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STATUTORY ENVIRONMENTAL ASSESSMENT
APPROPRIATE ASSESSMENT SCREENING REVIEW FOR CORRIB FIELD P6 FLEXIBLE FLOWLINE INSTALLATION

RAMBOLL

STATUTORY ENVIRONMENTAL ASSESSMENT
CORRIB FIELD P6 FLEXIBLE FLOWLINE INSTALLATION

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EXECUTIVE SUMMARY

Ramboll UK Limited (herein referred to as Ramboll) was commissioned by the then Department for Communications, Climate Action and Environment, now the Department of the Environment, Climate and Communications to provide assistance with regards to the statutory assessment of an application by Vermillion Exploration & Production Ireland Ltd (referred to herein as the applicant), submitted in respect of the installation of a new flexible flowline connecting the P6 wellhead with the Corrib central manifold at the Corrib Field. The new flexible flowline will be shorter in length (158 m) than the existing flowline (1,560 m) and will significantly reduce the unnecessary flow restrictions between the P6 wellhead and the Corrib central manifold.

The applicant has submitted an application for consent to carry out the works which includes the mobilisation of a Remotely Operated Vehicle (ROV) support vessel and two work class ROVs to the installation location at the Corrib Field. Verification of the dynamic positioning (DP) and ultra-short baseline (USBL) systems will be undertaken. Prior to the removal of the existing P6 flexible flowline, an as-found survey will be undertaken, which will include underwater video/stills and a geophysical survey. The flowline replacement will be carried out by ROV, with the existing flowline decoupled from the Corrib central manifold and P6 wellhead and the terminations moved at either end to allow the new flexible flowline to be installed. The existing flowline will be capped and preserved in situ on the seabed for future use. Following completion of the installation works there will be reinstatement of the worksite and an as-left survey will be undertaken. The competent authority (DECC) is required to consider the potential effects of such activities on the integrity of Natura 2000 sites, with respect to Article 6(3) of Council Directive 92/43/EEC which is transposed in to Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011-15 as amended (the Birds and Natural Habitats Regulations).

The application was originally submitted in January 2020 and then withdrawn in July due to the works not proceeding in 2020. The applicant then resubmitted their application in September 2020, with revised dates for progressing works on the Corrib Field P6 Flexible Flowline in either 2021 or 2022.

This report provides an assessment of the Appropriate Assessment (AA) Screening and Natura Impact Statement (NIS) Report submitted by the applicant.

Public consultation on the application has been undertaken by DECC. All submissions and observations (including those submitted in relation to the original application) received by the DECC have been taken into consideration in the preparation of this report.

Ramboll confirms that the information provided by the applicant is considered to be adequate, up to date and that no other information is required to make a screening determination or carry out an Appropriate Assessment. The applicant provided adequate, up-to-date, best scientific information so as to enable the DECC to make a screening determination and undertake an Appropriate Assessment to determine whether the integrity of a European site is likely to be adversely affected by the proposed project.

1. INTRODUCTION

Ramboll UK Limited (herein referred to as Ramboll) was commissioned by the Department for Communications, Climate Action and Environment, now the Department of the Environment, Climate and Communications (herein referred to as DECC) to provide assistance as competent experts for the statutory assessment of an application by Vermillion Exploration & Production Ireland Ltd (referred to herein as the applicant). The authors hold undergraduate and postgraduate qualifications in environmental science (or related disciplines), professional qualifications including chartered status with the Society for the Environment and full membership of the Institute of Environmental Management and Assessment (IEMA) and have long standing experience as expert practitioners within the fields of offshore development, environmental impact assessment and the appraisal of applications in the context of the Birds and Natural Habitat regulations.

The application was originally submitted in January 2020 and then withdrawn in July due to the works not proceeding in 2020. The applicant then resubmitted their application in September 2020, with revised dates for progressing works on the Corrib Field P6 Flexible Flowline in either 2021 or 2022.

This report provides an assessment of the Corrib Field P6 Flexible Flowline Installation Appropriate Assessment (AA) Screening and Natura Impact Statement (NIS) (September 2020) submitted by the applicant, prepared and approved by Ramboll as competent experts having relevant qualifications and experience.

1.1 Project Background

The competent authority (DECC) is required to consider the potential effects of such activities on the integrity of Natura 2000 sites, with respect to Article 6(3) of Council Directive 92/43/EEC which is transposed in to Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011-15 as amended (the Birds and Natural Habitats Regulations).

2. TERMS OF REFERENCE

2.1 Legislative Context

This report has been prepared having regard to EC Directive 2009/147/EC[1] on the conservation of wild birds (commonly referred to as the Birds Directive) and EC Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (commonly referred to as the Habitats Directives), the European Communities (Birds and Natural Habitats) Regulations 2011-15 (the Birds and Natural Habitats Regulations) as amended and relevant jurisprudence of the EU and Irish courts.

The AA Screening and the NIS submitted by the applicant confirm that the Project has been screened having regard to the Birds and Habitats Directives and the Birds and Natural Habitats regulations and relevant jurisprudence of the EU and Irish courts.

2.2 Relevant Guidance

This report, the applicant AA Screening and NIS reports have been prepared having regard to guidance on appropriate assessment for planning authorities, published by the Department for Environment, Heritage and Local Government (DEHLG) in 2009[2]. In addition, the structure and content of this report is based upon the methodology published by the European Communities in 2002[3] and Commission notice C (2018)[4].

2.3 Consultation

2.3.1 Notified Bodies

Notification of the application was issued to the following organisations:

- National Parks and Wildlife Services;
- Irish Maritime Administration, Department of Transport, Tourism and Sport;
- Maritime Services Division, Department of Transport, Tourism and Sport;
- Ship Source Pollution Prevention Unity Irish Maritime Administration, Department of Transport, Tourism and Sport;
- Irish Coastguard (& National Maritime Operations Centre), Department of Transport, Tourism and Sport;
- Sea Fisheries Protection Authority;
- Sea Fisheries Policy Division, Department of Transport, Tourism and Sport;
- Department of Defence;
- Mission Support Facility, Irish Air Corps;
- Naval Headquarters;
- Marine Institute; and
- Commissioners of Irish Lights.

