

SCREENING FOR APPROPRIATE ASSESSMENT AND ARTICLE 12 ASSESSMENT TECHNICAL REVIEW

Kinsale Alpha and Bravo Platforms Shallow Geological Survey

MGE0763RP0003
Screening for Appropriate
Assessment and Article 12
Assessment Technical
Review
A01
7 May 2020

REPORT

Document status

Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date
A01	Client Review	KOD	PK	GMcE	07/05/2020

Approval for issue

Gareth McElhinney

7 May 2020

© Copyright RPS Group Limited. All rights reserved.

The report has been prepared for the exclusive use of our client and unless otherwise agreed in writing by RPS Group Limited no other party may use, make use of or rely on the contents of this report.

The report has been compiled using the resources agreed with the client and in accordance with the scope of work agreed with the client. No liability is accepted by RPS Group Limited for any use of this report, other than the purpose for which it was prepared.

RPS Group Limited accepts no responsibility for any documents or information supplied to RPS Group Limited by others and no legal liability arising from the use by others of opinions or data contained in this report. It is expressly stated that no independent verification of any documents or information supplied by others has been made.

RPS Group Limited has used reasonable skill, care and diligence in compiling this report and no warranty is provided as to the report's accuracy.

No part of this report may be copied or reproduced, by any means, without the written permission of RPS Group Limited.

Prepared by:

Prepared for:

RPS

Paula Kearney
Technical Director - Ecology

Lyrr 2, IDA Business & Technology Park, Mervue
Galway, H91 H9CK

T +353 91 400 200
E paula.kearney@rpsgroup.com

Department of Communications, Climate Action & Environment

Maria O'Brien
Assistant Principal Officer

29-31 Adelaide Road,
Dublin 2, D02 X285

T +353 (0)16782720
E Maria.O'Brien@dccae.gov.ie

Dublin | Cork | Galway | Sligo
rpsgroup.com

RPS Group Limited, registered in Ireland No. 91911
RPS Consulting Engineers Limited, registered in Ireland No. 161581
RPS Planning & Environment Limited, registered in Ireland No. 160191
RPS Engineering Services Limited, registered in Ireland No. 99795
The Registered office of each of the above companies is West Pier
Business Campus, Dun Laoghaire, Co. Dublin, A96 N6T7



Contents

1	INTRODUCTION	1
1.1	Kinsale Area Decommissioning Project	1
1.2	Application Documents	1
1.3	Relevant Legislation	1
1.4	Kinsale Alpha and Bravo Platforms Shallow Geological Survey	2
2	TECHNICAL REVIEW.....	3
2.1	Legislation and Guidance used in the Technical Review	3
2.2	Public Consultation Responses	4
3	SCREENING FOR APPROPRIATE ASSESSMENT	7
3.1	Screening for AA Checklist	7
3.2	Management of the European site	8
3.3	Description of the Project	8
3.4	Characteristics of the European site	8
3.4.1	Conservation Objectives	9
3.5	Impact Prediction	15
3.6	Screening for Appropriate Assessment Matrix.....	18
4	FINDING OF NO SIGNIFICANT EFFECTS REPORT.....	20
5	ARTICLE 12 ASSESSMENT	24
5.1	Annex IV Species	24
5.1.1	Marine Mammals Baseline Assessment.....	25
5.1.2	Marine Turtles Baseline Assessment	25
5.2	Discussion	26
5.2.1	Potential effects on Marine Mammals	26
5.2.2	Potential effects on Turtles	26
6	CONCLUSION	27
6.1	Article 6(3) Appropriate Assessment Screening Conclusion	27
6.1.1	Conclusion	27
6.1.2	Further Information	27
6.2	Article 12 Conclusion	28

Tables

Table 2.1 Submission/ observations received from Prescribed Bodies consulted with as part of the Application for Consent for the Kinsale Alpha and Bravo Platforms Shallow Geological Survey	5
Table 2.2 Submission/ observations received by the DCCAE from Prescribed Bodies and Third Parties on the Application for Consent for the Kinsale Alpha and Bravo Platforms Shallow Geological Survey	6
Table 3.1 Information Checklist for the Appropriate Assessment	7
Table 3.2: Potential sources of impact to the SACs and their Qualifying Interests SCIs within the Rig Survey Zol.	10
Table 3.3: Potential sources of impact to the SPAs and their Special Conservation Interests within the Rig Survey Zol.....	11
Table 3.4: Seabird foraging ranges (summarised from Thaxter et al. 2012).....	13
Table 3.5 SPA SCI Species not assessed in the AA Screening Report	14
Table 3.6 SPAs not Considered in the AA Screening Report	15
Table 3.7 Information Checklist for the Impact Assessment	15
Table 3.8 Screening for Appropriate Assessment.....	18
Table 4.1 Finding of No Significant Effects.....	20
Table 5.1 Annex IV Marine Mammal Species and Adjudged Presence within the Survey Area	24

DRAFT

1 INTRODUCTION

1.1 Kinsale Area Decommissioning Project

PSE Kinsale Energy Limited (KEL) and Seven Heads Limited (SHL) are preparing for the decommissioning of the Kinsale area gas facilities. The Kinsale area gas facilities comprise the Kinsale Head gas field (which includes the adjacent satellite Ballycotton Gas Field and the Southwest Kinsale Gas Field), the Seven Heads gas field, the offshore topside platforms and jackets, infield subsea infrastructure (including well head structures, pipelines and umbilicals) and the onshore gas metering terminal at Inch, Co. Cork. The decommissioning project is herein referred to as the Kinsale Area Decommissioning Project (KADP).

The full decommissioning will be the subject of a number of separate applications to the Petroleum Affairs Division (PAD) of the Department of Communications, Climate Action & Environment (DCCAE) for permissions. Two applications have been made to date, namely.

- Consent Application No.1 included for the removal of the two platform topside structures and the plugging and abandoning of wells. This application was granted permission in April 2019.
- Consent Application No.2 included for the complete removal of platform jackets in accordance with OSPAR Decision 98/3. This application was granted permission in February 2020.

To inform the removal of the platform jackets as part of the decommissioning a survey is proposed to confirm the shallow seabed conditions in the immediate vicinity of the platforms details of which are provided in **Section 1.4** below.

1.2 Application Documents

Kinsale Energy submitted the following documents as part of the application:

- Cover Letter
- Environmental Impact Assessment
- Pre-survey Fisheries Assessment
- Appropriate Assessment Screening Report
- Application Form
- Evidence of Notification of Statutory Consultees

The above reports were considered as part of this technical review.

1.3 Relevant Legislation

Oil and gas exploration and production activities are regulated in Ireland under the Petroleum and Other Minerals Development Act 1960 (as amended) (referred to herein as the POMDA). Under the POMDA the Department of Communications, Climate Action and Environment (DCCAE) is a designated competent national authority. There is a statutory obligation on the Minister for the DCCAE to confirm that all projects seeking authorisation to undertake activity under the 1960 Act comply with the requirements of the EU Habitats Directive (Directive 92/43/EEC) on the Conservation of Natural Habitats and of Wild Fauna and Flora and the European Communities (Birds and Natural Habitats) Regulations, S.I. No. 477 of 2011 (as amended).

Under Article 6(3) of the EU Habitats Directive (92/43/EEC) and the Birds and Natural Habitats Regulations 2011 (S.I. 477 of 2011) as amended, project proponents are required to provide sufficient information to enable a designated competent authority to undertake a Screening for Appropriate Assessment (AA) to determine whether or not the proposed project (either alone or in-combination with other projects) is likely to

have significant effects on the conservation objectives of designated Natura 2000 (or European) sites¹. Where significant effects of the project cannot be screened out, the public authority can request the project proponent to submit a Natura Impact Statement (NIS) to inform the AA for the project.

In addition to the requirement to consider potential effects of a plan or project on European Sites under Article 6(3) of the Habitats Directive, the Directive requires consideration of the potential effects on species listed under Annex IV of the Directive (termed Annex IV species). Under Article 12, Annex IV species are afforded strict protection throughout their range, both inside and outside of designated protected areas. Where significant effects of the project cannot be screened (ruled) out, the Competent Authority can request the project proponent undertake a Stage 2 AA and prepare a Natura Impact Statement (NIS) for the project.

1.4 Kinsale Alpha and Bravo Platforms Shallow Geological Survey

Kinsale Energy is preparing for the decommissioning of the Kinsale Area gas fields and facilities, including the Kinsale Alpha (KA) and Kinsale Bravo (KB) platforms. Part of this decommissioning will include jacket removal. It is proposed that the jacket piles are cut prior to jacket removal through the use of an internal cutting tool, or where required, cutting externally. Some excavation of surficial seabed sediments may therefore be required to access the piles to allow external cutting as part of jacket removal.

The surficial sediments across the Kinsale Head area are shallow, with sub-cropping chalk present near the surface. It is proposed that a survey is undertaken in order to determine the present depth of the surficial sediments at each platform to inform the level of any excavation required. For the purposes of jacket lift, it is only required to determine whether the chalk/seabed sediment contact is within 5m of the seabed.

