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STATUTORY
ENVIRONMENTAL
ASSESSMENT
APPROPRIATE
ASSESSMENT
SCREENING
DETERMINATION FOR
IOLAR APPLICATION
(WELL 52/01-A)



STATUTORY ENVIRONMENTAL ASSESSMENT APPROPRIATE ASSESSMENT SCREENING DETERMINATION FOR IOLAR APPLICATION (WELL 52/01-A)

Project No. **1700003678**

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EXECUTIVE SUMMARY

Ramboll Environment and Health UK Limited (herein referred to as Ramboll) has been commissioned by the Department for Communication, Climate Action and Environment (herein referred to as DCCAE) to provide assistance with regards to the statutory assessment of applications for consent submitted in respect of offshore geophysical and seismic survey acquisition applications and exploratory drilling.

CNOOC Petroleum Europe Ltd (formally known as Nexen Petroleum UK Ltd) (referred to herein as the applicant) has submitted an application for consent pursuant to the provision of Section 5(2) of the Continental Shelf Act 1968 to carry out proposed exploration drilling on well 52/01-A (Iolar) under Frontier Exploration Licence (FEL) 3/18. This will entail placing a temporary wellhead and associated infrastructure on the seabed. The competent authority (DCCAE) is required to give consideration to the potential for likely significant effects of such activities on European Site(s), 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 Habitats Regulations).

Paragraph 42(2) of the Habitats Regulations states that "A screening for Appropriate Assessment of a plan or project for which an application for consent is received, or which a public authority wishes to undertake or adopt, and which is not directly connected with or necessary to the management of the site as a European Site, shall be carried out by the public authority to assess, in view of best scientific knowledge and in view of the conservation objectives of the site, if that plan or project, individually or in combination with other plans or projects is likely to have a significant effect on the European site".

Furthermore the regulations provide under Regulation 42 (6) and 42 (7) that:

- "6. The public authority shall determine that an Appropriate Assessment of a plan or project is required where the plan or project is not directly connected with or necessary to the management of the site as a European Site and if it cannot be excluded, on the basis of objective scientific information following screening under this Regulation, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site.
- 7. The public authority shall determine that an Appropriate Assessment of a plan or project is not required where the plan or project is not directly connected with or necessary to the management of the site as a European Site and if it can be excluded on the basis of objective scientific information following screening under this Regulation, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site."

This report provides an assessment of the Iolar Exploration Well Appropriate Assessment Screening Report submitted by the applicant.

Public consultation on the information provided by the applicant has been undertaken by the DCCAE. The consultation responses received by the DCCAE have been taken into consideration in the preparation of this report.

Ramboll confirms that the information provided by the applicant is considered to be adequate, up to date and provides robust scientific information to enable the DCCAE to make a screening determination. This report provides a conclusion that can be used by the DCCAE to issue a screening determination. The conclusion of this report is that the applicant must provide a Natura Impact Statement (NIS) to enable the DCCAE to undertake an Appropriate Assessment (AA).

Table ES.1 summarises the overall screening determination.

Table ES.1: Summary of Screening Determination for Appropriate Assessment

Outcome of Screening Report Assessment	Overall Screening Opinion / AA Required?
Likely or Potentially 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 required. DCCAE to request NIS from Applicant.
No Likely Significant Effects on Natura Sites identified, or project is directly connected with or necessary to the nature conservation management of the Natura site.	Appropriate Assessment is not required

1. INTRODUCTION

Ramboll Environment and Health UK Limited (herein referred to as Ramboll) has been commissioned by the Department for Communication, Climate Action and Environment (herein referred to as DCCAE) to provide assistance with regards to the statutory assessment of applications for consent submitted in respect of offshore geophysical and seismic survey acquisition applications and exploratory drilling.

1

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This report provides an assessment of the Iolar Exploration Well Appropriate Assessment Screening Report submitted by the applicant.

1.1 Project Background

The competent authority (DCCAE) is required to give consideration to the potential for likely significant effects of any project on European Site(s), with regard 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 Habitats Regulations).