Two responses were received in relation to the original application made in January 2020 as

[1] Amending Directive 70/409/EEC

[2] DEHLG (2009) Appropriate Assessment of Plans & Projects - Guidance for Planning Authorities, Revision Notes added 2010, URL: https://www.npws.ie/protected-sites/guidance-appropriate-assessment-planning-authorities (accessed 15/03/2019)

[3] European Communities (2002) 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/EE, URL: http://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm (accessed 15/03/2019)

[4] C (2018)4 7621 final "Managing Natura 2000 sites The provisions of Article 6 of the Habitats Directive 92/43/EEC. URL: http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/Provisions_Art_._nov_2018_endocx.pdf (accessed 17/05/2019)

follows:

- Maritime Safety Policy Division, Irish Maritime Administration, Department of Transport, Tourism and Sport dated 28 January 2020; and
- Maritime Services Division, Department of Transport, Tourism and Sport dated 17 February 2020.

Two responses were received in relation to the revised application made in September 2020 as follows:

- Maritime Safety Policy Division, Irish Maritime Administration, Department of Transport dated 18 September 2020; and
- Killybegs Port Office, Sea Fisheries Protection Authority dated October 2020.

The following observations were made:

- General comments and comments on environmental issues
    - 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.
    - As per Sea Pollution (Miscellaneous Provisions) Act 2006 Part 3 Para 20 and 21 refers, the operator should include in the submission
        - A risk assessment re hydrocarbon discharge should be included in submission.
        - A plan for the prevention and minimisation of any accidental discharge.
    - The Mayo area has a comprehensive inshore fishing fleet, however the area for site works is further offshore so shouldn’t adversely affect the inshore fleet.
    - There would be fishing activity by vessels for demersal and pelagic species in the surrounding area to the site. These may be Irish vessels but may also be foreign vessels. However the fishing in the surrounding areas shouldn’t be adversely affected.
    - There should be little risk with the proposed activities from a food safety point of view, the main concern would be from any chemical spillage, however these concerns are addressed in the documents provided. There is no active aquaculture site close to this area and therefore foresee no negative impact on any of the shellfish growing sites due to the considerable distances between the Corrib site and any aquaculture site.

Full consideration has been given to the comments and observations above in the AA Screening Review. However, not all comments and observations are relevant at the AA Screening Review stage. The AA Screening undertaken by the Department will have regard to EC Directive 2009/147/EC on the conservation of wild birds and EC Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, the European Communities (Birds and Natural Habitats) Regulations 2011-15 as amended and relevant jurisprudence of the EU and Irish courts.

In accordance with the above Directives, Regulations and jurisprudence, comments relating to mitigation are not relevant to the AA screening stage and are not considered further in this report.

2.3.2 Public Consultation

The original application was advertised by the DECC on their website following receipt on 29 January 2020. Invitations for submissions were advertised by the DECC to be received by close of business on 28 February 2020 to ensure consideration by the Minister.

One response was received, and the points raised by this has been considered and responded to in the following sections of this report:

- Response from a private individual (name withheld for privacy) dated 28 February 2020.

Following receipt of additional information from the applicant, the DECC advertised a further consultation period on this information from 14 May 2020 to 28 May 2020. Three responses were received, and the points raised have been considered and responded to as provided in the following sections of this report:

- Response from a private individual (name withheld for privacy) dated 26 May 2020;
- Response from a private individual (name withheld for privacy) dated 29 May 2020. This response was accepted a day late as the individual contacted the Department on the 28 May stating they had difficulties with e-mail, and it was agreed to accept a late response; and
- Response from Wild Ireland Defence CLG dated 28 May 2020.

The revised application was advertised by the DECC on their website following receipt on 18 September 2020. Invitations for submissions were advertised by the DECC to be received by close of business on 18 October 2020 ensure consideration by the Minister. One response was received to this consultation:

- Response from Irish Whale and Dolphin Group dated 16 October 2020.

2.3.3 General Consultation Responses

- The Public Participation Process is flawed. Although the proposed provision is in a bilingual area, the public consultation is in one sense only; the Irish language document relating to this process and application is not in the public domain.
- It has been noted that of late PAD has failed to supply survey references and these are required for documentation and enable clarity of which procedures and documentation apply to each job. It would be helpful if such references (used in previous years by PAD) were added to all documentation. It is noted that two different regulatory reference ids are used in the forms in the 2017 report and therefore presumably these are not regulatory reference numbers. Furthermore, MMOs should be required to submit data forms in excel, making evaluation of data easier and allowing it to be added to a database without retyping.

  The reporting requirements in 2017 were known and stated as a requirement in the documentation submitted prior to this work. Therefore reporting "must" be carried out as outlined in the guidelines and if it is not the case in 2017 it should be regarded as unsatisfactory and non-compliant when reviewed by the regulator. It is noted there is mention of an annual report, but this does not alter requirements which are due 30 days after project completion. So, in the case an annual report is irrelevant to the reporting requirements.

The above comments are either general comments relating to the application or process. The issue of the public participation process has been addressed separately by DECC and is not considered further in this report. The issue of compliance with reporting requirements for previous surveys is also not considered relevant to this current AA Screening Review and is not considered further in this report.

2.3.4 Project Specific Consultation Responses

The following project specific consultation responses have been received:

Consultee	Project Specific Comments	Response
Private Individual	This application appears to be a re-hash of the application made last year by the same company, Vermilion Exploration and Production Ireland Limited (Vermilion) with the only discernible difference being that reference is now made to Corrib Well P6 as opposed to Corrib Well P3 last year. I remain concerned, among other things, as last year about the non-stated rationale for what is referred to as 'replacement works at Corrib Well P6'. I am further totally confused by the email I received from PAD at 13:09 this afternoon. Attached to said email is a letter dated 24 February 2020 (referring to Letter of Approval to conduct an Offshore Pipeline Survey and Inspection and maintenance programme of the Offshore Facilities between to Corrib Field manifold and the landfall at Glengad, Co. Mayo from Petroleum Affairs Division, Department of Communications, Climate Action and Environment dated 24 February 2020.) In relation to application above, is it the intention of Vermilion to wait three months to see whether or not Judicial Review proceedings will be initiated or is it their intention to go ahead with works purportedly allowed by a Minister of State during an interregnum (shades of Frank Fahey many years ago) and for these allegedly permitted works to take place before the current application for much the same type of work - with attendant environmental factors not yet assessed - should take place. This would involve a replication of environment disturbance to the same area should it occur consecutively and not concurrently. There is no clarity of either purpose or information available to me to make a coherent submission in this regard as is my right. I ask that this current application, ref above, not be deemed assessable until there is clarity from the applicant, Vermilion, in relation to, at a minimum, whether works - with attendant environmental consequences - are intended to be undertaken consecutively or concurrently. I consider receipt of email from PAD today, detailed below, is an attempt by the Minister of State and PAD to pre-empt proper assessment of this current application.	The Petroleum Affairs Division (PAD), DCCAE responded to this email on 28 February 2020, as follows: In relation to your query, Condition 20 of the Corrib Consent to Operate states that: "Subsea facilities and flowlines will be subject to annual inspection to ensure that protection measures remain effective and any remedial measures necessary to provide additional protection will be undertaken as soon as practically possible. The first such inspection will be undertaken within the first month from the start of commercial gas production, when the flowlines are at maximum operating pressure and temperature". The letter of approval which was referred in your email refers to an application received on 16th April 2019, for (2019 annual maintenance survey to conduct an offshore pipeline survey and inspection of the offshore facilities in the Corrib Field) following observations made as part of the public consultation process. It is PAD's understanding that VEPIL propose to carry out this survey in the spring/summer of 2020. VEPIL applied for consent for their 2020 annual maintenance offshore survey and flexible flowline replacement works at Corrib Well P6, Corrib Field, northeast Atlantic, Ireland on 29 January 2020 and submissions have been invited by close of business today. Details of the proposed works, including proposed "replacement works at Corrib Well P6", and when they will be carried out is contained in the application documents which are on the Department's website.

