

Intended for

Department for Communication, Climate Action and Environment

Date

July 2019

Project Number

1700003678

**STATUTORY
ENVIRONMENTAL
ASSESSMENT
EIA SCREENING
DETERMINATION FOR
BARRYROE SITE SURVEY**

STATUTORY ENVIRONMENTAL ASSESSMENT EIA SCREENING DETERMINATION FOR BARRYROE SITE SURVEY

Project No. **1700003678**
Issue No. **3**
Date **23/07/2019**
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Version Control Log

Revision	Date	Made by	Checked by	Approved by	Description
5	23/07/2019	KM	PB	PB	Final report

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EXECUTIVE SUMMARY

Ramboll UK Limited (herein referred to as Ramboll) has been commissioned by the Department for Communications, Climate Action and Environment (herein referred to as DCCAE) to provide assistance with regards to the statutory assessment of an application by Exola DAC, a wholly owned subsidiary of Providence Resources plc, for an Environmental Impact Assessment (EIA) Screening Determination, submitted in respect of a geophysical and seabed survey within the Barryroe licence area (SEL1/11).

The site survey will comprise a seabed and shallow geophysical survey and an environmental baseline and habitat assessment survey to be conducted over three survey areas, encompassing four potential well locations, within two separate survey vessel activity areas at Barryroe, together with a single environmental control point approximately 10 km to the east-south east. The two survey vessel activity areas cover a total area of approximately 99 km² (25 km² and 74 km² respectively) and allow for a 1 km buffer around the survey areas within which the survey vessel may manoeuvre during line turns and during equipment deployment and recovery.

The competent authority (DCCAE) is required to give consideration to the potential for likely significant effects of such activities on the environment, having regard to the European Union (Environmental Impact Assessment (EIA)) (Petroleum Exploration) Regulations 2013 (as amended) and the EU Directive (2011/92/EU), as amended by Directive 2014/52/EU (herein referred to as "The EIA Directive") and relevant jurisprudence and guidelines. This report provides a review of the applicant's request for EIA screening determination (supported by an EIA Screening Report). Public consultation on the information provided by the applicant has been undertaken by the DCCAE. The consultation responses received by the DCCAE have been taken into consideration in the preparation of this report.

The report provides a conclusion that can be used by the DCCAE to issue a screening determination. The information presented in the applicant's screening report is considered to be complete, that no further information is required and provides adequate information to allow the DCCAE to issue a screening determination.

Table ES.1 summarises the overall screening determination.

Table ES.1: Summary of screening assessment for projects listed on Annex II of the EIA Directive

Outcome of Screening Report Assessment	Overall Screening Opinion / EIA Required?
Likely Significant Effects on the Environment	EIA required
More information is required to inform decision	Unknown if EIA is required — Request further information from the applicant
No Likely Significant Effects on the Environment	EIA not required

1. INTRODUCTION

Ramboll UK Limited (herein referred to as Ramboll) has been commissioned by the Department for Communications, Climate Action and Environment (herein referred to as DCCA) to provide assistance with regards to the statutory assessment of a request by Exola DAC, a wholly owned subsidiary of Providence Resources plc, for an Environmental Impact Assessment (EIA) Screening Determination, submitted in respect of a geophysical and seabed survey within the Barryroe licence area (SEL1/11).

1.1 Project Background

The site survey will comprise a seabed and shallow geophysical survey and an environmental baseline and habitat assessment survey to be conducted over three survey areas, encompassing four potential well locations, within two separate survey vessel activity areas at Barryroe, together with a single environmental control point approximately 10 km to the east-south east. The two survey vessel activity areas cover a total area of approximately 99 km² (25 km² and 74 km² respectively) and allow for a 1 km buffer around the survey areas within which the survey vessels may manoeuvre during line turns and during equipment deployment and recovery.

The key aims of the survey are to:

- Accurately determine water depths and provide information on the depth of sediments overlying bedrock and to map any chalk exposures;
- Provide information on seabed and sub-seabed conditions to ensure the safe emplacement and operation of a semi-submersible drilling rig at four proposed well locations (drilling does not form part of this application);
- Provide information on the cultural potential of the survey area, including the location of any shipwrecks or other underwater cultural heritage features;
- Assess the survey area for the presence of any Annex 1 habitats (as defined in the EC Habitats Directive 92/43/EC); and
- Obtain environmental baseline samples across the survey area to establish a benchmark for ongoing environmental monitoring as per OSPAR guidelines.

The 'European Union (Environmental Impact Assessment (EIA)) (Petroleum Exploration) Regulations 2013 (S.I. No 134/2013) (as amended in 2019)' (herein referred to as the 'EIA Regulations'), require that applications made to the Minister by holders of petroleum exploration licences or petroleum prospecting licences for permission to undertake "activities" under the licence must be assessed to establish if they would have a significant effect on the environment. This requires that all applications to carry out exploration activities must be subject to EIA Screening in the first instance to determine if an EIA is required.

This report has been prepared as a statutory assessment of a request for an Environmental Impact Assessment screening determination.

1.2 Documents Reviewed

The following documents have been reviewed to inform this report:

- Barryroe Site Survey Environmental Impact Assessment Screening Report, Exola, February 2019, updated in May 2019
- Pre-Survey Fishery Assessment at Barryroe (SEL1/11), for Exola DAC, Sinbad Offshore Support Ltd., February 2019, updated in April 2019
- Application for Approval to Conduct a Seabed Debris Clearance, Environmental Baseline and Habitat Assessment Site Survey, Exola DAC, Undated

- Letter from Exola DAC dated 7 May 2019 submitted with revised reports.

This report has been prepared by competent experts with appropriate expertise in Environmental Impact Assessment.

2. TERMS OF REFERENCE

2.1 Legislative Context

This review of the applicant's request for EIA screening determination has been prepared having regard to relevant European and Irish legislation and jurisprudence, including:

- EU 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); and
- European Union (Environmental Impact Assessment) (Petroleum Exploration) (Amendment) Regulations 2019 (S.I. No 124 of 2019).

2.2 Relevant Guidance

This report has been prepared having regard to guidance on EIA screening for planning authorities, published by the Department of Housing, Planning and Local Government (DHPLG) in 2018¹. In addition, the structure and content of this report is based upon the methodology published by the European Commission in 2017².

2.3 Public consultation

The application by the applicant was advertised by DCCAE on their website following receipt of the application on 21 February 2019. Invitations for submissions were advertised by DCCAE to be received by close of business on 1 April 2019 to ensure consideration by the Minister.

Two responses were received, and the points raised by these have been considered and responded to as provided in the following sections of this report:

- Response letter from Harrington & Co. Solicitors on behalf of An Taisce dated 1 April 2019; and
- Response letter from Department of Culture, Heritage and the Gaeltacht dated 4 April 2019.

No further consultation responses were received following advertisement by DCCAE on their website of additional information provided by the applicant on 9 May 2019.

