



**CORRIB FIELD: APPLICATION TO CONDUCT SURVEY AND INSPECTION/ MAINTENANCE
PROGRAMME OF THE PIPELINE AND OFFSHORE FACILITIES, AND REMEDIAL MAINTENANCE WORK**

ENVIRONMENTAL IMPACT ASSESSMENT (EIA) SCREENING DETERMINATION

Project Proposal

Further to the petroleum lease granted to the Corrib Gas Partners pursuant to Section 13 of the Petroleum Act 1960 (**Corrib Petroleum Lease**), a number of additional consents have been granted in respect of the Corrib Gas Field development, the details of which can be found on the DCCAE website. The consents granted in respect of the Corrib Gas Field development include a consent to operate the Corrib Gas Pipeline, granted in December 2015 pursuant to Section 40 of the Gas Act 1976, which is subject to a number of conditions, including the following:-

20. *‘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’.*

On 15 April 2019, Vermillion Exploration and Production Ireland Ltd (**Vermillion**), submitted an application to the Department of Communications, Climate Action and Environment (**DCCAE**) for approval to conduct an offshore pipeline survey and inspection/maintenance programme of the offshore facilities in the Corrib field, along with remedial work on the P3 well.

The proposed survey programme and repair work will consist of the following elements:-

- A subsea inspection and maintenance and infrastructure renewal survey programme of the subsea facilities using ROV and vessel mounted equipment deployed from the Construction / ROV Survey Support Vessel *Edda Sun*. This vessel will be responsible for the survey covering the area of the Corrib offshore field assets as well as seabed infrastructure as far inshore as Broadhaven Bay.
- A subsea inspection and maintenance survey programme of the subsea infrastructure using vessel deployed equipment from the inshore survey vessel *Leah-C*. This vessel will be responsible for the inshore parts of the survey, primarily within Broadhaven Bay as far as the inshore limit of safe navigation.
- The *Edda Sun* will also undertake a repair programme to the Corrib Central Manifold P3 wellhead, which will require the opening of the wellhead protection cover and replacement of the bridging plate and hydraulic override tool on the AMV actuator at the wellhead. No use of acoustic survey equipment is planned during the repair programme at P3.

The inshore and offshore elements of the work programme will investigate features such as free-spanning and scouring, and pipeline burial depth and integrity, as well as cathodic protection

measures. The offshore elements of the survey programme will also include the P3 wellhead structure remedial works, but no use of acoustic survey equipment is planned during the repair itself. As described above, a large offshore survey support vessel will undertake the offshore parts of the survey, while an inshore survey vessel will carry out the inshore elements of the survey. Both surveys will cover the area of the Corrib Field along the full extent of the offshore pipeline route (also covering selected sections of the main control umbilical), the BBGT water outfall pipeline, and other seabed infrastructure) as far inshore as the limit of navigation close to the landfall at Glengad.

The following documents were submitted with the Vermillion application:-

- (i) Application to Conduct an Offshore Survey;
- (ii) Two Method Statements:
 - a. Subsea Inspection and Maintenance;
 - b. Well P3 Hydraulic Fluid Loss Permanent Repair;
- (iii) Natura Impact Statement;
- (iv) EIA Screening and Environmental Risk Assessment for Annex IV Species.

Assessment Process

The Environment Advisory Unit (**EAU**), a functionally separate and independent unit of DCCAE is responsible for carrying out environmental screening and any environmental assessments determined as being required following screening, in accordance with the requirements set out in Directive 2011/92/EU, as amended by Directive 2014/52/EU (**EIA Directive**) and Directive 92/43/EEC, as amended, (**Habitats Directive**), in the context of applications, such as the within application, seeking approval to undertake a survey programme comprising an offshore pipeline and subsea structure inspection (to include repair and maintenance work as necessary), inshore pipeline inspection/maintenance, as well as a programme of repair works in relation to an existing wellhead.