Consultee	Project Specific Comments	Response
	In a word, not for the first time with Corrib, this process appears to be in a mess.	
Private Individual	The AA Screening carried out by the Department ought to be carried out in compliance with CJEU judgement in Case C-323/17 People Over Wind & Anor. v. Coillte, as indeed the applicant has acknowledged. The applicant's NIS has concluded that the Cumulative Impacts of the project requires "mitigation procedures", to mitigate against predicted negative impacts on the environment, thereby acknowledging negative impacts. It is therefore incumbent on the Department, in compliance with the relevant legislation and CJEU judgement to come to the only legal decision, i.e. an AA is required to ascertain and assess any negative impacts and if needed what type of mitigation measures are appropriate. It is impossible to device mitigation measures without an Appropriate Assessment carried out by the statutory body. I submit that "mitigation measures" are not in the gift of the applicant but are the duty of a statutory body as part of AA.	The AA Screening undertaken by the Department will have regard to EC Directive 2009/147/EC on the conservation of wild birds and EC Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, the European Communities (Birds and Natural Habitats) Regulations 2011-15 as amended and relevant jurisprudence of the EU and Irish courts. In accordance with the above Directives, Regulations and jurisprudence, comments on the applicant's mitigation commitments are not relevant to the AA screening stage and are not considered further in this report.
Private Individual	"The primary objective of the proposed scope of works is to replace the existing flexible flowline at the P6 wellhead with a new one of considerably shorter length and leaving the decommissioned flowline in situ on the seabed and preserved for future use" There is a glaring lack of logic between the stated purpose of this application which is "replacement works" at P6 and the "alternative" above which states without any doubt that the "decommissioned" flowline will be left in situ and preserved for future use – the absence of "probable/possible" in this statement is taken by me to mean that future use is envisaged and the concerns expressed by me last year in relation to P3 are now multiplied. In the absence of any information being available to me other than pro forma stuff presented in order to tick boxes, I request in this submission that the following information be obtained by your good selves and presented by the developer in clear and accessible format for further assessment: 1. Given 2.4 in the NIS, is the purpose of leaving the decommissioned flowline in situ to enable future proposed and/or planned extension of the existing Corrib infrastructure;	The works include the capping of the existing flowline and the preservation of this in situ on the seabed for future use. Any future use of the flowline left capped on the seabed will be subject to its own consenting procedure.

Consultee	Project Specific Comments	Response
	2. Should the answer to 1 above be negative, why the decommissioned flowline not being removed; 3. Should the answer to 1 above be in the positive explain why such future proposed/planned expansion of the existing Corrib plan/project is not now accompanied by appropriate EIS's etc.	
Wild Ireland Defence CLG	In relation to the Directive on natural habitats and wild flora and fauna, the Screening Department must carry out an Appropriate Assessment, as acknowledged by the applicant, in accordance with the CJEU judgement in Case C-323/17 "People Over Wind & Anor. v. Coillte". The applicant's "NIS" report concludes that the project's Cumulative Impacts require "mitigation procedures" to mitigate the predicted negative environmental impacts, thus recognizing negative impacts. It is therefore incumbent upon the Department, in accordance with the relevant legislation and the judgement of the CJEU, to reach the sole legal decision, i.e. an Appropriate Assessment is required to identify and evaluate any adverse impacts to identify appropriate mitigation measures if necessary. The proposed mitigation measures must be subjected to an Appropriate Assessment to demonstrate that the mitigation measures will not result in any negative effects on the special conservation area or any protected species.	The AA Screening undertaken by the Department will have regard to EC Directive 2009/147/EC on the conservation of wild birds and EC Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, the European Communities (Birds and Natural Habitats) Regulations 2011-15 as amended and relevant jurisprudence of the EU and Irish courts. In accordance with the above Directives, Regulations and jurisprudence, comments on the applicant's mitigation commitments are not relevant to the AA screening stage and are not considered further in this report.
IWDG	The EIA states the USBL system is stated as operating "a very low sound pressure intensity level", why can't these levels be stated precisely? Generally, this equipment operates with source levels of 185 to 206 dB re1mPa approximately. Claims regarding disturbance should be based on frequency (given correctly in this case) and source levels. Additionally, it is known that much acoustic equipment produces waste noise or noise outside the target frequencies. Generally, this is not studied and may differ for different operations of the same piece of equipment.	The observations provided by IWDG are noted here for completeness; however they were provided with direct reference to the EIA Screening Report and therefore are not considered relevant to the AA Screening review and are not considered further in this report.
	Additionally, the USBL system at 21 kHz is within the hearing range of cetaceans as a whole and not just "small cetaceans" as stated. Mitigation recommended for the USBL on page 58 includes a soft start. Further information on mitigation is stated in Section 6. This again states the use of soft starts. It is probably not possible to initiate a soft start with the ROV/USBL acoustics, where the ROV is	The observations provided by IWDG are noted here for completeness; however they were provided with direct reference to the EIA Screening Report and therefore are not considered relevant to the AA Screening review and are not considered further in this report.