2.3.1 General Consultation Responses

The following general responses have been received:

- Comments on the regulatory process:
 - Comment is made regarding a previous consultation response made by An Taisce on proposals by Exola to survey Barryroe. An Taisce note that in the case of the previous proposals, the High Court granted to An Taisce an Order of Certiorari quashing decisions in relation to an EIA Screening and Survey Consent.
 - An Taisce remains concerned that no significant structural changes have occurred in DCCAE's management of these decision making processes despite the circumstances that led to the Order of Certiorari.
 - An Taisce believe that it remains the case that there is no demarcation of duties within the DCCAE for the purposes of ensuring objectivity in decision-making for EIA screenings

¹ https://www.housing.gov.ie/sites/default/files/publications/files/guidelines_for_planning_authorities_and_an_bord_pleanala_on_carrying_out_eia_-_august_2018.pdf

² URL: http://ec.europa.eu/environment/eia/pdf/EIA_guidance_Screening_final.pdf (accessed 17/05/2019)

and other EIA decisions under the Directive. It seems that Civil Servants dealing directly with oil exploration developers on commercial matters are still involved in these types of environmental consent applications.

- It is the position of An Taisce that to ensure the necessary level of objectivity and to avoid a perception of objective bias, these types of environmental consents must be made by an independent body outside of the control of departmental units that manage commercial concerns of exploration licensees.
- An Taisce believe that public notification of this application is poor and is limited to a single electronic posting on the DCCAÉ's website. No information has been provided regarding the timing of any decisions and how any decision will be made public.
- An Taisce requests that it be informed in advance of any decision made in relation to this application, including any separate screening decision made in advance of the consent. We also ask that the public be notified of the decisions in an open and transparent manner.

These comments are in regard to the current regulatory process that exists within Ireland and structure of DCCAÉ. These matters are not within the scope of this review and therefore are not addressed in this report. The request for An Taisce to be informed in advance of the public of the screening decision is a matter for DCCAÉ.

2.3.2 Project Specific Consultation Responses

The following project specific responses have been received:

Consultee	Project specific comments	Response
An Taisce	<p>The survey and other works which are the subject of this application for consent are to be carried out as a precursor to and in preparation for further exploratory drilling works at this site. The location of 4 no. proposed wells are indicated in the application documentation.</p> <p>Exploratory drilling has been occurring periodically at the Barryroe site since 1973. Several wells have already been drilled which already demonstrate a potential yield of more than 500 tonnes of crude oil per day. Under Council Directive 2011/92/EU (the EIA Directive), an Environmental Impact Assessment (EIA) is mandatory for oil extraction exceeding 500 tonnes per day, while under the robust Irish transposition of Annex II of the Directive, any extraction of oil requires an EIA including extraction of oil for exploratory drilling purposes.</p> <p>An Taisce submits that the drilling works will require an EIA and that the cumulative effects of this and other site surveys, and also the cumulative effects of the site surveys with planned drilling works, should be subject to EIA and associated consultations</p>	<p>No drilling or extraction of hydrocarbons is proposed within the scope of activities for which the applicant is seeking consent. Whilst the application does show the proposed location of 4 no. potential future wells, it is stated in the application that the proposed exploration activities at this stage are limited to a geophysical survey and environmental baseline survey. Cumulative effects of this survey with other known activities are considered by the applicant.</p> <p>The area of the project is within an area designated for offshore exploration and has been assessed by the Irish Offshore Strategic Environmental Assessment 5.</p> <p>Furthermore, any future drilling works would be subject to a separate EIA Screening application and would be determined on the basis of information submitted at that time.</p>

Consultee	Project specific comments	Response
An Taisce	<p>An Taisce is concerned at the range of species that the developer has screened out of appropriate assessment, including species known to be in the area that are conservation objectives of nearby European Sites and species that are in the food chain of species for which European Sites were designated.</p> <p>In the screening, the developer relies on the absence of air-gun technology from the survey proposals to screen out certain species; however, the clear intention of Exola expressed in a Marine Notice published in October 2018 is to provide for the possibility that secondary equipment may be required (due to failure or poor performance of primary equipment) which may consist of mini air-gun, boomer sub-bottom profiler and sparker sub-bottom profiler. The survey vessel proposed in the current application is equipped to carry two types of air-gun. It is essential that all possible survey impacts are assessed at both screening and appropriate assessment stage.</p> <p>The Natura Impact Statement has only considered three species, the Harbour Porpoise, the Bottlenose Dolphin and the Grey Seal. An Taisce is of the belief that an insufficient range of species has been given due consideration and appropriate assessment. Furthermore, in our view the Natura Impact Statement leaves reasonable scientific doubt that the species assessed will not be impacted.</p> <p>The developer proposes to conduct an environmental field assessment of species and habitats at the same time as the sonar survey. An Taisce is of the opinion that the field assessment of species and habitats should predate any application for an acoustic survey or decision on same and should inform the Department's Appropriate Assessment for the purposes of removing all scientific doubt</p>	<p>The adequacy of the NIS will be reviewed and reported separately to this report.</p>
Department of Culture, Heritage and the Gaeltacht	<p>Underwater Archaeology</p> <p>The Department notes the intention to carry out an Underwater Archaeological Impact Assessment (UAIA) and this is to be welcomed. As identified in the previous response of August 2018, the submitted EIS Scoping Report does not include any section on the Underwater Cultural Heritage (UCH).</p> <p>The Department has no objections to this</p>	<p>The applicants report does not include any information on the archaeological baseline (i.e. currently known cultural heritage sites). This report concludes that the applicant has adequately addressed this through the commitment to undertake an archaeological assessment using the geophysical survey data and by using video/photos to inspect the benthic grab sample locations prior to deployment of the sampler.</p>

Consultee	Project specific comments	Response
	<p>application once the following is included as a CONDITION of any permit issued.</p> <ul style="list-style-type: none"> • The services of a suitably qualified and suitably experienced maritime archaeologist, to include experience in the interpretation of marine geophysical data, shall be engaged in advance of any such survey to undertake the UAIA so as to inform on the cultural potential of the area and advise on the known or potential location of any shipwrecks or other UCH within the specified survey area. This is particularly relevant where grab samples, etc. are being carried out. • The Underwater Archaeological Impact Assessment (UAIA) that comprised detailed desktop study and archaeo-geophysical interpretation of all geophysical survey results as well as assessment of the results of all sampling. • The UAIA shall be licensed by this Department and a detailed method statement shall accompany the licence application by the archaeologist. <p>Ideally the archaeologist would be on board the survey vessel to view the geophysical data in real time and identify known or potential UCH as it is encountered. If this is not possible the results of all marine geophysical survey undertaken shall be made available to the archaeologist for assessment and interpretation, and to inform on any potential submerged cultural heritage or submerged palaeo-landscape evidence.</p> <p>The UAIA report shall be forwarded to the Underwater Archaeology Unit of this Department for consideration and further comment in advance of any site investigation/sampling works taking place.</p> <p>The Underwater Archaeology Unit is happy to liaise with the applicant's archaeologist, once engaged, to assist with discussions on archaeological assessment already carried out and any new areas requiring assessment for the current application.</p>	<p>The conditions proposed are reasonable and proportionate given the potential for effects on previously unidentified cultural heritage sites and the absence of any assessment undertaken to date.</p> <p>A request for further information from the applicant was made querying how they propose to undertake the video/photography survey as made as this was not described.</p> <p>Following receipt of additional information from the applicant, information has been provided on how the video/photographic survey will be undertaken.</p>
Department of Culture, Heritage and the Gaeltacht	<p>Marine Science and Biodiversity</p> <p>The Department has reviewed the documentation submitted and is satisfied that, in relation to marine mammals, effective mitigation of any significant impacts on the SAC network or on Annex</p>	<p>The adequacy of the NIS will be reviewed and reported separately to this report.</p>

Consultee	Project specific comments	Response
	IV species can be achieved by adherence to the Department's Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters (DAHG, 2014).	