Paragraph 42(2) of the Habitats Regulations states that "A screening for Appropriate Assessment of a plan or project for which an application for consent is received, or which a public authority wishes to undertake or adopt, and which is not directly connected with or necessary to the management of the site as a European Site, shall be carried out by the public authority to assess, in view of best scientific knowledge and in view of the conservation objectives of the site, if that plan or project, individually or in combination with other plans or projects is likely to have a significant effect on the European site".

Furthermore the regulations provide under Regulation 42 (6) and 42 (7) that:

- "6. The public authority shall determine that an Appropriate Assessment of a plan or project is required where the plan or project is not directly connected with or necessary to the management of the site as a European Site and if it cannot be excluded, on the basis of objective scientific information following screening under this Regulation, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site.
- 7. The public authority shall determine that an Appropriate Assessment of a plan or project is not required where the plan or project is not directly connected with or necessary to the management of the site as a European Site and if it can be excluded on the basis of objective scientific information following screening under this Regulation, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site."

2. TERMS OF REFERENCE

2.1 Legislative context

This report has been prepared having regard to EC Directive 2009/147/EC¹ 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 as amended and relevant jurisprudence of the EU and Irish courts.

2.2 Relevant guidance

This report has been prepared having regard to guidance on appropriate assessment for planning authorities, published by the Department for Environment, Heritage and Local Government (DEHLG) in 2009². In addition, the structure and content of this report is based upon the methodology published by the European Communities in 2002³.

2.3 Public consultation

The application was advertised by DCCAE on their website following receipt of the application on 21 December 2018. Submissions were advertised by the DCCAE to be received by close of business on 21 January 2019 to ensure consideration by the Minister.

The following consultation responses were received:

- Consultation response received from An Taisce to DCCAE dated 13 December 2018.
- Consultation response received from An Taisce dated (21st January)
- Consultation response from Friends of the Irish Environment to DCCAE (undated).
- Consultation response from Gluaiseacht to DCCAE dated 21 January 2019.

Following the provision of additional information in relation to the EIA Screening on the 21st February 2019, a further letter was received from An Taisce to DCCAE dated 7 March 2019.

The points raised in these consultation responses have been considered and responded to as provided in the following sections.

2.3.1 General Consultee Observations

The following general responses have been received.

- Regulatory process: concern raised in regard to the lack of regulatory process of assessing
 exploration and development applications. The involvement of Department officials in the
 commercial and licensing aspects as well as environmental provides a perceived lack of
 objectivity and bias in the decision-making process;
- **Regulatory process:** concern raised that the public consultation has not engaged directly with bodies specified under SI No 134/2013 European Union (EIA) (Petroleum Exploration) Regulations 2013.
- **Regulatory process:** All future applications need to determine how Ireland will meet its commitment under the Paris Agreement and provisions of Climate Action and Low Carbon Development Act 2015 are to be met.

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:

- Regulatory process: The status of the consultation with regard to the Environmental Impact
 Assessment and Habitats Directive is unclear, including the process for notification of
 decisions by the Department to parties making submissions, and procedures for Judicial
 Review of any decision by the Department.
- Public consultation process: The public notification is not widely publicised on other
 media, such as newspapers or social media platforms and the current process of publicising
 public consultation is currently not transparent. Separate public notification and scientific
 peer review of the Habitats Directive process should be undertaken;

These general responses are in regard to the current regulatory process that exists within Ireland and since they are not project specific are not responded to by this report.

2.3.2 Project Specific Consultee Observations

The following specific responses have been received:

