for interaction, this is considered further in Section 2.3. **Underwater noise from vessel and activities** None of the qualifying interests are diving seabirds which are likely to be most at risk of any underwater noise effects, and therefore no interactions with the operations are considered to be possible.

Site Name: Dingle Peninsula SPA
Site Code: 004153

Site information

Relevant qualifying interests: Peregrine (*Falco peregrinus*), northern fulmar (*Fulmarus glacialis*), red-billed chough (*Pyrrhocorax pyrrhocorax*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: northern fulmar (*Fulmarus glacialis*)

Summary Conservation objectives:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above)

Feature attributes and targets defining favourable conservation status:
Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004153.pdf

Closest distance to the activities: 196km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
Fulmar, while having the potential to forage within range of the operational area (see Woodward *et al.* 2019), are regarded to have a low sensitivity to shipping traffic (Garthe & Hüppop 2004, Fliessbach *et al.* 2019). However, in view of the potential for interaction, this is considered further in Section 2.3.

Underwater noise from vessel and activities
None of the qualifying interests are diving seabirds which are likely to be most at risk of any underwater noise effects, and therefore no interactions with the operations are considered to be possible.

Site Name: Iveragh Peninsula SPA
Site Code: 004154

Site information

Relevant qualifying interests: Razorbill (*Alca torda*), peregrine falcon (*Falco peregrinus*), northern fulmar (*Fulmarus glacialis*), herring gull (*Larus argentatus*), European shag (*Phalacrocorax aristotelis*), cormorant (*Phalacrocorax carbo carbo*), red-billed chough (*Pyrrhocorax pyrrhocorax*), black-legged kittiwake (*Rissa tridactyla*), common guillemot (*Uria aalge*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: northern fulmar (*Fulmarus glacialis*), black-legged kittiwake (*Rissa tridactyla*)

Summary Conservation objectives:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above)

Feature attributes and targets defining favourable conservation status:
Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004154.pdf

Closest distance to the activities: 147km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels

Site Name: Iveragh Peninsula SPA
Site Code: 004154

Fulmar and black-legged kittiwake, while having the potential to forage within range of the operational area (see Woodward *et al.* 2019), are regarded to have a low sensitivity to shipping traffic (Garthe & Hüppop 2004, Fliessbach *et al.* 2019). However, in view of the potential for interaction, this is considered further in Section 2.3.

Underwater noise from vessel and activities
None of the qualifying interests are diving seabirds which are likely to be most at risk of any underwater noise effects, and therefore no interactions with the operations are considered to be possible.

Site Name: Beara Peninsula SPA
Site Code: 004155

Site information

Relevant qualifying interests: Peregrine falcon (*Falco peregrinus*), northern fulmar (*Fulmarus glacialis*), herring gull (*Larus argentatus*), European shag (*Phalacrocorax aristotelis*), red-billed chough (*Pyrrhocorax pyrrhocorax*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: northern fulmar (*Fulmarus glacialis*)

Summary Conservation objectives:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above)

Feature attributes and targets defining favourable conservation status:
Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004155.pdf

Closest distance to the activities: 123km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
Fulmar, while having the potential to forage within range of the operational area (see Woodward *et al.* 2019), are regarded to have a low sensitivity to shipping traffic (Garthe & Hüppop 2004, Fliessbach *et al.* 2019). However, in view of the potential for interaction, this is considered further in Section 2.3.

Underwater noise from vessel and activities
None of the qualifying interests are diving seabirds which are likely to be most at risk of any underwater noise effects, and therefore no interactions with the operations are considered to be possible.

Site Name: Deenish Island and Scariff Island SPA
Site Code: 004175

Site information

Relevant qualifying interests: Northern fulmar (*Fulmarus glacialis*), European storm-petrel (*Hydrobates pelagicus*), herring gull (*Larus argentatus*), lesser black-backed gull (*Larus fuscus*), Manx shearwater (*Puffinus puffinus*), red-billed chough (*Pyrrhocorax pyrrhocorax*), Arctic tern (*Sterna paradisaea*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: northern fulmar (*Fulmarus*