3. PROJECT DETAILS

Table 3.1 provides a summary of the project details.

Table 3.1: Project Details

Project Title:	Barryroe Site Survey
Applicant:	Exola DAC, a wholly owned subsidiary of Providence Resources plc
Exploration Licence Reference:	SEL1/11
Date EIA Screening Request Received (Respond within 90 days):	27 February 2019, subsequently additional information was received 8 May 2019.
<p>Brief Project Description:</p> <p>The site survey will comprise a seabed and shallow geophysical survey and an environmental baseline and habitat assessment survey to be conducted over three survey areas, encompassing four potential future well locations, within two separate survey vessel activity areas at Barryroe, together with a single environmental control point approximately 10 km to the east-south east. The two survey vessel activity areas cover a total area of approximately 99 km² (25 km² and 74 km² respectively) and allow for a 1 km buffer around the survey areas within which the survey vessel may manoeuvre during line turns and during equipment deployment and recovery.</p> <p>The key aims of the survey are to:</p> <ul style="list-style-type: none"> • Accurately determine water depths and provide information on the depth of sediments overlying bedrock and to map any chalk exposures; • Provide information on seabed and sub-seabed conditions to ensure the safe emplacement and operation of a semi-submersible drilling rig at four proposed well locations (drilling does not form part of this application); • Provide information on the cultural potential of the survey area, including the location of any shipwrecks or other underwater cultural heritage features; • Assess the survey area for the presence of any Annex 1 habitats (as defined in the EC Habitats Directive 92/43/EC); and • Obtain environmental baseline samples across the survey area to establish a benchmark for ongoing environmental monitoring as per OSPAR guidelines. <p>The proposed Barryroe site survey will comprise a seabed and shallow soils survey and an environmental baseline and habitat assessment. Survey operations are proposed to take place prior to 30th November 2019, subject to regulatory approval and vessel availability. If the survey has not commenced within this timeframe then operations will be undertaken sometime between 1st February 2020 and 30th November 2020, again subject to regulatory approval and vessel availability.</p> <p>The anticipated duration of the survey is approximately 16 working days, excluding transit, port calls and weather downtime. It is anticipated that the geophysical survey elements will take approximately 6 days to complete and that the remaining approximately 10 days will be spent on the environmental baseline survey.</p> <p>The vessel proposed to be used for the survey is the MV Kommander. Prior to the commencement of the proposed site survey operations, the applicant may seek approval from DCCAE to use an alternative equivalent survey vessel. In this event, DCCAE require confirmation that the survey equipment and methodology on any replacement vessel are equivalent to that described in the EIA Screening Report and that the description of proposed development will not change.</p> <p>Geophysical equipment to be used includes a Dual Frequency Side Scan Sonar, Single-beam Echo Sounder, Multi-beam echo sounder, Pinger sub-bottom profiler, USBL and magnetometer (note that no seismic activity will be conducted and airguns are not proposed).</p> <p>The environmental baseline survey will comprise approximately 53 seabed sample locations, from which benthic samples will be taken using a day grab, box corer or dual Van Veen grab. It is estimated that approximately 1 m² of seabed will be disturbed at each location. An indicative number of points and positions for the sample locations are provided by the applicant, however it is noted that the final number and location of sampling stations will be determined by the number of habitats</p>	

identified by the geophysical survey.

Any potentially sensitive habitats identified from the geophysical survey will be investigated using high-resolution video or camera stills. These seabed images will be taken by means of a digital stills deep water camera system with a dedicated strobe and video lamps mounted in a stainless steel frame. A USBL positioning beacon will be attached to the frame. Footage will be viewed in real time, using a hover and drift technique at appropriate intervals.

4. SCREENING CHECKLIST

4.1 Determining whether a Project should be subject to an EIA

Under Article 4(1) of the (Environmental Impact Assessment) Directive (2011/92/EU), as amended by Directive (2014/52/EU) (herein referred to as 'the EIA Directive'), projects listed in Annex I of the Directive shall be made subject to an Environmental Impact Assessment, unless an exemption is granted by the Irish Government (as the member state), due to exceptional circumstances.

Under Article 4(2) of the EIA Directive, member states must determine whether below threshold projects listed in Annex II of the Directive shall be made subject to an Environmental Impact Assessment through either case-by-case examination and / or thresholds or criteria set by the member state.

Table 4.1 sets out the first step in determining whether a project requires an EIA under the EIA directive.

Table 4.1 Checklist – EIA Screening for Seismic/ Geophysical Survey or Exploratory Drilling Project

<p>a) Is the project listed on Annex I of the EIA Directive?</p> <ul style="list-style-type: none"> • If Yes, EIA is required for the project. • If No, EIA may be required for the project - Proceed to Section b) 	No
<p>b) If No - Is the project listed on Annex II of the EIA Directive?</p> <ul style="list-style-type: none"> • If Yes, EIA may be required for the project - proceed to Sections 4.2 and 4.3 of Checklist. • If No, EIA is not required for the project. 	No, however the European Union (Environmental Impact Assessment) (Petroleum Exploration) Regulations 2013 require that holders of petroleum exploration licences or petroleum prospecting licences apply to the Minister for permission to undertake "activities" under the licence to establish whether the activities are likely to have significant effects on the environment by virtue, inter alia, of their nature, size and location.

4.2 Information to be provided by the Developer on the projects listed in Annex IIA of the EIA Directive

Under Article 4(4) of the EIA Directive, specified information is required to be provided by the Developer on the characteristics of the project and its likely significant effects on the environment.

The checklist provided in this section (Table 4.2) confirms whether the screening report submitted for the project provides the required information as specified in Annex IIA of the EIA Directive.

The developer is required by Article 4(4) to consider (where relevant) the available results of other relevant assessments on the effects of the environment carried out pursuant to other Union legislation other than the EIA Directive.

Table 4.2: 'Information to be provided' criteria, as set out in Annex IIA of the EIA Directive, meet the requirements.