To support the application for consent and meet obligations of Article 6 and Article 12 of the Habitats Directive and Article 4 of the EIA Directive, the reports accompanying the application include the following:

- Kinsale Area Decommissioning Project Kinsale Head Petroleum Lease (OPL 1) Application to Conduct an Offshore Survey - Kinsale Alpha and Bravo Platforms Shallow Geological Survey;
- Kinsale Alpha and Bravo Platforms Shallow Geological Survey - Appropriate Assessment Screening Report (March 2020) (the report is referred to herein as the AA Screening Report);
- Kinsale Alpha and Bravo Platforms Shallow Geological Survey Environmental Impact Assessment Screening/Environmental Risk Report (March 2020) (the report is referred to herein as the EIA Screening Report); and
- Kinsale Alpha and Bravo Platforms Shallow Geological Survey - Pre-survey Fisheries Assessment Report (March 2020).

RPS has been commissioned by the PAD-DCCAE to provide technical review support in relation to the statutory assessment of the above reports submitted in support of the application for consent.

¹ In Ireland, designated European sites include Special Areas of Conservation (SACs), designated due to their significant ecological importance for species and habitats protected under Annexes I and II respectively of the Habitats Directive, and Special Protected Areas (SPAs), designated for the protection of bird species protected under Annex I of the EU Birds Directive (Council Directive 2009/409/EEC).

2 TECHNICAL REVIEW

2.1 Legislation and Guidance used in the Technical Review

This technical review report presents the findings of the RPS review and assessment of the AA Screening Report of the Kinsale Alpha and Bravo Platforms Shallow Geological Survey.

This technical review and assessment of the AA Screening Report has been undertaken with regard to the following legislation, guidance and departmental circulars:

Legislation:

- European Communities Council Directive (92/43/EEC) on the conservation of natural habitats and wild flora and fauna (Habitats Directive);
- The European Communities (Birds and Natural Habitats) Regulations 2011 (as amended);
- Petroleum and Other Minerals Development Act, 1960 (as amended);
- Petroleum and Other Minerals Development Act, 1960 (Section 13A) Regulations, 1990 (S.I. 141/1990);
- European Union Directive on assessment of the effects of certain public and private projects on the environment (Environmental Impact Assessment) Directive (2011/92/EU) and as amended by Directive 2014/52/EU;
- European Union (Environmental Impact Assessment) (Petroleum Exploration) Regulations 2013 (S.I. No 134/2013);
- European Union (Environmental Impact Assessment) (Petroleum Exploration) (Amendment) Regulations 2019 (S.I. No. 124/2019);
- European Union (Environmental Impact Assessment and Appropriate Assessment) (Foreshore) Regulations 2014 (S.I. No 544/2014);
- European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No 544/2014); and
- The Planning and Development Act 2000-2019.

Guidance:

- Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg (EC, 2000);
- Communication from the Commission on the Precautionary Principle. Office for Official Publications of the European Communities, Luxembourg (EC, 2000a);
- Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg (EC, 2002);
- Nature and biodiversity cases: Ruling of the European Court of Justice. Office for Official Publications of the European Communities, Luxembourg (EC, 2006);
- Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities (DoEHLG 2009, rev 2010a);
- Interpretation Manual of European Union Habitats. Version EUR 28. European Commission 2013;

- Article 6 of the Habitats Directive – Rulings of the European Court of Justice. Final Draft September 2014;
- Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. European Commission (EC, 2018); and
- Recent Irish and European case law on the Habitats Directive.

Departmental/ National Parks and Wildlife (NPWS) Circulars:

- Compliance Conditions in respect of Developments requiring (1) Environmental Impact Assessment (EIA); or (2) having potential impacts on Natura 2000 sites. Circular Letter PD 2/07 and NPWS 1/07
- *Guidance on Compliance with Regulation 23 of the Habitats Directive*. Circular Letter NPWS 2/07
- *Appropriate Assessment of Land Use Plans*. Circular Letter SEA 1/08 & NPWS 1/08; and
- *Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities*. Circular NPWS 1/10 and PSSP 2/10. (DEHLG, 2010).

The Screening for AA will be reviewed to assess whether it includes the following:

- Robust scientific information and analysis including the reasoning and justifications for the conclusion. Relevant chapters of the EIA Screening Report may be cross-referenced and the findings integrated into the assessment, particularly where analysis of environmental factors is required to determine effects on the structure and function of the European sites;
- Compliance with the tests and standards of AA as presented in European and national guidance;
- The assessment is carried out on the entirety of information submitted as part of consent application, albeit the proposed works only apply to the survey to determine the present depth of the surficial sediments at Kinsale Alpha (KA) and Kinsale Bravo (KB) platforms and to inform the level of any excavation required; and
- A robust scientific assessment on the likelihood of significant effects.

The European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) outlines the requirements for Screening for AA under Regulation 42(1) and 42(2), as follows:

42. (1) A screening for Appropriate Assessment of a plan or project for which an application for consent is received, or which a public authority wishes to undertake or adopt, and which is not directly connected with or necessary to the management of the site as a European Site, shall be carried out by the public authority to assess, in view of best scientific knowledge and in view of the conservation objectives of the site, if that plan or project, individually or in combination with other plans or projects is likely to have a significant effect on the European site.

(2) A public authority shall carry out a screening for Appropriate Assessment under paragraph (1) before consent for a plan or project is given, or a decision to undertake or adopt a plan or project is taken.

2.2 Public Consultation Responses

Notification of the application to DCCAIE was issued on the 5th March 2020 to the statutory bodies listed in **Table 2.1**. The application was posted on the DCCAIEs website on 13th March 2020 with a closing date of the 13th April 2020. The date was subsequently extended to close of business on 24th April 2020.

The observations and comments received from the public and prescribed bodies are being considered as part of the AA screening assessment of the proposed Kinsale Alpha and Bravo Platforms Shallow Geological Survey in **Table 2.1** and **Table 2.2** below.

Table 2.1 Submission/ observations received from Prescribed Bodies consulted with as part of the Application for Consent for the Kinsale Alpha and Bravo Platforms Shallow Geological Survey

Prescribed Bodies	Response Received	Details of Submission
Irish Maritime Administration, Department of Transport, Tourism and Sport	-	No submissions or observations received.
Ship Source Pollution Prevention Unit Irish Maritime Administration, Department of Transport, Tourism and Sport	Email received on 23 rd April 2020	Regarding correspondence from PSE Kinsale Energy Ltd in respect of two site surveys applications they have submitted to the Petroleum Affairs Division, DCCAE. In this regard, I wish to inform you that (prospective) licensees and their employees and contractors are reminded that they should be aware of ship-source pollution prevention provisions which are in place to protect human health and the marine environment and apply to all shipping activity. These provisions are obligatory independently of particular licence terms and conditions. Under the MARPOL Convention and EU law, as applicable in national law, ships may not cause pollution either by discharge to water or emissions to air, when at sea or when at berth in port. Ships include Floating Production, Storage and Offloading vessels (FPSOs), also called a "unit" or a "system"; and Floating Storage Units, (FSUs). Ships berthed at terminals at sea are also obliged to conform to the law. Management of ship waste (mainly oil, hazardous and polluting substances, sewage, garbage and polluting emissions to air) and of all cargo residues must be ensured as required under international (IMO), EU and national law. Under existing provisions ships are obliged to discharge waste and cargo residues at port and ports are obliged to provide adequate facilities for their reception from ships.
Irish Coast Guard (& National Maritime Operations Centre), Department of Transport, Tourism and Sport	-	No submissions or observations received.
Sea Fisheries Protection Authority	-	No submissions or observations received.
Sea Fisheries Policy Division, Department of Agriculture, Food and the Marine	-	No submissions or observations received.
Department of Defence	-	No submissions or observations received.
Mission Support Facility, Irish Air Corps	-	No submissions or observations received.
Naval Headquarters	Email received on 23 rd April 2020	The Naval Service have no observations regarding these surveys, however it is requested that details of the survey vessels which will conduct the surveys are made known when to hand.
Marine Institute, Marine Environment and Food Safety Services	-	No submissions or observations received.
Marine Institute	-	No submissions or observations received.
Director of e-Navigation and Maritime Services, Commissioner of Irish Lights	-	No submissions or observations received.
Department of Culture, Heritage and the Gaeltacht (DCHG) Development Applications Unit (DAU)	-	No submissions or observations received.

Table 2.2 Submission/ observations received by the DCCAIE from Prescribed Bodies and Third Parties on the Application for Consent for the Kinsale Alpha and Bravo Platforms Shallow Geological Survey

Prescribed Bodies	Response Received	Details of Submission
An Taisce	Email received on 24 th April 2020	It is the considered view of An Taisce that a full Environmental Impact Assessment and Appropriate Assessment is required for this proposal.
Private individual	Email received on 24 th April 2020	Please do not allow any more fossil fuels to be explored, exploited and expatriated from Irish waters, soils and seas

DRAFT

3 SCREENING FOR APPROPRIATE ASSESSMENT

3.1 Screening for AA Checklist

As per the EU Guidelines (2002) the checklist below outlines the information necessary to complete the Screening for AA for the Kinsale Alpha and Bravo Platforms shallow geological survey.