Consultee	Project Specific Comments	Response
	switched on before it is put in the water. After which the HiPap pole is usually lowered. It is not easy to think how a soft start can always be practically implemented and while a soft start should be carried out it may not be always possible and this should be acknowledged.	
	The soft start specified for the MBES system in section 6.1.2.2 is logical and commendable and covers the transmit range for the equipment precisely and requires 10 dB increments of sound. Generally elsewhere 6 dB sound increments, which is a doubling of sound pressure, is the recommended standard, but 10 dB steps are acceptable in this case. However as the MBES system is deployed on the ROV the necessity of soft starting the MBES system using an inaudible frequency of 400 kHz, while the USBL is obviously operating in audible frequency ranges seems questionable but since multi-beam operation will not impact marine mammals it is not really important to mitigate for this equipment.	The observations provided by IWDG are noted here for completeness; however they were provided with direct reference to the EIA Screening Report and therefore are not considered relevant to the AA Screening review and are not considered further in this report.

3. REVIEW OF APPLICANT AA SCREENING REPORT

Table 3.1 provides a summary of the key project information.

Table 3.1: Project Information

Project Title:	Corrib Field P6 Flexible Flowline Installation
Project Type:	Installation of a new flexible flowline connecting the P6 wellhead with the Corrib central manifold at the Corrib Field and geophysical ROV survey
Applicant:	Vermillion Exploration & Production Ireland Ltd
Exploration Licence Reference:	n/a – part of Corrib Petroleum Lease
Date AA Screening Report Received:	10/09/2020

3.1 Determining Whether a Project Should be Subject to an Appropriate Assessment

Under Paragraph 42(6) of the Habitats Regulations, the DECC (as the relevant competent authority) shall determine that an AA is required, where it cannot be excluded, on the basis of objective scientific information following screening, that the project, either individually or in combination with other plans and projects, would have a significant effect on a European Site.

Where it is determined that AA is required for the proposed development or project, the applicant must submit a NIS.

3.2 Description of the Project

The AA screening process involves describing the individual elements of the project that are likely to give rise to impacts on the conservation objectives and/or qualifying features of a Natura site.

Table 3.2 provides a review of the applicant's description of the project.

Table 3.2: Description of Project AA Checklist

Brief Project Description:

The objective of the survey is to install a new flexible flowline connecting the P6 wellhead with the Corrib central manifold at the Corrib Field. The new flexible flowline will be shorter in length (158 m) than the existing flowline (1,560 m) and will significantly reduce the unnecessary flow restrictions between the P6 wellhead and the Corrib central manifold. The proposed work scope to do this is as follows:

- Mobilisation of the ROV support vessel (Siem Spearfish) and two ROVS from a UK port to the Corrib Field;
- Trials and verification of dynamic positioning (DP) system and ultra-short baseline system (USBL) to be undertaken prior to arrival within the Corrib Field exclusion zone;
- Completion of an As-Found Survey at the P6 work site, including underwater video / stills, acoustic geophysical survey and any seabed preparation works required prior to commencement;
- Depressurisation and isolation of the existing flowline from the central manifold and P6 wellhead (gas displaced into subsea process system);
- Disconnection of existing flowline from central manifold and P6 wellhead (existing flowline will be left in situ on the seabed);
- Preparation of laydown area and lay route for new flexible flowline;
- Deployment of the new flexible flowline from the support vessel and connection to central manifold and P6 wellhead using ROVs and the remotely operated ICARUS tie-in tool;
- Pressure testing and pre-commissioning activities for new flowline;

• Installation of protective concrete mattresses along length of new flexible flowline and in places along disconnected flowline to provide stability; • Reinstatement of the worksite and completion of an As-Left Survey including underwater video / stills and geophysical survey; and • Demobilisation of the support vessel and ROVs back to UK port. The As-Found and As-Left surveys will be carried out using the ROVs using a combination of survey techniques, namely multibeam echo sounder (MBES) and underwater video / camera imagery. A range of other sensors may also be used as part of the survey and ROV operations including: Sound Velocity Probes (SVPs) (used to calibrate acoustic survey equipment); as well as navigation / positioning sensors including a subsea Ultra Short Baseline (USBL) beacon system, obstacle avoidance sonar, an altimeter, Motion Reference Unit (MRU), Inertial Navigation System (INS) and Doppler Velocity Log (DVL). The total line kilometers for the As-Found and As-Left surveys will be approximately 2 line km. The survey is proposed to last approximately 6 days and occur between the months of May and October 2021 or during the same period in 2022

Project Element	**Have these features of the project been identified by the applicant? (If not, please provide details)**
Spatial Extent (size, scale, area etc)	**Yes.** The location of the Corrib Field and infrastructure is displayed, along with a total number of line kilometers for the As-Found and As-Left survey areas.
Supporting Infrastructure	**Yes.** Description meets requirements.
Transportation Requirements	**Yes.** The ROV support vessel has been identified as the *Siem Spearfish.*
Physical changes that will result from the project (e.g. from excavation, dredging)	**Yes.** The project will comprise physical intervention of the flowline that will result in temporary changes in the suspended sediment concentration and disturbance of the physical seabed. The applicant proposes to leave the existing flowline on the seabed. The applicant also proposes to use concrete mattresses to stabilise the proposed new flowline, and to stabilise the decommissioned flowline.
Emissions and Waste	**Yes.** Routine emissions and discharges during vessel operations have been considered. Description meets requirements.
Resource Requirements (e.g. water abstraction)	**Not applicable**. The resource requirements are standard for any vessel operations and are considered to be minimal.
Duration of each phase *e.g.* • *Phase 1 Construction* • *Phase 2 Operation* • *Phase 3 Decommissioning*	It is stated that the survey will be approximately 6 days in duration and will take place between the months of May and October 2021 or during the same period in 2022subject to weather conditions and regulatory approvals. The As-Found and As-Left surveys are expected to take less than 1 day each in duration.

The AA screening must consider the effects of the project in combination with other plans and other projects in making the screening assessment.

Table 3.3 provides a review of the in-combination assessment undertaken by the applicant.