Does the request for screening determination provide sufficient information, with particular regard to:	Yes / No / Unsure?	Briefly summarise whether the applicant meets the requirements:
<p>a) A description of the project including in particular:</p> <p>(a) A description of the physical characteristics of the whole project and, where relevant, the demolition works.</p> <p>(b) A description of the location of the project, with particular regard to the environmental sensitivity of geographical areas likely to be affected.</p>	Yes	<p>Adequate evidence has been provided by the Applicant of the physical characteristics of the whole project and its location, with particular regard to the environmental sensitivities likely to be affected.</p> <p>A separate AA Screening Report and Natura Impact Statement has been submitted by the applicant and this has been reviewed and reported on separately.</p> <p>The description of the existing baseline of the area is detailed and refers to results obtained from previous surveys in the area. It is additionally acknowledged that one of the objectives of the proposed survey is to undertake a benthic survey which will improve the level of information available.</p>
<p>b) A description of the aspects of the environment likely to be significantly affected by the project.</p>	Yes	<p>Adequate evidence has been provided by the Applicant on the aspects of the environment that is likely to be affected by the project. Biodiversity is focussed on Annex IV species of which there are over 400.</p>
<p>c) A description of any likely significant effects, to the extent of the information available on such effects, of the project on the environment resulting from:</p> <p>(a) The expected residues and emissions and the production of waste, where relevant;</p> <p>(b) The use of natural resources, in particular soil, land, water and biodiversity.</p>	Yes	<p>Adequate evidence has been provided by the Applicant on the likely effects of the project on the environment in sufficient detail resulting from the expected residues and emissions and production of waste (where relevant) and from the use of natural resources.</p>
<p>d) The criteria of Annex III shall be taken into account, where relevant, when compiling the information in accordance with points 1 to 3.</p>	Yes	<p>An assessment of whether the criteria of Annex III were taken into account is described in Section 4.3 below.</p>
<p>e) Available results of other relevant assessments of the effects on the environment carried out under other EU legislation.</p>	Yes	<p>The applicant has confirmed that they have prepared their screening report with reference to the Irish Offshore SEA 5.</p>

4.3 Criteria to determine whether a project listed in Annex II of the EIA Directive is likely to have a Significant Effect on the Environment

Under Article 4(3) of the EIA Directive, when determining whether a project listed in Annex II requires EIA, the Irish government (as the member state) must take into account the relevant selection criteria set out in Annex III of the Directive.

Annex III criteria is grouped into three main categories; 'characteristics of the projects', 'layout of the projects' and 'type and characteristics of the potential impact' of the projects as set out in Tables 4.3 – 4.5.

4.3.1 Characteristics of Project

Table 4.3 summarises the consideration given by the applicant to the 'Characteristics of the Projects' in the screening report.

Table 4.3: 'Characteristics of the Project' criteria, as set out in Annex III of the EIA Regulations

Does the request for screening determination provide sufficient information, with particular regard to:	Yes / No / Unsure?	Briefly summarise whether the applicant meets the requirements:
a) The size and design of the whole project;	Yes	Detailed information is presented regarding the locations and size (in terms of the different survey areas), nature, duration and survey methodology (geophysical and environmental) for the activity being assessed. It is noted that prior to the commencement of the proposed site survey operations, if necessary, the applicant may seek approval from DCCAE to use an alternative equivalent survey vessel from that described in the screening report. In this event, DCCAE should seek confirmation that the survey equipment and methodology on any replacement vessel are equivalent to that described in the EIA Screening Report and that the proposed development used to inform the EIA Screening Report will not materially change.
b) Cumulation with other existing or approved projects;	Yes	Other existing and approved projects are identified by the applicant, and potential interactions and cumulative effects considered in a sufficient level of detail appropriate to the proposed development. Therefore, it is considered that adequate information has been provided by the applicant.
c) The use of natural resources, particularly land, soil, water and biodiversity;	Yes	Adequate evidence has been provided by the Applicant regarding the use of natural resources has been provided by the applicant. Estimates are given of the volume of vessel fuel required.
d) The production of waste;	Yes	Adequate evidence has been provided by the Applicant regarding the production of waste has been provided by the applicant. An estimate of waste volumes and approach to waste

Does the request for screening determination provide sufficient information, with particular regard to:	Yes / No / Unsure?	Briefly summarise whether the applicant meets the requirements:
		management has been provided.
e) Pollution and nuisances;	Yes	Adequate evidence has been provided by the Applicant regarding the pollution and nuisances generated by the project have been provided by the applicant.
f) The risk of major accidents and / or disasters, which are relevant to the project concerned (including those caused by climate change);	Yes	<p>Given the nature of the proposed development there is limited risk of major accidents and/or disasters because the main is risk of fuel/chemical leaks, which would be relatively small. Unplanned events (principally the risk of injury to marine mammals due to collision) are considered in the EIA Screening Report at a level of detail appropriate to the proposed development and mitigation measures are identified to reduce the risk of such events. The significance of these unplanned events is calculated using an oil and gas industry standard risk assessment approach.</p> <p>Climate change is considered and concluded that as the survey is a short, one off event impacts on climate change are negligible. It is recognised that there could be cumulative climate change effects due to the development as a whole and it is acknowledged that this will be covered within future consenting processes.</p>
g) Risks to human health (e.g. due to water contamination or air pollution).	Yes	<p>Given the nature of the proposed development there is limited risk to human health (principally related to the handling of fuel/chemicals on the survey vessel, and any leak/spill of these materials as a result of unplanned events). The EIA Screening Report identifies mitigation measures to control these risks and concludes that there are no residual significant effects. Therefore, it is considered that adequate information has been provided by the applicant.</p>

4.3.2 Location of Project

The 'Location of Projects' Criteria, as set out in Annex III of the EIA Directive, considers the environmental sensitivity of geographical areas likely to be affected by projects with particular regard to the specified criteria.

Table 4.4 provides a review of whether the Screening Report meets the requirements for the 'Location of the Projects' Annex III criteria, required for the assessor to determine a Screening Opinion.

Table 4.4: 'Location of the Projects' Criteria, as set out in Annex III of the EIA Directive, meet the requirements to determine a Screening Opinion.

The environmental sensitivity of geographical areas likely to be affected by the project are considered in the Screening Report, with particular regard to:	Yes / No / Unsure?	Briefly summarise whether the applicant meets the requirements for a screening opinion:
a) The existing and approved land use;	Yes	The existing seabed is described in such detail as is available at present (e.g. water depths) and it is noted that some of the objectives of the proposed development are to conduct geophysical surveys and benthic sampling to improve the available baseline data. The SEA has assessed the land use and deemed the seabed suitable for the proposed project. The occurrence of fishing activity and existing oil and gas infrastructure is identified in Table 4.1 of the EIA Screening Report.
b) The relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the areas and its underground;	Yes	As stated in Table 4.1 there are no sensitive land uses nearby. The fishery resources in the area are identified as high quality, though they are of a medium sensitivity to the proposed survey, and the proposed survey is on a small temporal and spatial scale that means it is avoidable by fishermen. Again, mitigation measures to avoid impact have been proposed. The relative abundance, availability, quality and regenerative capacity of natural resources in the areas and its underground were adequately described where applicable in the baseline and assessment of environmental risks.
c) The absorption capacity of wetlands, riparian areas & river mouths;	N/A	The project location as well as the proposed activities means that this criterion is not applicable.
d) The absorption capacity of coastal zones and the marine environment;	Yes	The absorption capacity of the marine environment (and coastal zones where applicable) were adequately described.
e) The absorption capacity of nature reserves and parks;	N/A	Given the offshore location of this project, this criterion is not applicable. European sites are considered separately – See AA Screening and NIS report.
f) The absorption capacity of areas classified or protected under national legislation (e.g. Natura 2000 area);	Yes	The applicant identifies the Natura 2000 sites that may potentially be affected by the proposed development and briefly describes the AA Screening process and Natura Impact Statement undertaken (which is reported separately).
g) The absorption capacity of areas in which there has already been a failure to meet the environmental quality standards, laid down by	N/A	Given the offshore location of this project, this criterion is not applicable. The area involved has not been identified as an area where there has been a failure to meet legislative environmental quality standards of any kind.