Table 3.1 Information Checklist for the Appropriate Assessment

Are these known or available?	Yes/No
Size, scale area, land-take, etc.	<p>Yes: All relevant information regarding size and scale of the project can be found in Section 2.2 of the AA Screening Report and the proposed survey area is provided in Figure .2.1 of the AA Screening Report.</p> <p>There will be no land-take in relation to this survey.</p>
Project Sector	Yes: This project is in the Oil and Gas Sector.
Physical Changes that will flow from the Project (from excavation, piling, dredging etc.)	Yes: The potential for physical changes to the environment from the proposed surveys are discussed in Section 3.3 of the AA Screening Report. The survey programme does not involve any physical interaction with the seabed, and therefore the potential for physical disturbance effects has been discounted and not discussed further
Resource Requirements	<p>No: The main natural resources and raw materials required by the geophysical survey are not included in the AA Screening Report. However, the resource requirements are likely to include:</p> <ul style="list-style-type: none"> • water (freshwater and seawater); • fuel for power generation; and • selected chemicals. <p>The list of survey equipment is provided in Table 2.1 of the AA Screening Report and includes the following:</p> <ul style="list-style-type: none"> • Vessel • Single beam and multi-beam echosounder; • Sidescan sonar; • Sub-bottom profiler; and • Magnetometer.
Emissions and Waste	<p>No. The discharges from the survey vessels are expected to include treated domestic effluents (comprising grey water, sewage and food waste) and surface drainage from decks. Atmospheric emissions from the survey vessel in transit are also expected and solid domestic and operational wastes, as are normally associated with shipping activities are not discussed or assessed in the AA Screening Report. However they are assessed in Table 4.2 of the EIA Screening Report under 'Discharges and Wastes'. In the submission from <i>Ship Source Pollution Prevention Unit Irish Maritime Administration, Department of Transport, Tourism and Sport</i> (Email to DCCA 23rd April 2020) on the surveys applications, reiterates the responsibilities of the applicant with regards to ship-source pollution prevention provisions under the MARPOL Convention and EU law, as applicable in national law, as follows: <i>Management of ship waste (mainly oil, hazardous and polluting substances, sewage, garbage and polluting emissions to air) and of all cargo residues must be ensured as required under international (IMO), EU and national law. Under existing provisions ships are obliged to discharge waste and cargo residues at port and ports are obliged to provide adequate facilities for their reception from ships.</i></p>

Are these known or available?	Yes/No
Transportation Requirements	Yes: A vessel will be used to carry out the survey. A vessel has not yet been selected therefore a representative vessel was used for the purpose of the AA Screening Report.
Duration of Construction, Operation, Decommissioning etc.	Yes: The duration of the survey is stated in Section 2.2 of the AA Screening Report. The survey is expected to be complete in approximately 1.5 days.
Project Implementation Period	Yes: The timeframe of the survey is stated in Section 2.2 of the AA Screening Report. It is planned that the survey will take place between April and November 2020 or February and November 2021.
Distance from European Site	Yes: The criterion used for the selection of European sites within the likely zone of impact are of the AA Screening Report and the European sites selected for further assessment are provided in Table 4.1 and the distances from the survey to the European sites are provided in Appendix 1 of the AA Screening Report.
Cumulative Impacts with Other Projects or Plans	Yes: Consideration of the potential cumulative in-combination effects is provided in Section 4.3 of the AA Screening Report.
Other, as appropriate	Yes: A Screening Statement and Conclusion are provided in Section 5 the AA Screening Report.

3.2 Management of the European site

The Kinsale Alpha and Bravo Platforms shallow geological survey is not directly connected with or necessary to the management of any European site.

3.3 Description of the Project

Kinsale Energy is preparing for the decommissioning of the Kinsale Area gas fields and facilities, which are coming to the end of their productive life. The KADP includes for the decommissioning of all physical assets within Kinsale Energy's two leasehold areas (i.e. the Kinsale Head gas fields and the Seven Heads gas field), the pipelines and umbilicals outside the leasehold areas, as well as the onshore gas metering terminal at Inch, Co. Cork which will be fully removed in accordance with the conditions imposed by the original planning permission granted by Cork County Council (planning reference no. 2929/76) with the site returned to agricultural use.

As part of this project, jacket piles are to be cut before jacket removal. A geological survey is proposed to determine the present depth of the surficial sediments at each platform to inform the level of any excavation required. Around each platform, four lines, each of approximately 120-160m length, will be surveyed at 30m off each platform face. Equipment may be hull-mounted or towed; in the case of the latter, the equipment will first be deployed over-board prior to the sailing of the survey lines. Data collection quality will be monitored and additional lines may need to be run.

3.4 Characteristics of the European site

Given the nature of the project is such that it could affect water quality and water dependent habitats or species including fish, mammals and birds. A number of criteria are set out in the AA Screening Report to identify the European sites that could have potential interaction with the survey activities, as follows:

- **Birds**

Screen in any SPA for species sensitive to vessel disturbance which is located within 4km of the survey area, or where activities take place within shallow coastal waters known to be used by such species. For seabirds, screen in any colony SPA for which a qualifying interest could theoretically be present in the survey area based on available foraging range data.

- **Marine Mammals**

Screen in any SAC for marine mammal species where the site boundary overlaps the survey area, and for pinnipeds screen in any site within foraging range. Cetaceans are not central-place foragers, and attributing any animals to a specific SAC is challenging. For the purposes of this assessment, cetaceans which are qualifying interests of all SACs within the relevant management units as defined by IAMMWG (2015) have been used.

- **Fish (including marine mammals, migratory fish and diving birds)**

Screen in any SAC and SPA with qualifying interests which are noise sensitive (marine mammals, migratory fish, diving birds) either where the site boundary is within 15km of the survey area or where foraging ranges may bring such qualifying interests to within this distance. For cetaceans, screen in any SAC within the relevant management unit (after IAMMWG 2015) where the survey is proposed to take place.

No European sites were identified within the survey area or within the distances set out in the criterion above. The report focused on the potential for relevant mobile species which are qualifying interests of Natura 2000 sites to interact with the survey area and its footprint area. A total of 12 SACs and 33 SPAs were identified within the ZoI of the proposed survey. These sites are presented in Table 3.2, Table 3.4, Figure 3.1 and Figure 3.2 of the AA Screening Report.

3.4.1 Conservation Objectives

The qualifying interests SACs and SPAs are outlined in Table 3.2 and Table 3.4 of the AA Screening Report. An assessment of the potential for likely significant effects from the survey on the qualifying interests and site specific conservation objectives of the European sites selected for further assessment, is provided in Appendix 1 of the AA Screening.

The identification of European sites for further assessment has concentrated on the potential for relevant mobile species (seabirds, marine mammals and fish) which are qualifying interests of Natura 2000 sites, to interact with the survey area and its wider footprint of effect. The potential sources of impact from the survey to these SACs is provided in **Table 3.2** and potential sources of impact from the survey to SPAs is provided in **Table 3.3**.

Note that freshwater pearl mussel are unlikely to be found within the survey area, however Atlantic Salmon form a critical part of the life cycle of freshwater pearl mussel and are therefore included as a receptor.

Table 3.2: Potential sources of impact to the SACs and their Qualifying Interests SCIs within the Rig Survey Zol.

SAC Site Code	SAC Site Name	Distance from Study Area (km)	Site Specific Conservation Objectives Yes / No	Relevant Qualifying Interests	Physical Presence	Underwater Noise
IE0000101	Roaringwater Bay and Islands SAC	68	Yes	Harbour porpoise	Yes	Yes
				Grey seal	Yes	Yes
IE0002172	Blasket Islands SAC	184	Yes	Harbour porpoise	Yes	Yes
IE0003000	Rockabill to Dalkey Island SAC	266	Yes	Harbour porpoise	Yes	Yes
IE0002171	Bandon River SAC	29	No	Freshwater pearl mussel	Yes	Yes
IE0002170	Blackwater River (Cork/Waterford) SAC	50	Yes	Freshwater pearl mussel	Yes	Yes
				Atlantic salmon	Yes	Yes
				Sea lamprey	Yes	Yes
				River lamprey	Yes	Yes
				Twaite shad	Yes	Yes
IE0002162	River Barrow and River Nore SAC	108	Yes	Freshwater pearl mussel	Yes	Yes
				Atlantic salmon	Yes	Yes
				Sea lamprey	Yes	Yes
				River lamprey	Yes	Yes
				Twaite shad	Yes	Yes
IE0002137	Lower River Suir SAC	114	Yes	Freshwater pearl mussel	Yes	Yes
				Atlantic salmon	Yes	Yes
				Sea lamprey	Yes	Yes
				River lamprey	Yes	Yes
				Twaite shad	Yes	Yes
IE0000781	Slaney River Valley SAC	161	Yes	Freshwater pearl mussel	Yes	Yes
				Atlantic salmon	Yes	Yes
				Sea lamprey	Yes	Yes
				River lamprey	Yes	Yes
				Twaite shad	Yes	Yes
UK0030396	Bristol Channel Approaches SAC	193	Yes	Harbour porpoise	Yes	Yes
UK0030398	North Anglesey Marine SAC	293	Yes	Harbour porpoise	Yes	Yes
UK0030397	West Wales Marine SAC	171	Yes	Harbour porpoise	Yes	Yes
UK0030399	North Channel SAC	374	Yes	Harbour porpoise	Yes	Yes

REPORT

Table 3.3: Potential sources of impact to the SPAs and their Special Conservation Interests within the Rig Survey Zol