Objector	Project specific objection	Response
An Taisce	It is clear from information in the Appropriate Assessment Screening Report that a Natura Impact Statement and Stage 2 Appropriate Assessment is required. The Appropriate Assessment screening, Natura Impact Statement and Appropriate Assessment should meet in full the requirements of Irish law, CJEU judgments and Advocate General opinions in relation to the Habitats Directive. The current report and recommendations therein does not meet Irish and European law requirements and protections.	The adequacy of the AA Screening Report has been reviewed and recommendations for the DCCAE to adopt have been provided in this report.
	The Archaeological Assessment Summary Report is inadequate for the purposes of an EIA screening. It is not acceptable that the results of the ROV survey will not be available for assessment at EIA screening stage.	The adequacy of the Archaeological Assessment is reviewed in the EIA Screening Report produced by Ramboll.
	An Environmental Impact Assessment Report should be prepared for this development and an Environmental Impact Assessment conducted in accordance with all relevant European directives. The current EIA screening report fails to meet the requirements of several European laws including inter alia Council Directive 2011/92/EU amended by 2014/52/EU, Council Directive 92/43/EEC, Council Directive 2008/56/EC and Commission Decision 2017/848.	The EIA Screening Report produced by Ramboll confirms whether the application meets the requirements of the relevant European Directives.
	The international significance of the fishing resource in the area of drilling is clear from the report, as is the fact that the migratory path of tuna, which follow the Gulf Stream, could possibly be active in the area and that there is a likelihood of interaction between the drilling and tuna fishing operations. An Taisce submits that there is insufficient information on the presence of tuna and other fish species in the zone of drilling and that any consideration of the impact on fish is premature and should at least await the outcome of fisheries surveys by the Marine Institute programmed for later this year. The	The applicant notes that 'interaction with, and potential impacts upon, a number of other receptors (e.g. fisheries, marine reptiles including turtles) are possible but these are not relevant to the requirements of the Habitats and Birds Directives and are not discussed in this Stage 1 Appropriate Assessment Screening report'. This report

Objector	Project specific objection	Response
	pre-drilling fisheries study is lacking in any assessment of risk to fish from a blowout, or other form of leak of petroleum during the drilling operation.	provides a conclusion on whether we agree with the applicant's screening assessment in section 3.6.
	There has been no proper assessment of cumulative impacts and effects on habitats, species and the environment of other offshore exploration and drilling, either the cumulative impacts of previous exploration within this NEXEN site or the cumulative impacts of this site with other off shore exploration sites.	Further details on the cumulative assessment were requested from the applicant. The appropriateness of this response is reviewed in the EIA Screening Report produced by Ramboll.
	There has been no proper assessment of climate change impacts and effects.	The adequacy of the assessment of effects of climate change is reviewed in the EIA Screening Report produced by Ramboll.
	It has not been possible to consult fully on this application as key documents within the application have been withheld from public scrutiny including the generic well proposal, permits for use and discharge of added chemicals, and the Financial Responsibilities Assessment	The adequacy of the consultation is a matter for the DCCAE. These documents were not required for the review of the AA Screening Report.
Friends of the Irish Environment	It is submitted that this application requires a Stage 2 Appropriate Assessment and Environmental Impact Assessment Report as the screening reports are inadequate.	This report confirms whether the information provided meets the requirements to allow a decision to be made on whether a NIS is required to enable DCCAE to undertake an AA. The adequacy of the EIA Screening Report has been
		reviewed and reported separately to this report.
	The seabed area of the Porcupine Basin includes cold water coral reefs which are a priority habitat under the Habitats Directive. The current level of marine protection designation in Porcupine Basin area is inadequate to reflect the importance of sea bed habitat. The impact of the activity proposed on marine mammals and on a range a range of fish species including tuna migration paths requires assessment.	The potential effects on the ecology of the baseline environment are considered in the review of information provided by the applicant.
Gluaiseacht	Increasing effects of climate change for the benefits of the few.	The adequacy of the assessment of effects of climate change is reviewed in the EIA Screening Report produced by Ramboll.
	The Porcupine Seabight is a very important ecological area and we are just finding out how important the area is for blue and fin whales. We shouldn't be threatening these habitats by oil and gas drilling and seismic surveys.	The potential effects on the ecology of the baseline environment are considered in the review of information provided by the applicant.

3. REVIEW OF APPLICANT AA SCREENING REPORT

3.1 Project Details

Table 3.1 provides a summary of the key project information.

Table 3.1: Project Information

Project Title:	Iolar Exploration Well
Project Type:	Offshore Exploration Drilling
Applicant:	CNOOC Petroleum Europe Limited (formally known as Nexen Petroleum UK Limited)
Exploration Licence Reference:	FEL 3/18
Date AA Screening Report Received:	14 November 2018

3.2 Determining whether a Project should be subject to an Appropriate Assessment

Under Paragraph 42(6) of the Habitats Regulations, the DCCAE (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, will have a significant effect on a European Site.

Where it is determined that AA is required for a proposed development or project, the DCCAE must advise the applicant that a Natura Impact Statement (NIS) is required.