The environmental sensitivity of geographical areas likely to be affected by the project are considered in the Screening Report, with particular regard to:	Yes / No / Unsure?	Briefly summarise whether the applicant meets the requirements for a screening opinion:
legislation and relevant to the development or in which it is considered that there is such a failure;		
h) The absorption capacity of landscapes and sites of historical, cultural or archaeological significance.	Yes	<p>The assessment identifies disturbance to unknown sites of cultural significance as a potential effect and proposes the mitigation described below to avoid effects.</p> <p>No information is provided on the presence or absence of any known sites of historical, cultural or archaeological significance. However, the applicant states that the results of the geophysical survey will be used to inform an archaeological assessment after the survey (e.g. investigation of anomalous features) and that the benthic sample locations will be investigated using video/photos prior to grab samples being taken.</p>

4.3.3 Type and characteristics of the Potential Impact

The 'type and characteristics of the potential impact' criteria, as set out in Annex III of the EIA Directive, consider whether a project is likely to have a significant effect on the environment. Likely significant effects are considered in relation to the criteria set out in Tables 4.3 and 4.4, with additional regard to the impact on the project factors specified in Article 3(1) of the EIA Directive: population and human health; biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC; Land, soil, water, air and climate; material assets and cultural heritage and the landscape, in addition to the interaction between these factors. Table 4.5 provides a template to determine whether a Screening Determination could be made in regard to the type and character of the potential impact of a project.

Table 4.5: Checklist for Type and Characteristics of the Potential Impact of a Project

Factor (as specified in Article 3(1) of the EIA Directive)	Briefly summarise the environmental receptor / activity interactions considered:	Character of impact		Does applicant conclude a Significant Effect is likely? (Yes/No/Unknown?)
		Description of character of impact	Does the screening report provide information on character of impact?	
Population and human health	The applicants report gives a description of human health risk, with the principal potential interaction being the risks to human health from the storage, handling and use of hazardous materials on board (e.g. fuel and chemicals) and the effects of any associated unplanned events (e.g. leaks/spills). It is concluded by the applicant that population and human health risk to the wider public from hazardous materials is not relevant given the project location 41 km offshore. Other	The magnitude and spatial extent of the impact;	Yes	Adequate evidence has been provided by the applicant to support the conclusion that no significant effects are considered likely during routine operations, assuming the effective implementation of industry standard health and safety practices and the mitigation measures described. The applicant has also concluded that non-routine events are not considered likely to result in significant effects on population and human health.
		The nature of the impact;	Yes	The applicant has provided adequate evidence to conclude that no significant effects are likely during routine operations, assuming the effective implementation of industry standard health and safety practices and the mitigation measures described. The applicant has concluded that non-routine events are not considered likely to result in significant effects on population and human health.
		The transboundary nature of the impact;	Yes	The applicant has provided adequate evidence to conclude that no significant effects are likely during routine operations, assuming the effective implementation of industry standard health and safety practices

Factor (as specified in Article 3(1) of the EIA Directive)	Briefly summarise the environmental receptor / activity interactions considered:	Character of impact		Does applicant conclude a Significant Effect is likely? (Yes/No/Unknown?)
		Description of character of impact	Does the screening report provide information on character of impact?	
	potential interactions are emissions to air from vessel engines and emissions to sea from vessel wastes discharged overboard. It is concluded by the applicant that the quantity of emissions released will be relatively small due to the short duration of the proposed operations (16 days) and that emissions are likely to rapidly disperse offshore. Emissions to sea will be treated in accordance with MARPOL standards (i.e. sewage water treated or held on board for onshore disposal, and food waste macerated)			and the mitigation measures described. The applicant has concluded that non-routine events are not considered likely to result in significant effects on population and human health.
		The intensity and complexity of the impact;	Yes	The applicant has provided adequate evidence to conclude that no significant effects are likely during routine operations, assuming the effective implementation of industry standard health and safety practices and the mitigation measures described. The applicant has concluded that non-routine events are not considered likely to result in significant effects on population and human health.
		The probability of the impact;	Yes	The applicant has provided adequate evidence to conclude that no significant effects are likely during routine operations, assuming the effective implementation of industry standard health and safety practices and the mitigation measures described. The applicant has concluded that non-routine events are not considered likely to result in significant effects on population and human health.
		The expected onset, duration, frequency and reversibility of the impact;	Yes	The applicant has provided adequate evidence to conclude that no significant effects are likely during routine operations, assuming the effective implementation of industry standard health and safety practices and the mitigation measures described. The applicant has concluded that non-routine events are not considered likely to result in significant effects on population and human health.
		The cumulation of the impact with the impact of other existing or approved	Yes	Adequate information has been provided by the applicant to describe the potential for cumulative impacts and be able to conclude that significant effects are unlikely assuming effective implementation of industry health and safety practices and the mitigation measure described.

Factor (as specified in Article 3(1) of the EIA Directive)	Briefly summarise the environmental receptor / activity interactions considered:	Character of impact		Does applicant conclude a Significant Effect is likely? (Yes/No/Unknown?)
		Description of character of impact	Does the screening report provide information on character of impact?	
		developments;		
		The possibility of effectively reducing the impact.	Yes	The applicant has provided adequate evidence to conclude that no significant effects are likely during routine operations, assuming the effective implementation of industry standard health and safety practices and the mitigation measures described. The applicant has concluded that non-routine events are not considered likely to result in significant effects on population and human health.
Biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC;	The applicants report has considered the potential effects on biodiversity from the following receptor/activity interactions: <ul style="list-style-type: none"> • Seabed (from sampling) • Marine species and sites (Natura 2000 sites, PSSA, important life stage areas) from underwater noise and light emissions • Marine environment from accidental oil spill • Collision with marine species • Effects on fisheries It is identified by their report that the only potential source of significant effects is underwater	The magnitude and spatial extent of the impact;	Yes	Adequate evidence has been provided by the applicant to support the conclusion that no significant effects are considered likely, assuming the effective implementation of industry health and safety practices and the mitigation measures described. The EIA Screening Report describes the effects on non-protected species, in addition to protected species not on Annex IV and protected habitats, and European Marine Sites (SPAs and SACs). However, it is noted that there are non-protected species within the survey area, such as benthic communities, for which limited information is available. Although given the nature of the survey, no significant impacts are likely and new information will be obtained from the survey. A list of the Natura 2000 sites that have been screened in for the AA (for subsequent assessment) is included. In the Fishery Assessment it is noted that the use of data by ICES rectangle has allowed for an accurate assessment of the fishing in the specific area. The importance of a good communications strategy is noted with specific importance to the nephrops fishery.
		The nature of the	Yes	The applicant has provided adequate evidence to conclude that no