SPA Site Code	SPA Site Name	Distance from Study Area (km)	Site Specific Conservation Objectives Yes / No	Relevant SCIs	Physical Presence	Underwater Noise
IE0004002	Saltee Islands SPA	120	Yes	Northern fulmar	Yes	No
				Lesser black-backed gull	Yes	No
				Manx shearwater	Yes	Yes
				Northern gannet	Yes	Yes
IE0004003	Puffin Island SPA	161	No	Northern fulmar	Yes	No
				Manx shearwater	Yes	Yes
IE0004005	Cliffs of Moher SPA	314	No	Northern fulmar	Yes	No
IE0004007	Skelligs SPA	160	No	Northern fulmar	Yes	No
				Manx shearwater	Yes	Yes
				Northern gannet	Yes	Yes
IE0004008	Blasket Islands SPA	187	No	Northern fulmar	Yes	No
				Manx shearwater	Yes	Yes
IE0004021	Old Head of Kinsale SPA	27	No	Northern fulmar	Yes	No
				Herring gull	Yes	No
				Black-legged kittiwake	Yes	No
				Common guillemot	Yes	No
IE0004022	Ballycotton Bay SPA	36	Yes	Lesser black-backed gull	Yes	No
IE0004023	Ballymacoda Bay SPA	44	Yes	Lesser black-backed gull	Yes	No
IE0004028	Blackwater Estuary SPA	56	Yes	Lesser black-backed gull	Yes	No
IE0004030	Cork Harbour SPA	33	Yes	Lesser black-backed gull	Yes	No
IE0004032	Dungarvan Harbour SPA	69	Yes	Lesser black-backed gull	Yes	No
IE0004066	The Bull and The Cow Rocks SPA	131	No	Northern fulmar	Yes	No
				Northern gannet	Yes	No
IE0004069	Lambay Island SPA	294	No	Northern fulmar	Yes	No

REPORT

SPA Site Code	SPA Site Name	Distance from Study Area (km)	Site Specific Conservation Objectives Yes / No	Relevant SCIs	Physical Presence	Underwater Noise
				Manx shearwater	Yes	Yes
IE0004092	Tacumshin Lake SPA	134	No	Lesser black-backed gull	Yes	No
IE0004095	Kilcolman Bog SPA	89	No	Lesser black-backed gull	Yes	No
IE0004113	Howth Head Coast SPA	279	No	Northern fulmar	Yes	No
IE0004114	Illaunonearaun SPA	279	No	Northern fulmar	Yes	No
IE0004119	Loop Head SPA	261	No	Northern fulmar	Yes	No
IE0004117	Ireland's Eye SPA	284	No	Northern fulmar	Yes	No
IE0004122	Skerries Islands SPA	304	No	Northern fulmar	Yes	No
IE0004125	Magharee Islands SPA	238	No	Northern fulmar	Yes	No
IE0004127	Wicklow Head SPA	234	No	Northern fulmar	Yes	No
IE0004153	Dingle Peninsula SPA	191	No	Northern fulmar	Yes	No
IE0004154	Iveragh Peninsula SPA	149	No	Northern fulmar	Yes	No
IE0004155	Beara Peninsula SPA	119	No	Northern fulmar	Yes	No
IE0004156	Sheep's Head to Toe Head SPA	59	No	Northern fulmar	Yes	No
IE0004175	Deenish Island and Scariiff Island SPA	146	No	Northern fulmar	Yes	No
				Manx shearwater	Yes	Yes
IE0004189	Kerry Head SPA	250	No	Northern fulmar	Yes	No
IE0004190	Galley Head to Duneen Point SPA	47	No	Northern fulmar	Yes	No
IE0004191	Seven Heads SPA	35	No	Herring gull	Yes	No
IE0004192	Helvick Head to Ballyquin SPA	58	No	Northern fulmar	Yes	No
				Common guillemot	Yes	Yes
UK9014051	Skomer, Skokholm and the Seas off Pembrokeshire SPA	131	Yes	Lesser black-backed gull	Yes	No
				Manx shearwater	Yes	Yes
UK9014041	Grassholm SPA	173	Yes	Northern gannet	Yes	Yes

The foraging ranges in Thaxter *et al.* (2012) are used in the AA Screening Report to identify which bird species of Special Conservation Interest (SCI) of SPAs to be included in the assessment.

Thaxter *et al.* (2012) lists 25 species which utilise marine habitats for the purposes of foraging during the breeding season. It is noted that larger maximum foraging ranges are provided by Wakefield *et al.* (2017) for species such as black-legged kittiwake, common guillemot and razorbill and Woodward *et al.* (2019) has updated the foraging ranges for the species listed in Thaxter *et al.* (2012). Wakefield *et al.* (2017) is referenced in the AA Screening Report however Woodward *et al.* (2019) is not mentioned.

A summary table of the foraging ranges as per Thaxter *et al.* (2012) is set out below at **Table 3.4**. In light of information set out within **Table 3.4**, data held by NPWS, the JNCC and Natural Resources Wales was considered in respect of SPAs supporting species listed in **Table 3.3**, where the survey area is within the expected foraging ranges of these species.

Table 3.4: Seabird foraging ranges (summarised from Thaxter *et al.* 2012)

Species	Maximum foraging range	Mean Max foraging range	Mean foraging range
Red-throated diver	9	9	4.5
Northern fulmar	580	400 ± 245.8 (245.8*)	47.5
Manx shearwater	330	18.3 ± 12.5(3)a & >330(1)b	2.3
European storm-petrel	>65	-	-
Northern gannet	590	229.4 ± 124.3 (353.7*)	92.5
Great cormorant	35	25 ± 10 (35*)	5.2
European shag	17	14.5 ± 3.5 (18*)	5.9
Black-headed gull	40	25.5 ± 20.5 (46*)	11.4
Common gull	50	50	25
European Herring Gull	92	61.1 ± 44 (105.1*)	10.5
Lesser black-backed gull	181	141.0 ± 50.8 (191.8*)	71.9
Black-legged kittiwake	120	60.0 ± 23.3 (83.3*)	24.8
Sandwich tern	54	49.0 ± 7.1 (56.1*)	11.5
Common tern	30	15.2 ± 11.2 (26.4*)	4.5
Arctic tern	30	24.2 ± 6.3 (30.5*)	7.1
Little tern	11	6.3 ± 2.4 (8.7*)	2.1
Common guillemot	135	84.2 ± 50.1 (134.3*)	37.8
Razorbill	95	48.5 ± 35.0 (83.5*)	23.7
Atlantic puffin	200	105.4 ± 46.0 (151.4*)	4
Eider	80	80	2.4
Leach's petrel	<120	91.7 ± 27.5 (119.28*)	-
Mediterranean Gull	20	20	11.5
Roseate Tern	30	16.6 ± 11.6 (28.2*)	12.2 ± 12.1 (24.3)
Great Skua	13a & 219b	10.9 ± 3.0(2)a & 86.4(1)b	-
Arctic Skua	75	62.5 ± 17.7 (80.2*)	6.4 ± 5.9 (12.3*)

*Precautionary mean maximum range plus 1 standard deviation

It was noted in **Table 3.4** of the AA Screening Report that of the 33 SPAs identified for further consideration, not all of the SCI species listed for the SPAs that are sensitive to noise disturbance in the marine environment were considered in the report. The SPA SCI species and an account of their foraging behaviour is provided in **Table 3.5** below.

Table 3.5 SPA SCI Species not assessed in the AA Screening Report

SPA	Qualifying Interest	Species Foraging Behaviour
Saltee Islands SPA (IE0004002) 120km from the survey area	Guillemot	Species such as Guillemot are a wide ranging and regularly occurring migratory bird in Europe. The species dive from the sea surface down to 200 m to catch schooling fish such as sandeels and sprats, although most dives are less than 50 m. Guillemots feed in inshore and offshore waters. Their foraging range varies with mean foraging range reported at 37.8km, and most foraging occurs within 50km of a colony, however the mean maximum for this species is 134.3km. The species may be found in the Kinsale survey area during operations, as the Guillemot is listed as an SCI species for the Saltee Islands SPA which is 120km from the study area and is within the mean maximum foraging distance for the species.
	Puffin	Puffin is a wide-ranging species that can dive to 60 m to catch prey, but most dives are less than 30 m. Foraging ranges of the species vary between colonies and with the season. The mean foraging range is 4km (Thaxter et al. 2012), with a mean maximum foraging distance of 151.4km. The species may be found in the Kinsale survey area during operations, as Puffin is listed as an SCI species for the Saltee Islands SPA which is 120km from the study area and is within the mean maximum foraging distance for the species.
Puffin Island (IE0004003) SPA 161km from the survey area	Lesser Black-backed Gull	The diet of lesser black-backed gull, as with most gull species, is relatively broad including a large component scavenged from landfill and other urban areas. Birds foraging at sea typically feed on shoals of fish close to the surface. As a highly adaptable omnivore the species will make use of all marine food sources which are available to them. The species may be found in the survey area during operations, which lie within the mean maximum foraging distance (191.8km) of a number the three SPAs listed.
Blasket Islands (IE0004008) SPA 187km from the survey area		
Deenish Island and Scariff Island SPA (IE0004175) 146km from the survey area		
Helvick Head to Ballyquin SPA (IE0004192) 58km from the survey area	Herring Gull	The diet of herring gull, as with most gull species, is relatively broad including a large component scavenged from landfill and other urban areas. Birds foraging at sea typically feed on scavenged material and do not generally feed on fish or other marine fauna directly. The species may be found in the survey area during operations, which lie within the mean maximum foraging distance (105.1km) of the Helvick Head to Ballyquin SPA for which they are an SCI, which is located approximately 58km from the survey area.
	Kittiwake	Kittiwake are surface feeders, taking prey from the surface of the water through dipping however they also utilise shallow dives of up to a meter. The species also often follows ships to scavenge offal and bycatch. Food items typically comprise small shoaling fish including herring, sprats and sandeels, in addition to intertidal molluscs and crustaceans. The species may be found in the survey area during operations, which lie within the maximum foraging distance (83.3km) of the Helvick Head to Ballyquin SPA for which they are an SCI, which is located approximately 58km from the survey area.