Site Name: Deenish Island and Scariff Island SPA **Site Code: 004175**
glacialis), Manx shearwater (*Puffinus puffinus*), European storm-petrel (*Hydrobates pelagicus*), lesser black-backed gull (*Larus fuscus*) **Summary Conservation objectives:** • To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above) **Feature attributes and targets defining favourable conservation status:** Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004175.pdf
Closest distance to the activities: 146km
Consideration of site interest features against potential sources of likely significant effect
The physical presence of vessels Fulmar, Manx shearwater, lesser black-backed gull and European storm petrel, have the potential to forage within range of the operational area (see Woodward *et al.* 2019). Sensitivity to vessel movements is considered to be low for those species (see Garthe & Hüppop 2004, MMO 2018, Fliessbach *et al.* 2019), but in view of the potential for interaction, this is considered further in Section 2.3. **Underwater noise from vessel and activities** There is the potential for interactions between diving seabird species (Manx shearwater) which are potentially sensitive to underwater noise, and the operational activities. This is considered further in Section 2.3.

Site Name: Kerry Head SPA **Site Code: 004189**
Site information
Relevant qualifying interests: peregrine (*Falco peregrinus*), northern fulmar (*Fulmarus glacialis*), red-billed chough (*Pyrrhocorax pyrrhocorax*) **Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area:** northern fulmar (*Fulmarus glacialis*) **Summary Conservation objectives:** • To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (above) **Feature attributes and targets defining favourable conservation status:** Not listed - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004189.pdf
Closest distance to the activities: 254km
Consideration of site interest features against potential sources of likely significant effect
The physical presence of vessels Fulmar, while having the potential to forage within range of the operational area (see Woodward *et al.* 2019), are regarded to have a low sensitivity to shipping traffic (Garthe & Hüppop 2004, Fliessbach *et al.* 2019). However, in view of the potential for interaction, this is considered further in Section 2.3. **Underwater noise from vessel and activities**

Site Name: Kerry Head SPA
Site Code: 004189

None of the qualifying interests are diving seabirds which are likely to be most at risk of any underwater noise effects, and therefore no interactions with the operations are considered to be possible.

Site Name: Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Penfro SPA
Site Code: UK9014051

Site information

Relevant qualifying interests: Atlantic puffin (*Fratercula arctica*), Manx shearwater (*Puffinus puffinus*), European storm-petrel (*Hydrobates pelagicus*), lesser black-backed gull (*Larus fuscus*), red-billed chough (*Pyrrhocorax pyrrhocorax*), short-eared owl (*Asio flammeus*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: Manx shearwater (*Puffinus puffinus*), lesser black-backed gull (*Larus fuscus*), European storm-petrel (*Hydrobates pelagicus*)

Summary Conservation objectives:
Only draft conservation objectives are presently available for the site**:**
https://cdn.naturalresources.wales/media/675733/skomer-skokholm-and-seas-off-pembs-pspa-draft-conservation-objectives-final.pdf?mode=pad&rnd=131625760740000000

Closest distance to the activities: 131km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
Lesser black-backed gull, Manx shearwater and European storm-petrel have the potential to forage within range of the operational area (see Woodward *et al.* 2019). Sensitivity to vessel movements is considered to be low for those species (see Garthe & Hüppop 2004, MMO 2018, Fliessbach *et al.* 2019), but in view of the potential for interaction, this is considered further in Section 2.3.

Underwater noise from vessel and activities
There is the potential for interactions between diving seabird species (Manx shearwater) which are potentially sensitive to underwater noise, and the operational activities. This is considered further in Section 2.3.

Site Name: Grassholm SPA
Site Code: UK9014041

Site information

Relevant qualifying interests: Northern gannet (*Morus bassanus*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: Northern gannet (*Morus bassanus*)

Summary Conservation objectives:
The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:

- The population will not fall below 30,000 pairs in three consecutive years,
- It will not drop by more than 25% of the previous year's figures in any one year.

Site Name: Grassholm SPA
Site Code: UK9014041

- There will be no decline in this population significantly greater than any decline in the North Atlantic population as a whole.

https://naturalresources.wales/media/674134/Grassholm%20SPA%20Management%20Plan%2021%5B1%5D.4.08%20(English).pdf

Closest distance to the activities: 174km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
Northern gannet has the potential to forage within range of the operational area (see Woodward *et al.* 2019). Sensitivity to vessel movements is considered to be low for those species (see Garthe & Hüppop 2004, MMO 2018, Fliessbach *et al.* 2019), but in view of the potential for interaction, this is considered further in Section 2.3.