3.3 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 proposed well is located in FEL 3/18, 232.4 km west of the Irish mainland in the Porcupine Basin in water depths of 2.162 km. A spud date of April 2019 has been assumed since this is the earliest window for drilling operations and is likely to be favourable in terms of weather. The total duration of drilling is expected to be between 100 and 150 days. The weather window for drilling activities is between 1 April and 30 September.

A safety exclusion zone of 500 m around the drill ship whilst on station is proposed. The proposed drill ship (IceMAX) will maintain its position over the drilling location for the duration of the drilling activities using a dynamic positioning system. Drilling equipment is installed on the deck of the vessel, with the derrick normally placed in the middle of the ship. The well will be drilled through a moon pool that extends to the water's surface below the derrick.

Helicopters will be used to transfer personnel to and from the drill ship for the duration of the drilling period. Helicopters may also be used to occasionally supply the drill ship with equipment required at short notice and would also be used in the event of an emergency situation. Otherwise all transport of drilling equipment, supplies, water, fuel and food will be undertaken by supply vessels, which will also return waste and surplus equipment to shore. These vessels will also perform safety standby operations.

A single deviated well is proposed although should the well be deemed a success then there is potential for a short side track for coring purposes. The Iolar well will be drilled to either 6.31 km total vertical depth subsea in the success case or 5.923 km in the dry hole case. The drilling will consist of a number of phases:

- 1. Spudding: drilling or jetting of a 36" hole through the surface of the seabed into which a 36" conductor pipe will be cemented (a Remotely Operated Vehicle (ROV) will be used to minimise the amount of cement discharged to the seabed and provide visual monitoring);
- 2. Drilling: well sections of decreasing diameter (from 26" to 8.5") are drilled and casings installed and cemented to provide stability. Drilling fluid will be used and will be circulated back to the drill ship. Both Water Based Muds (WBM) and Oil Based Muds (OBM) are anticipated to be used depending on the down hole conditions.

The first two sections of the well will be drilled before the installation of a marine riser and therefore drilling fluids, rock cuttings and residual cement returns will be discharged directly onto the seabed. The sections will be jetted/drilled using seawater and WBM. Thereafter OBM will be used which will be circulated back to the drill ship, where drill cuttings and residual OBM will be placed in waste skips and shipped to shore for treatment, recycling or disposal. None of the OBM from the deeper sections will be discharged at sea.

Vertical Seismic Profiling (VSP) may be required and is used to establish the geological structure of the formations through which the well passes. VSP uses a small air gun array with receivers positioned inside the well. Typical VSP operations can take 6 to 12 hours to complete. The VSP source is expected to generate a noise level around 220 dB re 1uPa @ 1 m, with the majority of noise concentrated at low (<100 Hz) frequencies. These operations will be undertaken from the drill ship.

Once all operations are complete, the well will be permanently plugged and abandoned. Mechanical and cement plugs will be placed along the well at points where hydrocarbons could enter the well, thus isolating them from the surface. The wellhead will be severed and removed a minimum of 3 m below the seabed.

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
Supporting Infrastructure	Yes
Transportation Requirements	Yes
Physical changes that will result from the project (e.g. from excavation, dredging)	Yes
Emissions and Waste	Yes
Resource Requirements (e.g. water abstraction)	Yes
Duration of each phase e.g. • Phase 1 Construction • Phase 2 Operation • Phase 3 Decommissioning	Yes

The AA screening must consider the effects of the proposed development 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 states that there are no other projects in the Porcupine Basin nor any other known plans for future exploration or seismic activities during 2019 with the region.

Project Element	Is the predicted magnitude / extent of identified likely incombination effects considered by the applicant?	Summary		
Spatial Extent (define boundaries for examination of in-combination effects)	Yes	The applicant has described the potential extent of the effects of the project in order to correctly determine the envelope of impacts from the project and the receptors that may be affected in combination with other projects.		
Impact Identification (e.g. noise, chemical emissions etc.)	Yes	The applicant has described the potential impacts arising from the project and considered which of the impacts identified are relevant to the determination of LSE (specifically, underwater sound and pressure emissions and well blowout) and has linked these clearly to pathways that might transmit impacts to receptors.		
Pathway Identification (e.g. via water, air etc)	Yes	The applicant has described the potential impact / pressure pathways and have linked these clearly to determinations of LSE.		