* Thaxter et al. 2012 worst case mean maximum range plus the tolerance

The rationalisation for excluding certain bird species from further assessment is provided in Section 3.5.2 of the AA Screening Report and includes SPA sites supporting Fulmar and Manx Shearwater in the far north and west of Ireland including Clare Island SPA (Mayo), Duvillaun Islands SPA (Mayo), High Island, Inish shark and Davillaun SPA (Galway), Tory Island SPA (Donegal), West Donegal Coast SPA (Donegal) and Horn Head to Fanad Head SPA (Donegal) and Cruagh Island SPA (Galway). However, there is no rationalisation in the AA Screening Report to support the exclusion of the SPAs in **Table 3.6** below.

Table 3.6 SPAs not Considered in the AA Screening Report

SPA	Qualifying Interest	Distance from Study Area (km)	Mean Max Foraging Range
Mid Waterford Coast SPA	Herring Gull	86.6	105.1
Wexford Harbour and Slobs SPA	Lesser Black-backed Gull	143.5	191.8

3.5 Impact Prediction

Table 3.7 Information Checklist for the Impact Assessment

Have these sources been consulted?	Assessment
The Natura 2000 standard data form for the site	<p>A summary of the qualifying habitats and species of SACs and the SCIs of SPAs are provided in Appendix 1 of the AA Screening Report. It is noted in the report that the specific conservation objectives for each of the relevant sites have also been consulted (refer to NPWS, JNCC and Natural Resources Wales websites for full details). A list of Summary Objectives is provided for each site in Appendix 1 of AA Screening Report.</p> <p>It is not clear from the information provided in the AA Screening Report whether the Natura 2000 standard data forms for the sites have been consulted. No reference is made to these data forms in the documentation provided by Kinsale Energy and the site specific threats and pressures and CO as outlined in the Natura 2000 forms are not presented in the screening assessment, however the qualifying feature attributes and targets defining favourable conservation status are referred to in Appendix I of the AA Screening Report. The site synopses for each European site from the NPWS metadata site (NPWS, 2018) have not been used. However, an assessment of the potential for likely significant effects from the survey on the relevant qualifying interests of the European sites chosen for further assessment is provided in Appendix 1 of the AA Screening Report.</p>
Existing and historical maps	<p>A map is provided in Figure 1.1 that outlines the location of the Kinsale Alpha and Bravo platforms and wider Kinsale Area.</p> <p>Figure 2.1 is a map of proposed survey lines for KA and KB.</p> <p>A map is provided in Figure 3.1 of SPAs identified for further assessment.</p> <p>A map is provided in Figure 3.2 of SACs identified for further assessment.</p>
Land-use and other relevant existing plans	<ul style="list-style-type: none"> Shipping Fisheries Several surveys that are part of a seabed mapping initiative between Geological Survey Ireland and the Marine Institute. <p>In addition to those existing/approved projects/activities, four proposed offshore projects/ surveys were identified which are yet to be formally approved:</p> <ul style="list-style-type: none"> Geophysical survey conducted by Exola DAC

Have these sources been consulted?	Assessment
	<ul style="list-style-type: none"> • Celtic interconnector • Ireland-France subsea cable • Rig site geophysical survey conducted by Kinsale Energy <p>Section 4.3 of the AA Screening Report provides details of potential in-combination effects with other projects and surveys. No cumulative effects are predicted.</p>
Existing site survey material	<p>The COs have been included in Appendix 1 of the AA Screening Report. They can be found at the following websites;</p> <p>https://www.npws.ie/protected-sites/conservation-management-planning/conservation-objectives</p> <p>https://jncc.gov.uk</p> <p>https://naturalresources.wales/?lang=en</p> <p>Site specific conservation objectives that have been prepared by NPWS, the JNCC and Natural Resources Wales can be found at the above website and are available for some of the European sites.</p> <p>Section 3.4 of the AA Screening Report outlines the updated environmental information which is available for some relevant Species.</p>
Existing data on hydrogeology	<p>No information on hydrogeology was provided and is not relevant to this project.</p>
Existing data on key species	<p>Numerous published papers on key species ecology and behaviour and the sensitivities of these receptors to potential impacts associated with the survey activities are provided in Section 6 of the AA Screening Report. However, the Article 17 reporting for Ireland (NPWS 2019) which provides the conservation status of the natural habitats and species in the Annexes of the Habitats Directive was not referenced. The foraging ranges for bird is based on Thaxter et al. (2012). However, larger maximum foraging ranges are provided by Wakefield et al. (2017)² for species such as black-legged kittiwake, common guillemot and razorbill. In addition, the publication <i>Desk-based revision of seabird foraging ranges used for HRA screening</i> (Woodward et. al. 2019)³, is also not referenced which has updated the foraging ranges for the species listed in Thaxter et al. (2012).</p>
Environmental statements for similar projects or plans elsewhere	<p>A number of documents and papers were referenced in the AA Screening Report including the following:</p> <ul style="list-style-type: none"> - Decommissioning Plans and related Environmental Impact Assessment Report (EIAR) and Appropriate Assessment (AA) screening reports, which have been submitted to the Petroleum Affairs Division (PAD) of DCCAE for decommissioning activities including; facilities preparation, well plug and abandonment, platform topsides and subsea structure removal (application no. 1); and jacket removal (application no. 2). - DCENR (2015). Irish Offshore Strategic Environmental Assessment (IOSEA) - DECC (2016). Offshore Energy Strategic Environmental Assessment 3, Environmental Report. - Hammond PS, Northridge SP, Thompson D, Gordon JCD, Hall AJ, Murphy SN & Embling CB (2008). Background information on marine mammals for Strategic Environmental Assessment

² Wakefield ED, Owen E, Baer J, Carroll MJ, Daunt F, Dodd SG, Green JA, Guilford T, Mavor RA, Miller PI, Newell MA, Newton SF, Robertson GS, Shoji A, Soanes LM, Votier SC, Wanless S & Bolton M (2017). Breeding density, fine-scale tracking and large-scale modelling reveal the regional distribution of four seabird species. *Ecological Applications* 27: 2074-2091.

³ Woodward, I., Thaxter, CB., Owen, E., Cook, A.S.C.P. (2019) Desk-based revision of seabird foraging ranges used for HRA screening. *British Trust for Ornithology, BTO Research Report No. 724*

Have these sources been consulted?	Assessment
	<ul style="list-style-type: none"> - Langston RHW, Teuten E & Butler A (2013). Foraging ranges of northern gannets <i>Morus bassanus</i> in relation to proposed offshore wind farms in the UK: 2010-2012. RSPB document produced as part of the UK Department of Energy and Climate Change's offshore energy Strategic Environmental Assessment programme
State of the environment reports	The Article 17 reporting for Ireland, NPWS 2019 are not referenced
Site management plans	The specific CO for each of the relevant sites have also been consulted (refer to NPWS JNCC and Natural Resources Wales websites for full details of CO of each particular site -
Geographical information systems	The digital spatial data for the boundaries of the European sites is obtained from the NPWS JNCC and Natural Resources Wales websites
Site history files	The site history is provided in Section 1.
Other, as appropriate	<p>For the Annex IV species assessment several key data resources are referenced on the species composition and relative abundance of the marine mammal fauna in the Kinsale area and wider Celtic Sea in the EIA Screening Report for this survey.</p> <p>The baseline assessment on Annex IV marine mammals likely to be found in the Kinsale area (Harbour porpoise, Common dolphin, Bottlenose dolphin, Risso's dolphin, Baleen Whales (incl. Minke Whale, Humpback Whale and Fin Whale)) is provided in Section 3.2.6 of the EIA Screening Report. The data on cetaceans is from the 11 years of surveys conducted by marine mammal observers carried out as part of the annual Celtic Sea Herring Acoustic Surveys (CSHAS) covering waters off the south coast of Ireland, typically over a three week period each October and extends from 2-3 km off the coast to over 100 km offshore (e.g. O'Donnell et al. 2018).</p> <p>In addition, data was extracted from the Irish Whale and Dolphin Group's (IWDG) Casual Cetacean Sightings database, which includes sightings submitted by IWDG members, researchers and the general public and validated by the IWDG (IWDG 2019). Table 3.3 of the EIA Screening Report shows the seasonal distribution of Cetaceans in the Kinsale Area. It is acknowledged in the text that information on seasonal abundance of cetaceans is limited and the data in Table 3.3 provides indicative trends.</p>