Table 3.3: In-combination Assessment

Brief Description of identified plans / projects that might act in-combination (Operational, Consented and Proposed projects) with the proposed project:
The applicant's AA screening report considers the following projects that might act in-combination with the proposed project:

• Additional work programme at Corrib Field, scheduled for summer 2021 and 2022 which includes geophysical and visual surveys for inspection, maintenance and renewal of infrastructure; •

Project Element	**Is the predicted magnitude / extent of identified likely in-combination effects considered by the applicant?**	**Summary**
Spatial Extent (define boundaries for examination of in-combination effects)	Yes	The applicant has stated that the As-Found and As-Left surveys will be approximately 2 line km. Though a line plan is not specifically provided, Figures 3-2 and 3-3 depict the location of the current and potential future infrastructure that will be surveyed and is considered sufficient.
Impact Identification (e.g. noise, chemical emissions etc.)	Yes	The applicant considers that in-combination effects could occur through the pathways of underwater noise and disturbance from vessel presence.
Pathway Identification (e.g. via water, air etc)	Yes	The applicant identifies that the pathway for in-combination is via water.

3.3 Identification of relevant European sites and species

The applicant's AA screening report considers the designated European sites that may be impacted by the project, including consideration of direct, indirect and in combination effects. As projects that lie out with European sites may still have an impact upon their integrity, particularly in a marine environment where the environment is extremely dynamic and species may be highly mobile, identifying potential zones of influence surrounding the European sites is a key component.

Table 3.4 identifies the relevant European Sites and species that might be impacted by the project.

Table 3.4: Identification of Relevant European Sites/Species AA Screening Checklist

Natura site/ Annex IV species identified by assessor	Distance from Project Site (km)	Are the Natura site / Annex IV species identified by the applicant?	Are all the qualifying interests / Annex IV listed by the applicant?	Are direct impacts to the Natura Site / Annex IV species considered by the applicant?	Are indirect impacts to the Natura Site / Annex IV species considered by the applicant?	Are Potential Zones of Influence on the Natura Site / Annex IV species considered by the applicant?	Are in combination effects considered by the applicant?	Briefly summarise whether the applicant's consideration of relevant Natura sites / Annex IV species which may be affected by the proposed project, meets the requirements for a screening opinion:
1. West Connacht Coast SAC (002998)	57	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
2. Inishkea Islands SAC (000507)	59	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
3. Duvillaun Islands SAC (000495)	64	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
4. Mullet/Blacksod Bay Complex SAC (000470)	64	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
5. Broadhaven Bay SAC (000472)	69	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
6. Glenamoy Bog Complex SAC (000500)	77	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
7. Owenduff/Nephin Complex SAC (000534)	85	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.

Natura site/ Annex IV species identified by assessor	**Distance from Project Site (km)**	**Are the Natura site / Annex IV species identified by the applicant?**	**Are all the qualifying interests / Annex IV listed by the applicant?**	**Are direct impacts to the Natura Site / Annex IV species considered by the applicant?**	**Are indirect impacts to the Natura Site / Annex IV species considered by the applicant?**	**Are Potential Zones of Influence on the Natura Site / Annex IV species considered by the applicant?**	**Are in combination effects considered by the applicant?**	**Briefly summarise whether the applicant's consideration of relevant Natura sites / Annex IV species which may be affected by the proposed project, meets the requirements for a screening opinion:**
8. Inishbofin and Inishshark SAC (000278)	94	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
9. Clew Bay Complex SAC (001482)	96	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
10. River Moy SAC (002298)	103	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
11. Mweelrea/Sheeffry/Erriff Complex SAC (001932)	105	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
12. The Twelve Bens/Garraun Complex SAC (002031)	111	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
13. Newport River SAC (002144)	111	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
14. Slyne Heads Islands SAC (000328)	113	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.

Natura site/ Annex IV species identified by assessor	**Distance from Project Site (km)**	**Are the Natura site / Annex IV species identified by the applicant?**	**Are all the qualifying interests / Annex IV listed by the applicant?**	**Are direct impacts to the Natura Site / Annex IV species considered by the applicant?**	**Are indirect impacts to the Natura Site / Annex IV species considered by the applicant?**	**Are Potential Zones of Influence on the Natura Site / Annex IV species considered by the applicant?**	**Are in combination effects considered by the applicant?**	**Briefly summarise whether the applicant's consideration of relevant Natura sites / Annex IV species which may be affected by the proposed project, meets the requirements for a screening opinion:**
15. Maumturk Mountains SAC (002008)	118	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
16. Connemara Bog Complex SAC (002034)	118	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
17. Killala Bay/Moy Estuary SAC (000458)	120	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
18. Kilkieran Bay and Islands SAC (002111)	136	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
19. Lough Corrib SAC (000297)	147	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
20. Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC (000627)	154	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
21. Slieve Tooey/Tormore Island/Loughros Beg Bay SAC (000190)	154	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.

Natura site/ Annex IV species identified by assessor	**Distance from Project Site (km)**	**Are the Natura site / Annex IV species identified by the applicant?**	**Are all the qualifying interests / Annex IV listed by the applicant?**	**Are direct impacts to the Natura Site / Annex IV species considered by the applicant?**	**Are indirect impacts to the Natura Site / Annex IV species considered by the applicant?**	**Are Potential Zones of Influence on the Natura Site / Annex IV species considered by the applicant?**	**Are in combination effects considered by the applicant?**	**Briefly summarise whether the applicant's consideration of relevant Natura sites / Annex IV species which may be affected by the proposed project, meets the requirements for a screening opinion:**
22. Ballysadare Bay SAC (000622)	157	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
23. Lough Gill SAC (001976)	168	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
24. West of Ardara/Maas Road SAC (000197)	170	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
25. Galway Bay Complex SAC (000268)	174	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
26. Rutland Island and Sound SAC (002283)	178	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
27. Lough Melvin SAC (000428)	178	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
28. Donegal Bay (Murvagh) SAC (000133)	187	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.

Natura site/ Annex IV species identified by assessor	**Distance from Project Site (km)**	**Are the Natura site / Annex IV species identified by the applicant?**	**Are all the qualifying interests / Annex IV listed by the applicant?**	**Are direct impacts to the Natura Site / Annex IV species considered by the applicant?**	**Are indirect impacts to the Natura Site / Annex IV species considered by the applicant?**	**Are Potential Zones of Influence on the Natura Site / Annex IV species considered by the applicant?**	**Are in combination effects considered by the applicant?**	**Briefly summarise whether the applicant's consideration of relevant Natura sites / Annex IV species which may be affected by the proposed project, meets the requirements for a screening opinion:**
29. Lough Eske and Ardnamona Wood SAC (000163)	194	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
30. Lower River Shannon SAC (002165)	209	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
31. Horn Head and Rinclevan SAC (000147)	214	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
32. Inishkea Islands SPA (004004)	59	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
33. Inishglora and Inishkeeragh SPA (004084)	61	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
34. Termoncarragh Lake and Annagh Machair SPA (004093)	64	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
35. Duvillaun Islands SPA (004111)	64	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.