Factor (as specified in Article 3(1) of the EIA Directive)	Briefly summarise the environmental receptor / activity interactions considered:	Character of impact		Does applicant conclude a Significant Effect is likely? (Yes/No/Unknown?)
		Description of character of impact	Does the screening report provide information on character of impact?	
	noise from survey activities and the vessel itself.	impact;		significant effects are likely during routine operations, assuming the effective implementation of industry standard health and safety practices and the mitigation measures described. The applicant has concluded that non-routine events are not considered likely to result in significant effects on biodiversity.
		The transboundary nature of the impact;	Yes	Adequate evidence has been provided by the applicant to support the conclusion that no significant effects are considered likely, assuming the effective implementation of industry health and safety practices and the mitigation measures described. The applicant's report concludes that the location of the project means that transboundary effects are not likely to be significant.
		The intensity and complexity of the impact;	Yes	The applicant has provided adequate evidence to conclude that no significant effects are likely during routine operations, assuming the effective implementation of industry standard health and safety practices and the mitigation measures described. The applicant has concluded that non-routine events are not considered likely to result in significant effects on biodiversity.
		The probability of the impact;	Yes	The applicant has provided adequate evidence to conclude that no significant effects are likely during routine operations, assuming the effective implementation of industry standard health and safety practices and the mitigation measures described. The applicant has concluded that non-routine events are not considered likely to result in significant effects on biodiversity.
		The expected onset, duration, frequency and reversibility of	Yes	The applicant has provided adequate evidence to conclude that no significant effects are likely during routine operations, assuming the effective implementation of industry standard health and safety practices

Factor (as specified in Article 3(1) of the EIA Directive)	Briefly summarise the environmental receptor / activity interactions considered:	Character of impact		Does applicant conclude a Significant Effect is likely? (Yes/No/Unknown?)
		Description of character of impact	Does the screening report provide information on character of impact?	
		the impact;		and the mitigation measures described. The applicant has concluded that non-routine events are not considered likely to result in significant effects on biodiversity.
		The cumulation of the impact with the impact of other existing or approved developments;	Yes	Adequate information has been provided by the applicant to describe the potential for cumulative impacts and be able to conclude that significant effects are unlikely, assuming the effective implementation of industry health and safety practices and the mitigation measures described..
		The possibility of effectively reducing the impact.	Yes	Adequate evidence has been provided by the applicant to support the conclusion that no significant effects are considered likely. The mitigation measures proposed are considered reasonable and are known to be effective. It is stated clearly that if there is a break in sound producing activities during the hours of darkness that a re-start will not occur until daylight when the MMO can conduct the relevant watches. A suitably worded condition should be included in any permission granted to ensure that the proposed mitigation measures are adhered to by the Applicant.
Land, soil, water, air and climate;	The applicants report considers the potential sources of impact are limited to discharges to water from the survey vessel/equipment, air emissions from the survey vessel, waste disposal offshore and onshore, and direct physical impacts to	The magnitude and spatial extent of the impact;	Yes	The applicant has provided adequate evidence to conclude that no significant effects are likely during routine operations, assuming the effective implementation of industry health and safety practices and the mitigation measures described. The applicant has concluded that non-routine events are not considered likely to result in significant effects on land, soil, water, air or climate.
		The nature of the impact;	Yes	The applicant has provided adequate evidence to conclude that no significant effects are likely during routine operations, assuming the

Factor (as specified in Article 3(1) of the EIA Directive)	Briefly summarise the environmental receptor / activity interactions considered:	Character of impact		Does applicant conclude a Significant Effect is likely? (Yes/No/Unknown?)
		Description of character of impact	Does the screening report provide information on character of impact?	
	benthic habitats as a result of seabed sampling. Potential effects from these sources are considered and in most cases appropriate mitigation measures are identified to seek to ensure that effects are not significant			effective implementation of industry health and safety practices and the mitigation measures described. The applicant has concluded that non-routine events are not considered likely to result in significant effects on land, soil, water, air or climate.
		The transboundary nature of the impact;	Yes	Adequate evidence has been provided by the applicant to support the conclusion that no significant effects are considered likely, assuming the effective implementation of industry health and safety practices and the mitigation measures described. The location of the project and the limited spatial distribution of effects means that the applicants report considers that transboundary effects are not likely to be significant
		The intensity and complexity of the impact;	Yes	The applicant has provided adequate evidence to conclude that no significant effects are likely during routine operations, assuming the effective implementation of industry health and safety practices and the mitigation measures described. The applicant has concluded that non-routine events are not considered likely to result in significant effects on land, soil, water, air or climate.
		The probability of the impact;	Yes	The applicant has provided adequate evidence to conclude that no significant effects are likely during routine operations, assuming the effective implementation of industry health and safety practices and the mitigation measures described. The applicant has concluded that non-routine events are not considered likely to result in significant effects on land, soil, water, air or climate.
		The expected onset, duration, frequency	Yes	The applicant has provided adequate evidence to conclude that no significant effects are likely during routine operations, assuming the

Factor (as specified in Article 3(1) of the EIA Directive)	Briefly summarise the environmental receptor / activity interactions considered:	Character of impact		Does applicant conclude a Significant Effect is likely? (Yes/No/Unknown?)
		Description of character of impact	Does the screening report provide information on character of impact?	
		and reversibility of the impact;		effective implementation of industry health and safety practices and the mitigation measures described. The applicant has concluded that non-routine events are not considered likely to result in significant effects on land, soil, water, air or climate.
		The cumulation of the impact with the impact of other existing or approved developments;	Yes	Adequate evidence has been provided by the applicant to support the conclusion that no significant effects are considered likely, assuming the effective implementation of industry health and safety practices and the mitigation measures described. Adequate information has been provided by the applicant to describe the potential for cumulative impacts and be able to conclude that significant effects are unlikely.
		The possibility of effectively reducing the impact.	Yes	The applicant has provided adequate evidence to conclude that no significant effects are likely during routine operations, assuming the effective implementation of industry health and safety practices and the mitigation measures described. The applicant has concluded that non-routine events are not considered likely to result in significant effects on land, soil, water, air or climate.
Material assets, cultural heritage and the landscape	The applicants report has described the location of the proposed activities 41 km offshore, the assessments identify that the only potential adverse effect is the potential for effects on cultural heritage assets. There are no known historical,	The magnitude and spatial extent of the impact;	Yes	The applicant has committed to investigate any cultural heritage features of interest identified during the geophysical survey. Assuming this mitigation measure is implemented, there is no likelihood of significant effects on this receptor. In the Fishery Assessment it is noted that the use of data by ICES rectangle has allowed for an accurate assessment of the fishing in the specific area. The importance of a good communications strategy is noted with specific importance to the nephrops fishery.
		The nature of the	Yes	Adequate evidence has been provided by the applicant to support the