3.6 Screening for Appropriate Assessment Matrix

Table 3.8 Screening for Appropriate Assessment

Appropriate Assessment Screening Criteria	Response
<p>Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the European Sites</p>	<p>The individual elements of the survey activities likely to give rise to impacts on European sites are identified in Section 3.3 of the AA Screening Report as follows:</p> <ul style="list-style-type: none"> • The physical presence of the survey vessel; • Underwater noise including from the vessel and survey equipment. <p>The survey does not involve any physical interaction with the seabed.</p>
<p>Describe any likely direct, indirect or secondary impacts of the project on the European Sites by virtue of:</p> <ul style="list-style-type: none"> • Size and Scale • Land Take • Distance from European sites or key features of the site • Resource Requirements • Emissions • Excavation Requirements • Transport Requirements • Duration of construction, operation and decommissioning • Other. 	<p>The likely direct, indirect or secondary impacts of the project on the European Sites are assessed in the AA Screening Report Section 4.2 and Table 4.1. Receptors such as birds, marine mammals and fish have been identified as the principal receptors. Potential sources of effects are outlined in Table 4.1 and discussed in the following sections in the context of potential receptors (qualifying interests of SPAs and SACs) for which interactions could not be discounted.</p> <p>Size, Scale and Landtake:</p> <p>The KA and KB platforms are located off the coast of Co. Cork, approximately 47km and 45km from the nearest landfall respectively.</p> <p>Around each platform, four lines, each of approximately 120-160m length, will be surveyed at 30m off each platform face.</p> <p>Impacts are not expected in relation to the size and scale of the project. There will be no land take for the survey.</p> <p>Distance from European sites or key features of the site:</p> <p>The distances of European sites within the Zol of the different elements of the survey activities are provided in Appendix 1. The relative locations of the European sites within the Zol are presented in Figure 3.1 and 3.2 of the AA Screening Report.</p> <p>Potential impacts from survey activities were identified for qualifying interests of 12 SACs and 33 SPAs identified within the Project Zol.</p> <p>The potential impacts were underwater noise and physical presence of the survey vessel.</p> <p>It was concluded that there are no likely significant effects of the survey on the features or conservation objectives of any Natura 2000 site.</p> <p>Resource Requirements: The equipment used to partake in the survey is reusable.</p> <p>Emissions: Emissions expected from the survey include underwater noise. Waste emissions are not considered in the AA Screening Report however they are assessed in Table 4.2 of the EIA Screening Report under 'Discharges and Wastes'.</p> <p>Excavation Requirements: There will be no excavation as part of the survey</p> <p>Transport Requirements: The surveys will be carried out with a sea vessel, which has not been chosen yet.</p> <p>Duration of decommissioning: The duration of the survey is stated in Section 2.2. The survey is expected to be complete in approximately 1.5 days.</p>

Appropriate Assessment Screening Criteria	Response
<p>Describe any likely changes to the site arising as a result of:</p> <ul style="list-style-type: none"> • Reduction of Habitat • Disturbance to Key Species • Habitat or Species Fragmentation • Reduction in Species Diversity • Changes in Key Indicators of Conservation Value • Climate Change 	<p>Reduction of Habitat: Potential impacts from survey activities were identified for the qualifying interest of 12 SACs and 33 SPAs. There will be no reduction in the habitat available in these European sites.</p> <p>Disturbance to Key Species: There is potential for disturbance to key annexed species (including marine mammals, birds and fish) from the physical presence of the vessel and underwater noise.</p> <p>Habitat or Species Fragmentation: It is unlikely that there will be any habitat fragmentation as a result of the survey activities. The physical presence of the vessels may influence the distribution and movements of sensitive species in the water column, namely protected migratory fish and marine mammals, and may potentially cause temporary displacement and/or other behavioural responses in birds when the survey is being conducted.</p> <p>Reduction in Species Diversity: There will not be a reduction in species diversity.</p> <p>Changes in Key Indicators of Conservation Value: No changes in key indicators of conservation value are expected.</p> <p>Climate Change: No impacts are expected in relation to climate change.</p>
<p>Describe any likely impacts on the European Sites as a whole in terms of:</p> <ul style="list-style-type: none"> • Interference with key relationships that define the structure of the site • Interference with key relationships that define the function of the site 	<p>Disturbance to birds, fish and marine mammals is identified as the likely interferences between structure and function of European sites.</p>
<p>Indicators of significance as a result of the identification of effects set out above in terms of:</p> <ul style="list-style-type: none"> • Loss • Fragmentation • Disruption • Disturbance • Change to Key Elements of the Site 	<p>Disruption and disturbance caused by surveying works to the birds and marine life in the Zol.</p>
<p>Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is not known</p>	<p>Potential impacts to marine mammals, fish and birds due to underwater noise and presence of the survey vessel.</p>

4 FINDING OF NO SIGNIFICANT EFFECTS REPORT

Table 4.1 Finding of No Significant Effects

Name of Project or Plan	Screening for Appropriate Assessment of Proposed Works
Name and Location of European Site.	<p>Roaringwater Bay and Islands SAC – Approx. 97km from the survey area.</p> <p>Blasket Islands SAC – Approx. 212 km from the survey area.</p> <p>Rockabill to Dalkey Island SAC – Approx. 265 km from the survey area.</p> <p>Bandon River SAC – Approx. 49 km from the survey area.</p> <p>Blackwater River (Cork/Waterford) SAC – Approx. 64km from the survey area.</p> <p>River Barrow and River Nore SAC - Approx. 114km from the survey area.</p> <p>Lower River Suir SAC - Approx.120km from the survey area.</p> <p>Slaney River Valley SAC - Approx. 160km from the survey area.</p> <p>Bristol Channel Approaches / Dynesfeydd Môr Hafren SAC - Approx. 185km from the survey area.</p> <p>North Anglesey Marine / Gogledd Môn Forol SAC – Approx. 292km from the survey area.</p> <p>West Wales Marine / Gorllewin Cymru Forol SAC - Approx. 166km from the survey area.</p> <p>North Channel SAC - Approx. 372km from the survey area.</p> <p>Ballymacoda Bay SPA - Approx. 59km from the survey area.</p> <p>Ballycotton Bay SPA – Approx. 52km from the survey area.</p> <p>Blackwater Estuary SPA – Approx. 66km from the survey area.</p> <p>Cork Harbour SPA – Approx. 52km from the survey area.</p> <p>Dungarvan Harbour SPA – Approx. 80km from the survey area.</p> <p>Galley Head to Duneen Point SPA – Approx. 69km from the survey area.</p> <p>Helvick Head to Ballyquin SPA – Approx. 70km from the survey area.</p> <p>Old Head of Kinsale SPA – Approx. 50km from the survey area.</p> <p>Seven Heads SPA – Approx. 58km from the survey area.</p> <p>Sheep’s Head To Toe Head SPA – Approx. 89km from the survey area.</p> <p>Saltee Islands SPA – Approx. 123km from the survey area.</p> <p>Puffin Island SPA – Approx. 178km from the survey area.</p> <p>Cliffs of Moher SPA – Approx. 339km from the survey area.</p> <p>Skelligs SPA – Approx. 183km from the survey area.</p> <p>Blasket Islands SPA – Approx. 216km from the survey area.</p> <p>The Bull and The Cow Rocks SPA – Approx. 163km from the survey area.</p> <p>Lambey Island SPA – Approx. 269km from the survey area.</p>

Name of Project or Plan	Screening for Appropriate Assessment of Proposed Works
	<p>Tacumshin Lake SPA – Approx. 136km from the survey area.</p> <p>Kilcolman Bog SPA – Approx. 108km from the survey area.</p> <p>Howth Head Coast SPA - Approx. 257km from the survey area.</p> <p>Ilfaunonearaun SPA - Approx. 304km from the survey area.</p> <p>Loop Head SPA – Approx. 287km from the survey area.</p> <p>Ireland’s Eye SPA – Approx. 260km from the survey area.</p> <p>Skerries Islands SPA – Approx. 276km from the survey area.</p> <p>Magharee Islands SPA – Approx. 263km from the survey area.</p> <p>Wicklow Head SPA - Approx. 221km from the survey area.</p> <p>Dingle Peninsula SPA – Approx. 219km from the survey area.</p> <p>Iveragh Peninsula SPA - Approx. 182km from the survey area.</p> <p>Beara Peninsula SPA - Approx. 134km from the survey area.</p> <p>Deenish Island and Scariff Island SPA - Approx. 162km from the survey area.</p> <p>Kerry Head SPA - Approx. 275km from the survey area.</p> <p>Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Penfro SPA – Approx. 131km from the survey area.</p> <p>Grassholm SPA – Approx. 173km from the survey area.</p>
<p>Description of the Project or Plan.</p>	<p>Kinsale Energy is preparing for the decommissioning of the Kinsale Area gas fields and facilities, which are coming to the end of their productive life.</p> <p>As part of this project a survey was proposed to inform the detailed removal procedures for the platform jackets. The survey is proposed to confirm the shallow seabed conditions in the immediate vicinity of the platforms.</p> <p>The survey will include the use of acoustic equipment (e.g. sub-bottom profiler) to detect the depth of surficial sediments and their contact with the underlying bedrock to inform the need for any excavation around the jacket piles required during jacket removal.</p>
<p>Is the project or plan directly connected with or necessary to the management of the proximal European sites?</p>	<p>No</p>
<p>Are there other projects or plans that together with the project or plan being assessed could affect the site?</p>	<p>Exola DAC has applied for approval of a geophysical survey in the Barryroe field. There are a number of surveys to be conducted in 2020 by GSI and the Marine Institute as part of the seabed mapping project within the INFORMAR programme. The Celtic Interconnector and Ireland-France subsea cable are projects proposed within the Kinsale Area.</p> <p>There will be other works as part of the Kinsale Area decommissioning programme including a rig site geophysical survey.</p> <p>No relevant projects or surveys were identified which were considered to be a source for potential cumulative effects in relation to the proposed short shallow geological survey.</p>

Name of Project or Plan	Screening for Appropriate Assessment of Proposed Works
-------------------------	--

The Assessment of Significant Impacts

Describe how the project or plan (alone or in combination) is likely to affect the European Site(s).