EIA – In Ireland, environmental assessments of such applications are carried out by the EAU in accordance with Directive 2011/92/EU, as amended by Directive 2014/52/EU (EIA Directive). Where the activities the subject of the application fall outside the projects listed in Annex I of the EIA Directive, an EIA Screening Assessment and Determination is required to be carried out by the EAU in the first instance, as to whether the activities the subject of the application would, or would not be likely to have, significant effects on the environment by virtue, *inter alia*, of their nature size and location. Where it has been determined, following screening, that the activities the subject of the application are likely to have significant effects on the environment, an environmental impact assessment will be required.

Habitats – The European Communities (Birds and Natural Habitats) Regulations 2011 – 15 (S.I. 477 of 2011, as amended) (**Birds and Natural Habitats Regulations**) give effect to the Habitats Directive as a matter of Irish law and require, *inter alia*, that a public authority carry out screening for Appropriate Assessment of a plan or project for which an application for consent is received. Where a public authority determines that an Appropriate Assessment is required, the Birds and Natural Habitats Regulations require that the assessment carried out by a public authority include a determination pursuant to Article 6(3) of the Habitats Directive as to whether or not the plan or project would adversely affect the integrity of a European site. The EAU is responsible for carrying out Stage 1 AA screening assessments, and any Stage 2 Appropriate Assessment determined as being required following screening, in accordance with the Birds and Natural Habitats Regulations, in respect of applications, such as the within application.

On receipt of an application, the Petroleum Affairs Division in DCCA (‘**PAD**’) places the application on the DCCA website for consultation and refers the application, and any associated responses to the consultation, to the EAU for the purposes of carrying out its assessments.

On the completion of all environmental assessments by the EAU and after incorporating any suggested conditions which may be recommended by the EAU, the application will then be evaluated by the Petroleum Affairs Division in the Department who will make a recommendation to the Minister of State regarding whether consent should be given for the activities applied for.

Independent Expert Advisors

DCCA has further engaged Ramboll Environment and Health UK Limited (**Ramboll**) to provide advice to the EAU with regard to the carrying out of statutory environmental assessments of applications, such as the within application, in respect of an existing pipeline and offshore facilities, seeking permission to carry out a survey programme comprising an offshore pipeline and subsea structure inspection (to include repair and maintenance work as necessary), inshore pipeline inspection/maintenance, as well as a programme of repair works in relation to an existing wellhead.

Ramboll conducted an independent assessment of the information provided by the Applicant by reference to the relevant selection criteria set out in Annex III of the EIA Directive and their Report entitled “Statutory Environmental Assessment Screening Determination for Corrib Pipeline Survey, Inspection and Maintenance” (**‘Ramboll Report’**) is shown at Appendix 1.

Legislative Background

The EIA Directive (Directive 2011/92/EU, as amended by Directive 2014/52/EU) requires that projects that are likely to have significant effects on the environment by virtue, *inter alia*, of their nature, size or location are made subject to an environmental impact assessment.

Under Article 4 of the EIA Directive, projects listed under Annex I are automatically subject to an environmental impact assessment and for projects listed in Annex II, Member States shall determine whether the project shall be subject to an assessment and can make the determination through either one of both (a) case by case examination or (b) thresholds set by the Member State.

Article 4(4) of the Directive requires in respect of projects listed in Annex II that the developer provide information on the characteristics of the project and its likely significant effects on the environment. The list of information to be provided is set out at Annex IIA; namely:

1. A description of the project, including in particular:
 - (a) a description of the physical characteristics of the whole project and, where relevant, of demolition works;
 - (b) a description of the location of the project, with particular regard to the environmental sensitivity of geographical areas likely to be affected.
2. A description of the aspects of the environment likely to be significantly affected by the project.
3. 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:
 - (a) the expected residues and emissions and the production of waste, where relevant;
 - (b) the use of natural resources, in particular soil, land, water and biodiversity.

Annex IIA further provides that the criteria listed in Annex III of the Directive shall be taken into account, where relevant, when compiling the information required in 1 – 3 above.

Article 4(4) further provides that the developer may also provide a description of any features of the project and/or measures designed to avoid or prevent what might otherwise have been significant adverse effects on the environment.