Natura site/ Annex IV species identified by assessor	**Distance from Project Site (km)**	**Are the Natura site / Annex IV species identified by the applicant?**	**Are all the qualifying interests / Annex IV listed by the applicant?**	**Are direct impacts to the Natura Site / Annex IV species considered by the applicant?**	**Are indirect impacts to the Natura Site / Annex IV species considered by the applicant?**	**Are Potential Zones of Influence on the Natura Site / Annex IV species considered by the applicant?**	**Are in combination effects considered by the applicant?**	**Briefly summarise whether the applicant's consideration of relevant Natura sites / Annex IV species which may be affected by the proposed project, meets the requirements for a screening opinion:**
36. Blacksod Bay/Broad Haven SPA (004037)	65	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
37. Bills Rocks SPA (004177)	75	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
38. Stags of Broadhaven SPA (004072)	82	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
39. Clare Island SPA (004136)	89	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
40. Illanmaster SPA (004074)	91	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
41. Cruagh Island SPA (004170)	105	Yes	No	Yes	Yes	Yes	Yes	Meets the requirements.
42. Connemara Bog Complex SPA (004181)	119	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.

Natura site/ Annex IV species identified by assessor	**Distance from Project Site (km)**	**Are the Natura site / Annex IV species identified by the applicant?**	**Are all the qualifying interests / Annex IV listed by the applicant?**	**Are direct impacts to the Natura Site / Annex IV species considered by the applicant?**	**Are indirect impacts to the Natura Site / Annex IV species considered by the applicant?**	**Are Potential Zones of Influence on the Natura Site / Annex IV species considered by the applicant?**	**Are in combination effects considered by the applicant?**	**Briefly summarise whether the applicant's consideration of relevant Natura sites / Annex IV species which may be affected by the proposed project, meets the requirements for a screening opinion:**
43. West Donegal Coast SPA (004150)	151	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
44. Ardboline Island and Horse Island SPA (004135)	154	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
45. Inishmore SPA (004152)	154	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
46. Inishmurray SPA (004068)	155	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
47. Inishduff SPA (004115)	165	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
48. Inner Galway Bay SPA (004031)	175	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
49. Cliffs of Moher SPA (004005)	185	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.

Natura site/ Annex IV species identified by assessor	**Distance from Project Site (km)**	**Are the Natura site / Annex IV species identified by the applicant?**	**Are all the qualifying interests / Annex IV listed by the applicant?**	**Are direct impacts to the Natura Site / Annex IV species considered by the applicant?**	**Are indirect impacts to the Natura Site / Annex IV species considered by the applicant?**	**Are Potential Zones of Influence on the Natura Site / Annex IV species considered by the applicant?**	**Are in combination effects considered by the applicant?**	**Briefly summarise whether the applicant's consideration of relevant Natura sites / Annex IV species which may be affected by the proposed project, meets the requirements for a screening opinion:**
50. Mid-Clare Coast SPA (004182)	197	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
51. Tory Island SPA (004073)	208	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
52. River Shannon and River Fergus Estuaries SPA (004077)	210	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
53. Loop Head SPA (004119)	210	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
54. Horn Head to Fanad Head SPA (004194)	215	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
55. Kerry Head SPA (004189)	226	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
56. Dingle Peninsula SPA (004153)	235	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.

Natura site/ Annex IV species identified by assessor	**Distance from Project Site (km)**	**Are the Natura site / Annex IV species identified by the applicant?**	**Are all the qualifying interests / Annex IV listed by the applicant?**	**Are direct impacts to the Natura Site / Annex IV species considered by the applicant?**	**Are indirect impacts to the Natura Site / Annex IV species considered by the applicant?**	**Are Potential Zones of Influence on the Natura Site / Annex IV species considered by the applicant?**	**Are in combination effects considered by the applicant?**	**Briefly summarise whether the applicant's consideration of relevant Natura sites / Annex IV species which may be affected by the proposed project, meets the requirements for a screening opinion:**
57. Blasket Islands SPA (004008)	247	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
58. Iveragh Peninsula SPA (004154)	264	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
59. Puffin Island SPA (004003)	281	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
60. Skelligs SPA (004007)	286	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
61. Deenish Island and Scariff Island SPA (004175)	294	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
62. Beara Peninsula SPA (004155)	304	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
63. The Bull and The Cow Rocks SPA (004066)	309	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.

Natura site/ Annex IV species identified by assessor	**Distance from Project Site (km)**	**Are the Natura site / Annex IV species identified by the applicant?**	**Are all the qualifying interests / Annex IV listed by the applicant?**	**Are direct impacts to the Natura Site / Annex IV species considered by the applicant?**	**Are indirect impacts to the Natura Site / Annex IV species considered by the applicant?**	**Are Potential Zones of Influence on the Natura Site / Annex IV species considered by the applicant?**	**Are in combination effects considered by the applicant?**	**Briefly summarise whether the applicant's consideration of relevant Natura sites / Annex IV species which may be affected by the proposed project, meets the requirements for a screening opinion:**
64. Treshnish Isles SPA (UK9003041)	374	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
65. Rum SPA (UK9001341)	403	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
66. Irish Sea Front (UK9020328)	530	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
67. Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Penfro (UK 9014051)	620	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
68. Glannau Aberdaron ac Ynys Enlli / Aberdaron Coast and Bardsey Island (UK9013121)	635	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
69. Annex II/IV species - otter	n/a	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.

Natura site/ Annex IV species identified by assessor	**Distance from Project Site (km)**	**Are the Natura site / Annex IV species identified by the applicant?**	**Are all the qualifying interests / Annex IV listed by the applicant?**	**Are direct impacts to the Natura Site / Annex IV species considered by the applicant?**	**Are indirect impacts to the Natura Site / Annex IV species considered by the applicant?**	**Are Potential Zones of Influence on the Natura Site / Annex IV species considered by the applicant?**	**Are in combination effects considered by the applicant?**	**Briefly summarise whether the applicant's consideration of relevant Natura sites / Annex IV species which may be affected by the proposed project, meets the requirements for a screening opinion:**
70. Annex IV species - cetaceans	n/a	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.
71. Annex IV species- turtles	n/a	Yes	Yes	Yes	Yes	Yes	Yes	Meets the requirements.