The individual elements of the survey likely to give rise to impacts on European sites are identified in Section 3.3 as follows:

- The physical presence of the survey vessel;
- Underwater noise including from the vessel and survey equipment.

The survey does not involve any physical interaction with the seabed.

Explain why these effects are not considered significant.

The survey is expected to be complete in approximately 1.5 days. The vessel associated with the surveying will be temporarily present (1.5 days) and signify a small and transient incremental increase in the level of shipping in the Celtic Sea. In view of the minor and temporary increment to vessel presence that the survey would represent, significant effects on marine mammals, birds or fish are not considered to be likely.

The DAHG “Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters” (DAHG 2014) includes plan/project-specific guidance on Geophysical Acoustic Surveys in section 4.3.4. Significant effects on marine mammals are not expected as the proposed survey is outside distance from enclosed bays, inlets and estuary at which impacts to marine mammals are considered. In addition, underwater noise from the survey vessel itself could potentially cause behavioural disturbance of marine mammals present in the area. However, the impacts are considered to be highly localised and temporary (approximately 1.5 d) therefore the proposed survey will have a negligible effect on marine mammals.

Injury to fish or behavioural disturbance is not considered likely.

Significant effects on diving birds are considered to be highly unlikely due to the lower amplitude and higher frequency source characteristics of the potential sources of the survey. However, not all of the SCI species listed for the SPAs that are sensitive to noise disturbance in the marine environment were assessed in the report. In addition two SPAs that are within the ZoI for the survey, namely the Mid Waterford Coast SPA and the Wexford Harbour and Slobbs SPA were not assessed.

List of agencies consulted: provide contact name and telephone or e-mail address.

The following statutory consultees were notified about the proposed survey:

- Irish Maritime Administration
- Ship Source Pollution Prevention Unit
- Irish Coast Guard (& National Maritime Operations Centre)
- Sea Fisheries Protection Authority
- Sea Fisheries Policy Division
- Department of Defence
- Mission Support Facility
- Naval Headquarters
- Marine Institute (Oranmore and Dublin)

Name of Project or Plan	Screening for Appropriate Assessment of Proposed Works
	<ul style="list-style-type: none"> • Director of e-Navigation and Maritime Services • Department of Culture, Heritage and the Gaeltacht (DCHG) Development Applications Unit (DAU) <p>The following relevant fisheries organisations and forums relevant were consulted:</p> <ul style="list-style-type: none"> • Irish South and West Fish Producer Organisation (IS&WFPO) • Irish South and East Fish Producer Organisation (IS&EFPO) • South West Regional Fisheries Forum/ (Regional Inshore Fisheries Forum) • South East Regional Fisheries Forum/ (Regional Inshore Fisheries Forum) • National Inshore Fisheries Forum (NIFF) • Irish Fish Producers Organisation (IFPO) • Killybegs Fishermen’s Organisation (KFO) • Bord Iascaigh Mhara <p>DCCAE published the application for consent for the survey on their website and are undertaking consultations which closed on the 24th April 2020.</p>
Response to consultation.	The responses to the consultation are provided in Table 2.1 above
Data Collected to Carry Out the Assessment	
Who carried out the assessment?	RPS
Sources of data.	Information/data sources referenced within the AA Screening Report. Other information/ data sources included academic/ grey literature, online databases, and feedback from statutory/ non-statutory bodies and interested parties.
Level of assessment completed.	Desktop assessment
Where can the full results of the assessment be accessed and viewed?	DCCAE Website
Overall Conclusion.	To be determined on receipt of further information response.

5 ARTICLE 12 ASSESSMENT

5.1 Annex IV Species

Under Article 12, Annex IV species are afforded strict protection throughout their range, both inside and outside of designated protected areas.

An assessment on the impact of the proposed survey on Annex IV species is provided in Section 4 of the *Appropriate Assessment Screening Report* and Section 5 of the *Kinsale Alpha and Bravo Platforms shallow geological survey - Environmental Impact Assessment Screening/Environmental Risk Report* (March 2020).

The baseline assessment on Marine Mammals is provided in Section 3.2.6 of the EIA Screening report. Habitats Directive Annex IV species that could potentially occur in the survey area are listed in Table 3.5 of the EIA Screening and the known abundance and distribution of these species in the Celtic Sea, and of relevance to the survey area, is described in Section 3.2.4 and 3.2.6 of the EIA Screening report.

A list of the Annex IV marine mammals and reptiles are provided in Error! Reference source not found. below and whether they are likely to be found within the survey area and zone of influence.

Table 5.1 Annex IV Marine Mammal Species and Adjudged Presence within the Survey Area

Group	Common Name	Latin Name	Protection	Found within Survey Area and Zol (Y/N)
Cetaceans	Minke Whale	<i>Balaenoptera acutorostrata</i>	IV	Y
	Sei Whale	<i>Balaenoptera borealis</i>	IV	Y
	Blue Whale	<i>Balaenoptera musculus</i>	IV	Y
	Fin Whale	<i>Balaenoptera physalus</i>	IV	Y
	Beluga/White Whale	<i>Delphinapterus leucas</i>	IV	N
	Northern Right Whale	<i>Eubalaena glacialis</i>	IV	Y
	Long-finned Pilot Whale	<i>Globicephala melas</i>	IV	Y
	Northern Bottlenose Whale	<i>Hyperoodon ampullatus</i>	IV	Y
	Pygmy Sperm Whale	<i>Kogia breviceps</i>	IV	N
	Humpback Whale	<i>Megaptera novaeangliae</i>	IV	Y
	Sowerby's Beaked Whale	<i>Mesoplodon bidens</i>	IV	N
	Gervais' Beaked Whale	<i>Mesoplodon europaeus</i>	IV	N
	True's Beaked Whale	<i>Mesoplodon mirus</i>	IV	N
	Killer Whale	<i>Orcinus orca</i>	IV	Y
	Sperm Whale	<i>Physeter macrocephalus</i>	IV	N
	False Killer Whale	<i>Pseudorca crassidens</i>	IV	N
	Cuvier's Beaked Whale	<i>Ziphius cavirostris</i>	IV	N
	Short-beaked Common Dolphin	<i>Delphinus delphis</i>	IV	Y
	Risso's Dolphin	<i>Grampus griseus</i>	IV	Y
	White-sided Dolphin	<i>Lagenorhynchus acutus</i>	IV	Y
	White-beaked Dolphin	<i>Lagenorhynchus albirostris</i>	IV	Y
	Striped Dolphin	<i>Stenella coeruleoalba</i>	IV	Y
	Common Bottlenose Dolphin	<i>Tursiops truncatus</i>	II/IV	Y
Harbour Porpoise ⁴	<i>Phocoena phocoena</i>	II/IV	Y	
Pinnipeds	Grey Seal	<i>Halichoerus grypus</i>	II/IV	N
	Harbour seal	<i>Phoca vitulina</i>	II/IV	N
	Loggerhead Turtle	<i>Caretta caretta</i>	II/IV	Y

⁴ QI of European Sites within Zol

Group	Common Name	Latin Name	Protection	Found within Survey Area and ZoI (Y/N)
Marine Reptiles/ Turtles	Leatherback Turtle	<i>Dermochelys coriacea</i>	IV	Y
	Hawksbill Turtle	<i>Eretmochelys imbricata</i>	IV	Y
	Kemp's Ridley Turtle	<i>Lepidochelys kempii</i>	IV	Y
	Green Turtle	<i>Chelonia mydas</i>	IV	Y

5.1.1 Marine Mammals Baseline Assessment

The baseline assessment on Annex IV marine mammals is provided in Section 3.2.6 of the EIA Screening Report. Of the 24 species of marine mammal found in Irish waters 12 species are thought to be present all year round, six are thought to be seasonally present while the remaining six (Northern right whale, Beluga White whale, False killer whale, Gervais' beaked whale, True's beaked whale and Pygmy sperm whale) are classified as rarely occurring or vagrant species (NPWS Article 17 Reporting, 2013 & 2019).

Table 3.3 of the EIA Screening report provides details on the cetacean sightings for the Kinsale area based on data extracted from the annual Celtic Sea Herring Acoustic Surveys and the Irish Whale and Dolphin Group (IWDG) Casual Cetacean Sightings database for the Kinsale area between 2008-2019. The harbour porpoise, common dolphin and bottlenose dolphin are the most common toothed cetaceans off the south coast of Ireland, where they are sighted year-round, whilst Risso's dolphin, Minke whale, fin whale and humpback are seasonally recorded. Small number sightings of killer whale have been recorded close to the coast. There were very few sightings of pinnipeds off the south coast of Ireland, with those few being clustered in the south-west and south-east, distant to the Kinsale Area. The seasonal occurrence of regularly occurring cetaceans in the Kinsale Area as adjudged from the IWDG datasets is provided in *Table 3.4 Seasonal occurrence of cetaceans in the Kinsale Area*.

The data on cetaceans and other marine megafauna gathered as part of the ObSERVE programme was also considered in the EIA Screening Report as the ObSERVE survey programme provides a greater level of quantification and seasonal information on cetaceans than was previously available. Two strata covered by the ObSERVE programme are relevant to the Kinsale study area, Stratum 4 and Stratum 8. The surveys on Stratum 4 were conducted in both summer and winter in 2015 and 2016 and covers the offshore waters off the south coast, including the Kinsale area, and Stratum 8 covers the south and south west coasts, however the surveys for Stratum 8 were only conducted in the summer and winter of 2016.