The EIA Directive requires that when carrying out an EIA Screening Assessment, the relevant selection criteria as set out in Annex III shall be taken into account.

Article 4(6) of the EIA Directive requires that an EIA Screening Decision must be made as soon as possible and within a period not exceeding 90 days from the date on which the developer has submitted all the information required.

Public Consultation and Process

The Vermillion application and supporting documentation were posted on the DCCA website on 16 April 2019. During the 30 period of consultation, it came to the Department's attention that not all the documents had been posted on the website at the same time. In order to ensure that a 30 day consultation would apply in respect of all the application documents, an extension of the 30 day consultation period was granted to Tuesday, 28th May 2019. The following responses were received and the points raised have been considered as part of the EIA screening assessment process:

- Department of Culture, Heritage & Gaeltacht dated 27th May 2019
- Submission from Member of the Public dated 28th May 2019

Having reviewed the Vermillion Application and accompanying documents, the responses received to the public consultation, Ramboll recommended that further information be obtained from Vermillion in relation to their application on the basis that insufficient information had been provided with the application to enable an EIA Screening Assessment and Determination be made in respect of the proposed activities. Adopting that recommendation, additional information was sought from the Applicant on 25th June 2019. The Department website was updated to reflect the position and the bodies who submitted observations following the initial consultation were notified of the decision to request further information.

The Applicant submitted an updated EIA Screening and Environmental Risk Assessment for Annex IV Species (July 2019), which was published on the Department website on 5th July 2019, for comment by 19th July 2019. One response was received prior to the additional information being posted on the website that referred to more than one application and the points raised have been considered as part of the EIA screening assessment process:

- Submission from Member of the Public dated 14th June 2019

Having further reviewed the Vermillion Application and accompanying documents, including the updated information received, and the responses received to the supplemental public consultation, Ramboll recommended that further information be obtained from Vermillion in relation to their application on the basis that the information submitted to date remained insufficient to enable an EIA Screening Assessment and Determination be made in respect of the proposed activities. Adopting that recommendation, additional information was again sought from the Applicant on 31st

July 2019. The Department website was updated to reflect the position and the bodies who submitted observations following the initial consultation were notified of the decision to request further information

The Applicant submitted an updated EIA Screening and Environmental Risk Assessment for Annex IV species (August 2019), which was published on the Department website on 21st August 2019, for comment by 5th September 2019. Two further responses were received and the points raised have been considered as part of the EIA screening assessment process:-

- Department of Culture, Heritage & Gaeltacht dated 5th September 2019
- Submission from Member of the Public dated 5th September 2019

The consultation responses received (including the project specific observations) during the public consultations in respect of the Application are shown in the Ramboll Report at Appendix 1, and formed part of the external review of the Applicant's EIA Screening Assessment and Report undertaken by Ramboll.

EIA Screening Assessment and Determination

In carrying out the EIA Screening assessment of the application made by Vermillion in accordance with the requirements of the EIA Directive, I have carefully considered the following documents:-

- Documents provided by the Applicant:
 - Documents submitted with the application (as listed above);
 - Updated EIA Screening and Environmental Risk Assessment for Annex IV Species Report, prepared by RSK on behalf of Vermillion (dated August 2019);
 - Updated Natura Impact Statement, prepared by RSK on behalf of Vermillion (dated August 2019)
- External review of the applicant's EIA Screening Assessment / Report carried out by Ramboll (Ramboll Report entitled "Statutory Environmental Assessment Screening Determination for Corrib Pipeline Survey, Inspection and Maintenance, which is included at Appendix 1)
- Submissions received during the public consultation processes

The EIA screening assessment of the project carried out by Ramboll considered the different project elements by reference to the Annex III criteria. In this context the following elements were considered:

- **Characteristics of the Project** including size and design of the development, cumulation with other with other existing or approved developments, use of natural resources (particularly land, soil, water and biodiversity), production of waste, pollution and nuisances, risk of major accidents and/or disasters relevant to the project including climate change, risks to human health
- **Location of the project** including existing and approved land use, relative abundance, availability and regenerative capacity of natural resources in the area, absorption capacity of wetlands, riparian areas and river mouths, absorption capacity (of coastal zones and marine areas, nature reserves and parks, areas classified or protected under national legislation,

areas where there has been a failure to meet environmental quality standards, landscapes and sites of historical, cultural or archaeological significance).