3.4 Screening for Likely Significant Effects on Natura Sites and Adverse Effects on Annex IV Species

Table 3.5 provides a summary of the likely significant effects identified for the project alone and in combination with other projects considering, *inter alia*, the characteristics and specific environmental conditions of the sites concerned by the relevant project and the project location.

Table 3.5: Assessment of Likely Significant Effects (LSE) AA Screening

Summary of LSE
The applicant's AA Screening Report identified the following impact sources for further consideration in the determination of LSE: • Physical presence of the ROV support vessels, ROVs and equipment; • As-Found and As-Left acoustic geophysical surveys and associated general vessel activity; • Routine emissions and discharges during vessel operations; • Direct and indirect impacts resulting from the P6 flowline replacement works activities themselves; • Accidental events. Each impact source has been assessed for its impact to different qualifying features of European sites, as per below. **Physical presence of ROV support vessel, ROVs and equipment** Potential interaction with marine mammals (disturbance/risk of collision) and seabirds (disturbance resulting in displacement from foraging areas). With regards to marine mammals, disturbance is considered unlikely given the total habitat available to the highly mobile receptor, and the short duration of the survey. Likelihood of collision with marine mammals is also considered extremely low, given the method by which the equipment will be deployed, the survey speed, and the mobility of marine mammals. With regards to seabirds, displacement effects are considered unlikely to affect local bird populations given the short duration of the survey, and total available foraging habitat to seabird species in the wider area. **As-Found and As-Left acoustic surveys and associated general vessel activity** This is considered the primary potential impact of the activities by the applicant. There is the potential for underwater acoustic disturbance to mobile marine species. Specific impacts on seabirds cannot be ruled out but is considered unlikely to be significant. Marine mammals are considered to be a key receptor that have the potential to be affect by underwater noise. Although it is known that bottlenose dolphins, grey seals, harbour seals and harbour porpoises from nearby SACs may be present in the survey area during operations, it is considered unlikely that the surveys will result in any significant affects, as no discernible effect has been observed during previous surveys. Furthermore, the acoustic scope of this proposed survey is significantly reduced compared to such previous surveys. A characterisation of the underwater noise has been undertaken as part of the NIS. Underwater noise impacts on migratory fish are also considered, however no effect is predicted due to the short duration of the survey and the rapid attenuation of high frequency sound, in addition to the low hearing sensitivity of Annex II migratory fish species. **Routine emissions and discharges** None of the qualifying features are likely to be impacted by routine emissions and discharges. **P6 flowline replacement works** The replacement works will result in localised changes to the suspended sediment concentration, physical disturbance to the seabed, and release of a small volume of liquid into the environment. The applicant has determined that the area of seabed that would be altered is negligible. The liquid to be released is of low toxicity and its rapid dispersion and dilution will result in a negligible impact. No LSE is predicted for any qualifying features of European sites from this pathway. **Accidental events**

It is considered that a spillage or accidental release could impact qualifying habitats and species at a European site if it should occur. However, an accidental event is considered to be of very low likelihood, and as such it is unlikely to have a significant effect on any qualifying species. The AA Screening Conclusions state that: • No habitats are likely to be significantly affected by the listed potential impacts; • The main impact of underwater noise on qualifying features is highly unlikely but that these impacts cannot be ruled out; and • Accidental events are very low in likelihood and so any effects on European sites and their qualifying interests is very low. As a result of the assessment, it is considered that the project activities, taken either individually or when in combination with other plans or projects, are not likely to have a significant effect on any European site, however, the potential for impacts on qualifying features as a result of underwater noise cannot be ruled out in spite of the unlikelihood of such an occurrence.
Do you agree with the applicant's AA screening assessment? Why?
In our expert opinion, we agree with the applicant's AA Screening that significant effects cannot be excluded for the reasons stated in the documentation and therefore a NIS is required to support the application.

3.5 Screening Determination

If significant effects are certain, likely or uncertain then the DECC must request the applicant provides a NIS in order for the DECC to undertake an AA as the competent authority. The applicant may also choose to recommence the screening process with a modified project that removes or avoids elements that posed risks of LSE.

Table 3.6 and 3.7 provide a summary of Ramboll's recommendation to enable DECC to make a screening determination.

Table 3.6: Summary of Applicant's Screening Report Review

Is the plan or project directly connected with or necessary to the nature conservation management of the Natura site?	No
Is the project or plan likely to have significant effects on the environment?	Yes, on this basis that the potential for impact on qualifying features as a result of underwater noise cannot be ruled out.
Is an AA required? (Yes / No / More Information Required?)	Yes, there is potential for likely significant effects from the project on European sites and species. Therefore, a NIS is required to assess the likely significant effects in view of the European sites and species and their conservation objectives.
What further information is required to inform AA Screening Opinion (if any)?	None. Sufficient information has been provided by the applicant to be able to conclude that a NIS is required to support the application.

Table 3.7: Recommendation of Screening Determination

Outcome of Screening Report Assessment	**Overall Screening Opinion / AA Required?**
Likely or Potential Likely Significant Effects on Natura Sites identified, and project is not directly connected with or necessary to the nature conservation management of the Natura site.	Yes, it is concluded that it is not possible as a matter of scientific certainty to rule out likely significant effects (without mitigation). As such an Appropriate Assessment is required and the applicant must provide a Natura Impact Statement.
~~No Likely Significant Effects on Natura sites identified, and project is not directly connected with or necessary to the nature conservation management of the Natura site.~~	~~Appropriate Assessment is not required.~~

4. STAGE 2 APPROPRIATE ASSESSMENT

4.1 Natura Impact Statements

A NIS[5] is a scientifically robust examination of a proposed plan or project, which is used to characterise any possible implications of the project on the conservation objectives of any relevant European site(s). The primary purpose of the NIS is to provide the competent authority with the information required to complete an AA.

Following the receipt of a NIS, the DECC (as the competent authority) will undertake an AA to determine whether the proposed project is likely to have an adverse effect on the integrity[6] of any relevant European sites with regards to their conservation objectives, both individually and in combination with other plans or projects. On completion of the AA, the DECC will produce an AA Conclusion Statement.

The applicant's AA screening report identified potential LSE associated with underwater noise generated from the As-Found and As-Left acoustic surveys on key receptor species (marine mammals, fish and diving seabirds). The potential for LSE on habitats was screened out.