The seasonal occurrences and abundances of cetaceans in these two strata covering the Kinsale area are summarised in *Table 3.4 Cetacean sighting numbers and abundance estimates for waters south of Ireland from the ObSERVE aerial surveys in 2015 and 2016*⁵ of the Report and shown in Figure 3.5 (toothed whales) and Figure 3.6 (baleen whales).

5.1.2 Marine Turtles Baseline Assessment

The baseline assessment on Annex IV marine reptiles is provided in Section 3.2.4 of the EIA Screening Report. From a paper by Gabriel King and Simon Berrow in the Irish Naturalists' Journal *Marine turtles in Irish waters* (2009), the majority of records for sea turtles in Irish waters are of leatherback turtles. Sightings are off the south coast of Ireland from the summer, with the greatest numbers in August.

There are four records for leatherback turtle from the 2014 Celtic Sea Herring Acoustic Survey (Cronin & Barton 2014), three of the sightings were recorded approximately 70km south of Cork Harbour, with no further sightings of this species in subsequent surveys (O'Donnell et al. 2016, 2017, 2018). 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 wider Kinsale area (Rogan et al. 2018).

⁵ Note: The table reference **Table 3.4** is used for two tables, namely *Table 3.4 Seasonal occurrence of cetaceans in the Kinsale Area* (pg. 21) and *Table 3.4 Cetacean sighting numbers and abundance estimates for waters south of Ireland from the ObSERVE aerial surveys in 2015 and 2016* (pg.24). Therefore, the full table citation is provided for clarity.

5.2 Discussion

5.2.1 Potential effects on Marine Mammals

The potential effects on Annex IV marine mammal species from potential impacts from underwater noise is considered in Section 4.2.2 (pgs. 25-30) of the AA Screening Report.

The potential acoustic survey equipment to be used and indicative source characteristics of same are provided in Table 4.2. The source levels from the various equipment which will be potentially used to conduct the survey, range from 176dB re 1µPa @1m (peak) to 240dB re 1µPa @1m (peak). The source levels are based on the manufacturer specifications where available for that particular piece of equipment or based on comparable equipment specifications. The levels also draw on the results of Crocker & Fratantonio (2016)⁶ which provides calibrated measurements of source characteristics.

The predicted underwater noise levels for the proposed activities from vessels, activities and localities are as follows:

- Exposure to sound pressure level (SPL) above 180 dB re 1 µPa rms is highly unlikely;
- SPL >160 dB re 1 µPa rms are encountered only within the immediate vicinity of the activity (<50m);
- SPL >120 dB re 1 µPa rms are encountered up to a few kilometres (Neptune LNG 2016, Fairweather 2016, Owl Ridge Natural Resource Consultants 2016)

The estimated hearing range and proposed injury threshold criteria for marine mammals based on Permanent Threshold Shift (PTS) and permanent hearing damage in response to impulsive noise, are provided in Table 4.3. Harbour porpoise is identified as having the lowest threshold for underwater noise at the onset of PTS at 202dB re 1µPa. Harbour porpoise are also an Annex II species and a qualifying interest of European sites within the zone of influence of the survey area. It is discussed that given the nature of the proposed survey and the techniques to be used the survey will *'not generate source levels of this amplitude or will not result in received sound levels exceeding this threshold beyond more than a few metres from the source'*. Therefore, the predicted impacts to marine mammal is considered negligible.

Underwater noise from the survey vessel itself could potentially cause behavioural disturbance of marine mammals present in the area, which has been well documented in the scientific papers referenced in the AA Screening report. However, the impacts are considered to be highly localised and temporary (approximately 1.5 days) therefore the proposed survey will have a negligible effect on marine mammals.

5.2.2 Potential effects on Turtles

The potential effects on Annex IV marine turtle species from potential impacts from underwater noise is considered in Section 5 (pg.50) of the EIA Screening Report. The impacts of underwater noise on cheloniid species is poorly understood. It is discussed in the EIA screening report that noise emitted by the survey vessel and equipment is likely to be heard by marine turtles, however based on the scientific information available the impacts are considered to be highly localised and temporary (approximately 1.5 days) therefore the proposed survey will have a negligible effect on marine turtles.

⁶ Crocker SE & Fratantonio FD (2016). Characteristics of High-Frequency Sounds Emitted During High-Resolution Geophysical Surveys. OCS Study, BOEM 2016-44, NUWC-NPT Technical Report 12, 203pp.

6 CONCLUSION

6.1 Article 6(3) Appropriate Assessment Screening Conclusion

6.1.1 Conclusion

In carrying out the technical review of the Screening for AA and to arrive at a definitive determination under Article 6(3) of the Habitats Directive as to whether the survey, on its own or in combination with other plans and projects, is likely to have a significant effect on a European site, RPS took into account the following:

- Appropriate Assessment Screening Report (March 2020)
- Environmental Impact Assessment Screening/ Environmental Risk Report (March 2020)
- Pre-survey Fisheries Assessment
- Cover Letter
- Application Form
- Evidence of Notification of Statutory Consultees
- Submissions and observation received as part of the consultation; and
- Relevant European and Irish case law.

In conducting the Screening for AA, case-law of the Court of Justice of the European Union (Case C 258/11) has established that the assessment carried out under Article 6(3) cannot have lacunae and must contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of a project on a European site.

Insufficient information has been provided to conclude beyond reasonable scientific doubt that the proposed survey, individually or in combination with other plans or projects is not have likely significant effect on European sites, therefore, further information is required.

6.1.2 Further Information

The further information required from the applicant is as follows:

1. Potential impacts were identified for 33 SPAs, however not all of the SCI species that are sensitive to noise disturbance in the marine environment and where the survey is within their foraging range, were considered in the AA Screening report. These include the Saltee Islands SPA (Guillemot and Puffin), Puffin Island SPA (Lesser Black-backed Gull), Blasket Islands SPA (Lesser Black-backed Gull), Deenish Island and Scariff Island SPA (Lesser Black-backed Gull) and Helvick Head to Ballyquin SPA (Herring Gull and Kittiwake). The applicant is requested to provide an assessment on the likely significant effects of the proposed survey on these SCI species for the SPAs.
2. Two SPAs that are within the Zol for the survey, namely the Mid Waterford Coast SPA and the Wexford Harbour and Slobbs SPA were not assessed. The applicant is requested to provide an assessment on the likely significant effects of the proposed survey on these SPAs.
3. The foraging ranges used in the assessment to screen SPAs are as per Thaxter et al. (2012). However, larger maximum foraging ranges are provided by Wakefield et al. (2017) for species such as black-legged kittiwake, common guillemot and razorbill. In addition, Woodward et. al. (2019) has updated the foraging ranges for the species listed in Thaxter et al. (2012). Therefore, the applicant is requested to review and consider the foraging ranges provided in Wakefield et al. (2017) and Woodward et. al. 2019 and to amend their assessment if required.
4. The discharges from the survey vessels are expected to include treated domestic effluents (comprising grey water, sewage and food waste) and surface drainage from decks. Atmospheric emissions from the survey vessel in transit are also expected and solid domestic and operational wastes, as are normally associated with shipping activities are not discussed or assessed in the AA Screening Report. In the

submission from Ship Source Pollution Prevention Unit Irish Maritime Administration, Department of Transport, Tourism and Sport (Email to DCCAE 23rd April 2020) on the survey applications, they reiterate the responsibilities of the applicant with regards to ship-source pollution prevention provisions under the MARPOL Convention and EU law, as applicable in national law, as follows: *'Management of ship waste (mainly oil, hazardous and polluting substances, sewage, garbage and polluting emissions to air) and of all cargo residues must be ensured as required under international (IMO), EU and national law. Under existing provisions ships are obliged to discharge waste and cargo residues at port and ports are obliged to provide adequate facilities for their reception from ships.'* Therefore, the applicant is requested to submit an assessment of waste and emissions from the survey activities and the likely significant effects of same on European sites.

6.2 Article 12 Conclusion

The vessel associated with the surveying will be temporarily present and signify a small and transient incremental increase in the level of shipping in the Celtic Sea and the survey is expected to be complete in approximately 1.5 days. In view of the minor and temporary increment to vessel presence that the Kinsale Alpha and Bravo Platforms shallow geological survey would represent, significant effects on marine mammals, birds or fish are not considered to be likely.

Underwater noise from the survey vessel itself could potentially cause behavioural disturbance of marine mammals present in the area, which has been well documented in the scientific papers referenced in the EIA Screening report. However, the impacts are considered to be highly localised and temporary (the expected duration of the survey approximately 1.5 days) therefore the proposed survey will have a negligible effect on marine mammals.

Underwater noise from equipment used the survey will not exceed the permanent threshold shift (PTS) for marine mammals beyond more than a few metres from the source. Therefore, the predicted impacts to marine mammal is considered negligible.

In addition, underwater noise from equipment used the survey will not have a significant effect on marine turtles given the short duration of the survey, the perceived limited sensitivity of the receptor and the moderate intensity nature of the noise source.

Therefore, it is concluded that the proposed survey will not give rise to significant impacts to species listed under Annex IV of the Habitats Directive.