Factor (as specified in Article 3(1) of the EIA Directive)	Briefly summarise the environmental receptor / activity interactions considered:	Character of impact		Does applicant conclude a Significant Effect is likely? (Yes/No/Unknown?)
		Description of character of impact	Does the screening report provide information on character of impact?	
	<p>cultural or archaeological sites in the area covered by the application. However the applicant states that the results of the geophysical survey will be used to inform an archaeological assessment after the survey (e.g. investigation of anomalous features) and that the benthic sample locations will be investigated using video/photos prior to grab samples being taken.</p> <p>Effects on other material assets are considered by the applicants report in the context of other sea users (e.g. shipping and fisheries). The assessment of effects on shipping is considered competent and relevant.</p> <p>Effects on seascape are not considered by the applicant, however given the short duration of the survey (16 working days) and location 41 km offshore, no significant</p>	impact;		<p>conclusion that no significant effects are considered likely, assuming the effective implementation of industry health and safety practices and the mitigation measures described..</p> <p>The only potential effect identified is to any previously unidentified cultural heritage assets. The applicant has committed to investigate any features of interest identified during the geophysical survey. Assuming this mitigation measure is implemented, there is no likelihood of significant effects on this receptor</p>
		The transboundary nature of the impact;	Yes	Adequate evidence has been provided by the applicant to support the conclusion that no significant effects are considered likely, assuming the effective implementation of industry health and safety practices and the mitigation measures described..
		The intensity and complexity of the impact;	Yes	Adequate information has been provided by the applicant to describe the intensity and complexity of the impacts and be able to conclude that significant effects are unlikely, assuming the effective implementation of industry health and safety practices and the mitigation measures described..
		The probability of the impact;	Yes	<p>Adequate evidence has been provided by the applicant to support the conclusion that no significant effects are considered likely, assuming the effective implementation of industry health and safety practices and the mitigation measures described..</p> <p>The only potential effect identified is to any previously unidentified cultural heritage assets. The applicant has committed to investigate any features of interest identified during the geophysical survey. Assuming</p>

Factor (as specified in Article 3(1) of the EIA Directive)	Briefly summarise the environmental receptor / activity interactions considered:	Character of impact		Does applicant conclude a Significant Effect is likely? (Yes/No/Unknown?)
		Description of character of impact	Does the screening report provide information on character of impact?	
	effects are likely.			this mitigation measure is implemented, there is no likelihood of significant effects on this receptor
		The expected onset, duration, frequency and reversibility of the impact;	Yes	Adequate information has been provided by the applicant to describe the expected onset, duration, frequency and reversibility of the impacts and be able to conclude that significant effects are unlikely, assuming the effective implementation of industry health and safety practices and the mitigation measures described..
		The cumulation of the impact with the impact of other existing or approved developments;	Yes	Adequate evidence has been provided by the applicant to support the conclusion that no significant effects are considered likely, assuming the effective implementation of industry health and safety practices and the mitigation measures described..
		The possibility of effectively reducing the impact.	Yes	Adequate evidence has been provided by the applicant to support the conclusion that no significant effects are considered likely, assuming the effective implementation of industry health and safety practices and the mitigation measures described.. Adequate information is provided which confirms that is any potentiality sensitive feature is identified by the geophysical data this will be investigated using the underwater camera.
The interaction between the factors		The applicant identifies potential cumulative projects and discusses the potential interaction of those project with the proposed development.	The magnitude and spatial extent of the impact;	Yes

Factor (as specified in Article 3(1) of the EIA Directive)	Briefly summarise the environmental receptor / activity interactions considered:	Character of impact		Does applicant conclude a Significant Effect is likely? (Yes/No/Unknown?)
		Description of character of impact	Does the screening report provide information on character of impact?	
		The nature of the impact;	Yes	No significant effects are considered likely by the applicant.
		The transboundary nature of the impact;	Yes	Adequate information has been provided by the applicant to conclude that cumulative impacts are not considered likely, assuming the effective implementation of industry health and safety practices and the mitigation measures described.
		The intensity and complexity of the impact;	Yes	No significant effects are considered likely by the applicant.
		The probability of the impact;	Yes	Adequate information has been provided by the applicant to conclude that cumulative impacts are not considered likely, assuming the effective implementation of industry health and safety practices and the mitigation measures described.
		The expected onset, duration, frequency and reversibility of the impact;	Yes	Adequate information has been provided by the applicant to conclude that cumulative impacts are not considered likely, assuming the effective implementation of industry health and safety practices and the mitigation measures described.
		The cumulation of the impact with the impact of other existing or approved developments;	Yes	Adequate information has been provided by the applicant to conclude that cumulative impacts are not considered likely, assuming the effective implementation of industry health and safety practices and the mitigation measures described.
		The possibility of effectively reducing	Yes	Adequate information has been provided by the applicant to conclude that cumulative impacts are not considered likely, assuming the effective

Factor (as specified in Article 3(1) of the EIA Directive)	Briefly summarise the environmental receptor / activity interactions considered:	Character of impact		Does applicant conclude a Significant Effect is likely? (Yes/No/Unknown?)
		Description of character of impact	Does the screening report provide information on character of impact?	
		the impact.		implementation of industry health and safety practices and the mitigation measures described.

5. MITIGATION AND MANAGEMENT COMMITMENTS

Table 5.1 documents the commitments made by the applicant and additional measures that should be included in any licence issued. The mitigation measures proposed are considered to be reliable and known to be effective.

Table 5.1: Mitigation and Management Commitments.

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific Condition Recommended
Physical Presence	Risk of collision with vessels reduced through the use of positioning and automatic identification systems, notice to mariners also. Contractors with good HSE performance will be used.		X
	Benthic sample stations will be investigated prior to sampling using high-resolution video or stills photography.		X
Interactions with Other Sea Users	For interactions with fishermen, the project proposes the use of a FLO, submitting a notification to "regular runners" and Notice to Mariners.		X
	In the Fishery Assessment it is recommended that a French speaking person ashore with a working knowledge of both the fishing industry and offshore operations should be available if liaison with foreign vessel owners is required. It would be envisioned that this person would work in conjunction with the FLO		X
Underwater Noise	Exola and its survey contractor will adhere to the DAHG Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters (DAHG, 2014). Of note is that these measures apply specifically to marine mammals, however, observations shall also be undertaken for marine reptiles and the same procedures applied where possible.		X
	Two qualified MMOs will be appointed to monitor marine mammals and log all data according to the standardised forms provided in the DAHG Guidance and provide an MMO report to the regulatory authorities.		X
	Acoustic surveying will not commence if marine mammals are detected within a 500 m radius around the acoustic sources (referred to as the Monitored Zone).		X
	Sound-producing survey activities will only be commenced in daylight hours where effective visual monitoring, as determined by the MMO, can be achieved.		X
	For sound-producing activities, as water depths across the proposed survey area are less than 200 m, pre-start-up monitoring will be conducted by the MMO at least 30 minutes before any activity using the acoustic sources is due to commence. Sound-producing survey activity using the acoustic sound sources will not commence until at least 30 minutes have elapsed with no marine mammals detected within the Monitored Zone by the MMO. This pre-start monitoring will be followed by the soft-start procedure.		X
Commencement of sound-producing survey activities will be undertaken using a 'soft-start' (ramp up and gradual		X	