Therefore, the potential effects of underwater noise were assessed for the key receptor species listed as Qualifying Interests of designated Natura 2000 sites or listed as Annex IV species to the Habitats Directive. The conclusion of the applicant's AA screening report was that LSE cannot be excluded for these species.

Table 4.1 provides a checklist of information that should be provided by the applicant's NIS (or supporting documents), with regards to European site(s) and/or species that may be affected by the proposed project, in order for the DECC to undertake an AA.

Table 4.1: Summary of European Site Information to be Included in a NIS (or supporting documentation)

NIS Content	Does the applicant's NIS provide the following information? (Y/N)	Briefly Explain Answer:
The Conservation Status of relevant Habitats and Species listed under Annex II of the Habitats Directive;	Yes	The conservation status of the habitats and species listed on Annex II of the Habitats Directive are not detailed by the applicant. However, the conservation objectives are provided, which is to maintain or restore favourable conservation status of the relevant habitats and species. This is considered sufficient to inform a decision.
The Conservation Status of relevant Species listed under Annex I of the Birds Directive;	Yes	The conservation status of the relevant species listed on Annex I of the Birds Directive are not detailed by the applicant. However, the conservation objectives are provided, which are to maintain or restore the favourable conservation status of

NIS Content	Does the applicant's NIS provide the following information? (Y/N)	Briefly Explain Answer:
		the bird species listed as Special Conservation Interests for each SPA. This is considered sufficient to inform a decision.
The baseline conditions of any relevant European site(s);	Yes	Adequate information has been provided by the applicant in this regard.
The conservation objectives and qualifying features of any relevant European site(s);	Yes	The conservation objectives and qualifying features of the relevant European sites have been adequately described adequately by the applicant.
Any management plans associated with relevant European site(s);	Yes	Though the applicant has not made reference to any management plans, it is acknowledged that there are no relevant management plans available for the sites screened in.
Details on each species and habitat type for which relevant European site(s) are designated and spatial mapping of the distribution and temporal mapping, including lifestyle stages;	Yes	Adequate information has been provided by the applicant in this regard.
Information on population profile of the species and their conservation status (e.g. size, population structure etc.)	Yes	Population estimates for Annex II marine mammals and Annex I birds have been included where they are a designated feature of a European site. Conservation objectives of the sites have been provided.
Ecosystem structure and functioning of the site and its overall conservation state;	Yes	Adequate information has been provided by the applicant in this regard as the applicant has provided a short description of each European site.
The role of the site within the ecosystem region and the Natura 2000 network;	Yes	Sufficient information is provided on the sites as a whole to inform a decision.
Any other aspects of the site or its wildlife that is likely to have an influence on its conservation status and objectives (e.g. current management activities, other developments etc.)	Yes	No management plans are known to exist for the sites included. Conservation objectives are detailed. Ramboll considers that the information provided by the applicant is sufficient to inform a decision.

Table 4.2 provides a checklist of information that should be provided in the NIS (or supporting documents), in order for the DECC to complete an AA.

Table 4.2: Summary of Information to be Included in a NIS (or supporting documentation) for Consideration in AA

NIS Content	Does the applicant's NIS provide sufficient detail to inform an Appropriate Assessment? (Y/N)	Briefly Explain Answer:
A description of size, scale and objectives of the proposed plan or project;	Yes	The information provided on the proposed project activities details the survey objectives, line distance, activities, equipment, and duration which is considered adequate.
A description of the pressures of the proposed plan or project,and its likely impacts on the conservation objectives and local site characteristics;	Yes	Adequate information has been provided by the applicant to describe the pressures of the project and its likely impacts on the conservation objectives and local sites characteristics.
Identification of all European sites located within the zone of influence of the proposed plan or project, together with qualifying interests and conservation objectives;	Yes	The applicant has listed all the sites that it deems relevant for the project as part of the Stage 1 AA. The NIS considers the nearest site for each designated feature species group; it does not specifically detail all sites that may be affected. It is assumed therefore that all sites with designated features carried forward to the NIS have the potential to be affected by the project. The applicant's assessment shows no adverse effect on the integrity of the nearest sites. Ramboll agrees with this conclusion and notes that based on the nature of the likely effects (i.e. effects associated with underwater noise or disturbance) this can be taken as a proxy to support the conclusion that there would be no adverse effect on the integrity of all of the sites detailed in stage 1.
Methodologies, analysis and data sources utilised to demonstrate use of best scientific knowledge;	Yes	The applicant has used the most recent scientific knowledge to inform the assessment, such as Southall *et al.* (2019) to inform the hearing thresholds, and Woodward *et al.* (2019) to inform the bird foraging ranges.
A scientific assessment, analysis and statement of the significant effects including direct, indirect, cumulative and in combination effects of the relevant European site(s) and/or species which are expected to occur as a result of the development;	Yes	The applicant has provided an assessment, analysis and statement of the significant effects including direct, indirect, cumulative and in combination effects of the relevant European site(s) and/or species which are expected to occur as a result of the development.

NIS Content	Does the applicant's NIS provide sufficient detail to inform an Appropriate Assessment? (Y/N)	Briefly Explain Answer:
Details of any appropriate mitigation measures undertaken, or proposed to be undertaken by the applicant to mitigate any significant effects on the environment or on the European site(s) and/or species, and the period within which any such measures shall be carried out by the developer;	Yes	The applicant mentions that statutory required marine mammal mitigation protocols will be applied to the survey, and specifically mentions the use of soft starts and marine mammal observers (MMOs).
An assessment of the scope and scale of residual effects after mitigation (including direct, indirect, cumulative and in combination effects);	Yes	The applicant has provided an assessment of the scope and scale of residual effects after mitigation (including direct, indirect, cumulative and in combination effects)
A conclusion in relation to whether or not the project would adversely affect the integrity of any European site (either individually or in cumulation with other existing or consented developments)	Yes	The applicant presents a concluding statement that as a result of the above assessment, which takes account of the best scientific knowledge – including in the light of direct monitoring of similar activities over a period of years - and the conservation objectives of the closest European site, it is considered that the proposed activities taken either individually or when in combination with other plans or projects, are not likely to adversely affect the integrity of any European sites or on any other designated site or species.

4.2 Article 12 Assessment in relation to Annex IV species

The Applicant's NIS makes cross reference to the EIA screening and risk assessment for Annex IV species that accompanies the application, which provides further characterisation of the baseline for Annex IV species of marine mammals and sea turtles in the area. The assessment provided supports the conclusion that the proposed project will not cause any significant disturbance to Annex IV species.