- **Types and characteristics of the potential impact** as set out in Annex III of the EIA Directive.

Based on careful consideration of the documentation highlighted above by reference to the Annex III criteria, I agree with and adopt the conclusions reached in the Ramboll Report (at Appendix 1) regarding the adequacy of the information provided by the applicant and accordingly am satisfied that the applicant has provided sufficient information to enable an EIA Screening Assessment of the proposed site survey programme, comprising an offshore pipeline and subsea structure inspection (to include repair and maintenance work as necessary), inshore pipeline inspection/maintenance, as well as a programme of repair and engineering work on the P3 well.

I further agree with and adopt the responses to the project specific observations received during the public consultation process as set out in the Ramboll Report (at Appendix 1 to this Determination).

As regards the additional observations made during the public consultation process relating to the current regulatory process and structures in DCCAE, these are addressed, in addition to the Ramboll response, in the “Assessment Process” section of this Determination, which describes the structural changes that have occurred in the Department’s management of the environmental assessment and decision making processes in respect of applications, such as the within application.

I note the applicant’s own conclusion that the proposed Corrib site survey is not likely to have a significant effect on the environment and that an EIA is not, therefore, required.

I further agree with and adopt the EIA Screening Assessment carried out by Ramboll in respect of the Vermillion application by reference to the Annex III criteria and the conclusions reached in the Ramboll EIA Screening Determination for Corrib Site Survey Report (set out at Appendix 1 to this Determination). I further note, agree with and adopt the confirmation from Ramboll (at pages 1 and 8 of the Ramboll Report) that the conclusions of the assessment would not materially change, should any of the work be delayed until later in 2019 or 2020.

Accordingly, I am satisfied and have decided that the proposed survey programme in the Corrib Field, comprising an offshore pipeline and subsea structure inspection (to include repair and maintenance work as necessary), inshore pipeline inspection/maintenance, as well as the programme of repair works of the P3 wellhead is not likely to have a significant effect on the environment and, consequently, an Environmental Impact Assessment is not required in respect of the application, subject to the implementation of the mitigation measures referred to in the Ramboll Report, which are adopted as follows:

- I note the mitigation and management measures committed to by Vermillion and the requirements by the Department of Culture, Heritage and the Gaeltacht in the submission made as part of the public consultation and the recommendation by Ramboll in their Report that all measures should be included in any consent granted in respect of the Vermillion application. Accordingly I adopt all the mitigation measures recommended by Ramboll as outlined in Table 1 (below) and this decision is contingent on the inclusion of these mitigation measures in any consent granted in respect of this application.

Further the vessels proposed to be used for the surveys are the Edda Sun and the Leah –C and consideration of the potential for significant effects is based on the technical specifications for the vessels and their survey equipment supplied by the applicant. Accordingly, adopting the

recommendation by Ramboll, this decision is further contingent on the following also being included as a condition of any consent granted in respect of this application:

- The applicant must seek approval from DCCAE prior to the commencement of the survey should alternative survey vessels be proposed. In this event, confirmation will be required that the survey equipment and methodology on any replacement vessel are equivalent to that described in the applicant's EIA Screening Report, and that the nature and extent of the proposed activities described in that Report has not materially changed.

The Applicant can be informed of this EIA Screening Determination and the public will also be informed of this EIA Screening Determination, with the Determination being published on the Department's website and notice thereof being published in a national newspaper.

Jean Clarke

A handwritten signature in cursive script that reads "Jean Clarke".