Underwater noise from vessel and activities
There is the potential for interactions between diving seabird species (northern gannet) which are potentially sensitive to underwater noise, and the operational activities. This is considered further in Section 2.3.

Site Name: Irish Sea Front SPA
Site Code: UK9020328

Site information

Relevant qualifying interests: Manx shearwater (*Puffinus puffinus*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: Manx shearwater (*Puffinus puffinus*),

Summary Conservation objectives:
To avoid significant deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, subject to natural change, thus ensuring that the integrity of the site is maintained in the long term and makes an appropriate contribution to achieving the aims of the Birds Directive for each of the qualifying species. This contribution would be achieved through delivering the following objectives for each of the sites qualifying features:

- Avoid significant mortality, injury and disturbance of the qualifying features, so that the distribution of the species and ability to use the site are maintained in the long-term;
- Maintain the habitats and food resources of the qualifying features in favourable condition.
- Ensure access to the site from linked breeding colonies

https://hub.jncc.gov.uk/assets/0032da71-db02-44b5-b4e1-022d77ef7ee3#irish-sea-front-sas-conservation-objectives.pdf

Closest distance to the activities: 315km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
Manx shearwater has the potential to forage within range of the operational area (see Woodward *et al.* 2019). Sensitivity to vessel movements is considered to be low for those species (see Garthe & Hüppop 2004, MMO 2018, Fliessbach *et al.* 2019), but in view of the potential for interaction, this is considered further in Section 2.3.

Site Name: Irish Sea Front SPA
Site Code: UK9020328

Underwater noise from vessel and activities
There is the potential for interactions between diving seabird species (Manx shearwater) which are potentially sensitive to underwater noise, and the operational activities. This is considered further in Section 2.3.

Site Name: Copeland Islands SPA
Site Code: UK9020291

Site information

Relevant qualifying interests: Manx shearwater (*Puffinus puffinus*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: Manx shearwater (*Puffinus puffinus*),

Summary Conservation objectives:
To maintain each feature in favourable condition. Component objectives for breeding Manx shearwater are, no significant decrease in population against national trends and, fledging success sufficient to maintain or enhance population

https://www.daera-ni.gov.uk/publications/special-protection-area-copeland-islands

Closest distance to the activities: 422km

Consideration of site interest features against potential sources of likely significant effect

The physical presence of vessels
Manx shearwater has the potential to forage within range of the operational area (see Woodward *et al.* 2019). Sensitivity to vessel movements is considered to be low for those species (see Garthe & Hüppop 2004, MMO 2018, Fliessbach *et al.* 2019), but in view of the potential for interaction, this is considered further in Section 2.3.

Underwater noise from vessel and activities
There is the potential for interactions between diving seabird species (Manx shearwater) which are potentially sensitive to underwater noise, and the operational activities. This is considered further in Section 2.3.

Site Name: Aberdaron Coast and Bardsey Island SPA
Site Code: UK9013121

Site information

Relevant qualifying interests: Manx shearwater (*Puffinus puffinus*)

Qualifying interests identified for further consideration on the basis of a foreseeable interaction with the operational area: Manx shearwater (*Puffinus puffinus*),

Summary Conservation objectives:
The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:

- Breeding population of Manx shearwater (confined to Ynys Enlli) is stable or increasing.
- Reproductive rates remain stable.
- Deaths from the lighthouse attractions, fencing and other infrastructure are minimal.
- No ground predators are introduced.

Site Name: Aberdaron Coast and Bardsey Island SPA **Site Code: UK9013121**
• Nesting birds are not disturbed by restoration works on boundary walls or recreational activities. • All factors affecting the achievement of these conditions are under control. See the following document for performance indicators for the feature: https://naturalresources.wales/media/672092/Glannau%20Aberdaron%20Plan%20English.pdf
Closest distance to the activities: 254km
Consideration of site interest features against potential sources of likely significant effect
The physical presence of vessels Manx shearwater has the potential to forage within range of the operational area (see Woodward *et al.* 2019). Sensitivity to vessel movements is considered to be low for those species (see Garthe & Hüppop 2004, MMO 2018, Fliessbach *et al.* 2019), but in view of the potential for interaction, this is considered further in Section 2.3. **Underwater noise from vessel and activities** There is the potential for interactions between diving seabird species (Manx shearwater) which are potentially sensitive to underwater noise, and the operational activities. This is considered further in Section 2.3.

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Tables

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Figures

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