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific Condition Recommended
	<p>increase in energy/noise source) procedure for any equipment where the output peak SPL exceeds 170 dB re 1µPa at 1 metre. The build-up of acoustic energy output will occur in consistent stages to provide a steady gradual increase in power (over a period of 20 minutes). Where the power of acoustic noise sources cannot be increased gradually due to operational parameters of the device, the device will be switched on and off in a consistent sequential manner for a period of 20 minutes prior to commencement of the full necessary output.</p> <p>Where a soft-start procedure has commenced, there is no requirement to halt or discontinue the procedure at night or in poor weather or visibility conditions or if marine mammals are sighted within the Monitored Zone.</p> <p>Where there is a break in sound output (e.g. in the event of equipment failure, shut-down etc.) from the acoustic sources for more than 30 minutes, all soft-start procedures must be undertaken before activity can recommence.</p> <p>If a break in sound output occurs during the hours of darkness, the survey will be suspended until daylight when effective visual monitoring, as determined by the MMO, can be completed before start up.</p> <p>Full reporting on MMO operations and mitigation measures undertaken must be provided to the relevant regulatory authorities.</p>		<p>X</p> <p>X</p> <p>X</p> <p>X</p>
Atmospheric Emissions	<p>Compliance with the Merchant Shipping (Prevention of Air Pollution from Ship) Regulations 2010-2017 and the MAPROL Convention 73/78 Appendix VI on atmospheric emissions.</p> <p>Operations will be planned to minimise duration, and vessel movements, and ensure efficient operations.</p>	<p>X</p> <p>X</p>	
Discharges to the Sea	<p>Solid waste stored onboard and handled to comply with the Waste Management Hierarchy, MARPOL and the Sea Pollution (Prevention of Pollution by Garbage from Ships). Garbage Management Plan will be developed. Contractors must use authorised waste contractors.</p> <p>Adherence to IMO and Irish Regulations and guidance on ballast water management.</p> <p>All discharges will be treated and discharged according to the MARPOL Convention and any additional IMO requirements.</p> <p>Survey vessel will have a SOPEP in place in accordance with Annex I of MARPOL.</p> <p>Spill kits on board the vessel deck to clean-up spills of utilities hydrocarbons or chemicals before they can enter the sea.</p> <p>Refuelling of the survey vessel to be undertaken in port, thus reducing potential for collision or spillage at sea</p>	<p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p>	

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific Condition Recommended
Archaeology	<p>Using geophysical data to ensure no marine archaeology sites are disturbed.</p> <p>Investigation of benthic grab sample sites using video/photos</p> <ul style="list-style-type: none"> • The services of a suitably qualified and suitably experienced maritime archaeologist, to include experience in the interpretation of marine geophysical data, shall be engaged in advance of any such survey to undertake the UAIA so as to inform on the cultural potential of the area and advise on the known or potential location of any shipwrecks or other UCH within the specified survey area. This is particularly relevant where grab samples, etc. are being carried out. • The Underwater Archaeological Impact Assessment (UAIA) that comprised detailed desktop study and archaeo-geophysical interpretation of all geophysical survey results as well as assessment of the results of all sampling. • The UAIA shall be licensed by DAHG and a detailed method statement shall accompany the licence application by the archaeologist. <p>Ideally the archaeologist would be on board the survey vessel to view the geophysical data in real time and identify known or potential UCH as it is encountered. If this is not possible the results of all marine geophysical survey undertaken shall be made available to the archaeologist for assessment and interpretation, and to inform on any potential submerged cultural heritage or submerged palaeo-landscape evidence.</p> <p>The UAIA report shall be forwarded to the Underwater Archaeology Unit of this Department for consideration and further comment in advance of any site investigation/sampling works taking place.</p>		<p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p>

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific Condition Recommended
General	<p>Should the applicant change the survey vessel or equipment they should be required to seek approval from DCCAIE and that as part of that process DCCAIE should expect to see evidence that the vessel, equipment and methodology proposed are not materially different from the assumptions used to inform the applicant's assessment of potential effects.</p> <p>Appropriate steps will be taken regarding the use and handling of substances that could be harmful to human health or the environment, in accordance with Regulations and best practice.</p> <p>Solid waste will be stored appropriately on the vessel and returned to shore for handling in accordance with the Sea Pollution (Prevention of Pollution by Garbage from Ships) Regulations 2012.</p> <p>Garbage Management Plan will be in place in accordance with MARPOL Annex V.</p>	<p>X</p> <p>X</p> <p>X</p>	<p>X</p>

6. CONCLUSIONS

Table 6.1 provides a summary of the review of the applicant’s screening assessment. The identification of any residual likely significant effect in the EIA Screening Report (following consideration of mitigation) indicates a requirement for an EIA (Table 6.2).

Table 6.1: Conclusions of screening assessment, based on checklists provided in Table 4.3-4.5, for projects listed on Annex II of the EIA Directive

Summary of features of project and of its location indicating the need for EIA:	
None – the documentation provided by the applicant supports the conclusion that an EIA is not required.	
Do you agree with the applicant’s screening assessment? If no, why?	Yes.
Is the project likely to have significant residual effects on the environment?	No. The nature (type) of survey activities proposed and their characteristics, in terms of the limited interactions with sensitive features of the environment, mean that no likely significant effects are predicted. The applicant has provided adequate and up to date evidence to support this conclusion. The information provided by the applicant is considered complete and no further information is required to enable the DCCAIE to make a Screening Determination.
Is EIA required? (Yes / No / More Information Required?)	No. The proposed development including the proposed mitigation measures is not likely to have a significant effect on the environment.
What further information is required to inform decision (if any)?	None, however, the DCCAIE should note the following points: <ul style="list-style-type: none"> • The vessel proposed to be used for the survey is the MV Kommander. Prior to the commencement of the proposed site survey operations, the applicant may seek approval from DCCAIE to use an alternative equivalent survey vessel. In this event, DCCAIE should expect to see confirmation that the survey equipment and methodology on any replacement vessel are equivalent to that described in the EIA Screening Report and that the proposed of development described in the EIA Screening Report has not materially changed. • The decision should state that no EIA is required for the proposed development as described in the application, including all proposed mitigation measures as detailed in Section 5.

Table 6.2: Summary of screening assessment for projects listed on Annex II of the EIA Directive

Outcome of Screening Report Assessment	Overall Screening Opinion / EIA Required?
Likely Significant Residual Effects on the Environment	EIA required
More information is required to inform decision	Unknown – EIA is required – Further information required from the applicant
No Likely Significant Effects on the Environment	EIA not required