Environment Advisory Unit, 14th October, 2019
Department of Communications, Climate Action and Environment

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific
	<p>The geophysical vessel operator must provide a report (including a daily log) on the operation of survey equipment that will indicate the soft starts and their duration to the MMO. This information will be made available to NPWS;</p> <p>The MMO must use a distance measuring stick, reticle telescope or binoculars to ascertain distances to marine mammals.</p> <p>Sound-producing activities will only commence in daylight hours where effective visual monitoring, as performed and determined by the MMO, has been achieved. Effective visual monitoring should be undertaken in good weather conditions, where sea state is low and visibility is good (no fog, heavy rain).</p> <p>Prior to the soft start the MMO will survey for 30 minutes. Soft start can only begin if the 500m zone around the centre of the sound source has been clear of species for 30 minutes.</p> <p>Soft start procedure will ensure controlled build-up of acoustic energy output is undertaken in consistent stages, providing a steady and controlled graduation acoustic source levels that will allow animals the opportunity to vacate the area:</p> <ul style="list-style-type: none"> • In commencing an acoustic survey operation, the following soft start (or ramp up) must be used, including during any testing of acoustic sources, where the output peak sound pressure level from any source exceeds 170 dB re: 1µPa @1m: • a) Where it is possible according to the operational parameters of the equipment concerned, the device's acoustic energy output shall commence from a lower energy start-up (i.e., a peak sound pressure level not exceeding 170 dB re: 1µPa @1m) and thereafter be allowed to gradually build up to the necessary maximum output over a period of 20 minutes. • b) This controlled build-up of acoustic energy output shall occur in consistent stages to provide a steady and gradual increase over the ramp-up period (e.g., output peak sound pressure level of 170 dB>180 dB>190 dB>200 dB200+ dB over 20 minutes). • c) Where the acoustic output measures outlined in steps (a) and (b) are not possible according to the operational parameters of any such equipment, the device shall be switched "on" and "off" in a consistent sequential manner over a period of 20 minutes prior to commencement of the full necessary output. • In all cases where a Ramp-Up Procedure is employed the delay between the end of ramp-up and the necessary full output should be minimised to prevent 	<p>X</p> <p>X</p> <p>X</p> <p>X</p>	

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific
	<p>unnecessary high-level sound introduction into the environment.</p> <ul style="list-style-type: none"> • Once the Ramp-Up Procedure commences, there is no requirement to halt or discontinue the procedure at night-time, nor if weather or visibility conditions deteriorate nor if Annex IV species occur within a 500 m radial distance of the sound source, i.e., within the Monitored Zone • If there is a break in sound output for a period greater than 30 minutes (e.g., due to equipment failure, shut-down, survey line or station change) then all Pre-Start Monitoring and a subsequent Ramp-up Procedure (where appropriate following Pre- Start Monitoring) must be undertaken. • An agreed and clear on-site communication signal must be used between the MMO and the Works Superintendent as to whether the relevant activity may or may not proceed, or resume following a break (see below). It shall only proceed on positive confirmation with the MMO. • For higher output survey operations which have the potential to produce injurious levels of underwater sound (see sections 2.4, 3.2) as informed by the associated risk assessment, there is likely to be a regulatory requirement to adopt a shorter 5- 10 minute break limit after which period all Pre-Start Monitoring and a subsequent Ramp-up Procedure (where appropriate following Pre-Start Monitoring) shall recommence as for start-up. • Vessel(s) working in or in vicinity to Broadhaven Bay SAC will operate in accordance with the Vessel Code of Conduct for Inspection and Maintenance Surveys (Document No. COR-14-SH-0227, 2018). This document forms part of the Operators Environmental Management Plan (EMP) and details specific measures for vessel operators to avoid impacts to marine mammals (particularly small cetaceans). Where at all possible when operating acoustic geophysical survey equipment, the Leah-C will work in an inshore to offshore direction, in an effort to retain an open aspect for animals to leave the confines of Broadhaven Bay, rather than animals wishing to increase their distance from the sound sources having to head further inshore 		
Atmospheric Emissions	Air emissions will be minimised through regular maintenance of all engines onboard, in line with Maritime Registry of Shipping (MRS), MARPOL 73/78 Annex VI and other similar requirements.	X	