3.4 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

NB Sites presented in Appendix A of the Applicants AA Screening Report have been cross referenced against current lists of Natura sites – no omissions of relevant sites have been determined. On this basis the list of sites presented by the Application in Appendix A have been considered below.

	tura site/ species entified by assessor	Distance from Project Site (km)	Are the Natura site / species identified by the applicant?	Are all the qualifying interests listed by the applicant?	Are direct impacts to the Natura Site considered by the applicant?	Are indirect impacts to the Natura Site considered by the applicant?	Are Potential Zones of Influence on the Natura Site considered by the applicant?	Are in combination effects considered by the applicant?	Briefly summarise whether the applicant's consideration of relevant Natura sites which may be affected by the proposed project, meets the requirements for a screening opinion:
1.	Achill Head [002268]	400	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
2.	Akeragh, Banna and Barrow Harbour [00332]	286	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
3.	Anton Dohrn Seamount [UK0030387]	713	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
4.	Ballinskelligs Bay and Inny Estuary [00335]	238	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
5.	Barley Cove to Ballyrisode Point [001040]	258	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
6.	Belgica Mound Province [002327]	119	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements

Natura site/ species identified by assessor	Distance from Project Site (km)	Are the Natura site / species identified by the applicant?	Are all the qualifying interests listed by the applicant?	Are direct impacts to the Natura Site considered by the applicant?	Are indirect impacts to the Natura Site considered by the applicant?	Are Potential Zones of Influence on the Natura Site considered by the applicant?	Are in combination effects considered by the applicant?	Briefly summarise whether the applicant's consideration of relevant Natura sites which may be affected by the proposed project, meets the requirements for a screening opinion:
7. Black Head-Poulsallagh Complex [00020]	359	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
8. Blasket Islands [002172]	224	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
9. Broadhaven Bay [000472]	435	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
10. Carrowmore Dunes [002250]	334	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
11. Carrowmore Point to Spanish Point and Island [001021]	336	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
12. Connemara Bog Complex [002034]	360	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
13. East Rockall Bank [UK0030389]	647	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements

Natura site/ species identified by assessor	Distance from Project Site (km)	Are the Natura site / species identified by the applicant?	Are all the qualifying interests listed by the applicant?	Are direct impacts to the Natura Site considered by the applicant?	Are indirect impacts to the Natura Site considered by the applicant?	Are Potential Zones of Influence on the Natura Site considered by the applicant?	Are in combination effects considered by the applicant?	Briefly summarise whether the applicant's consideration of relevant Natura sites which may be affected by the proposed project, meets the requirements for a screening opinion:
14. Erris Head [001501]	434	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
15. Glenamoy Bog Complex [00500]	445	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
16. Haig Fras [UK0030353]	385	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
17. Hovland Mound Province [002328]	135	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
18. Inishbofin and Inishshark [00278]	366	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
19. Inisheer Island [01275]	355	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
20. Inishkea Islands [00507]	415	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements

Natura site/ species identified by assessor	Distance from Project Site (km)	Are the Natura site / species identified by the applicant?	Are all the qualifying interests listed by the applicant?	Are direct impacts to the Natura Site considered by the applicant?	Are indirect impacts to the Natura Site considered by the applicant?	Are Potential Zones of Influence on the Natura Site considered by the applicant?	Are in combination effects considered by the applicant?	Briefly summarise whether the applicant's consideration of relevant Natura sites which may be affected by the proposed project, meets the requirements for a screening opinion:
21. Inishmaan Island [0000212]	353	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
22. Inishmore Island [000213]	345	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
23. Kenmare River [IE02158]	230	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
24. Kerry Head Shoal [02263]	278	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
25. Kilkee Reefs [02264]	317	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
26. Kilkeran Lake and Castlefreke Dunes [01061]	315	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
27. Kilkieran Bay and Islands [02111]	354	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements

Natura site/ species identified by assessor	Distance from Project Site (km)	Are the Natura site / species identified by the applicant?	Are all the qualifying interests listed by the applicant?	Are direct impacts to the Natura Site considered by the applicant?	Are indirect impacts to the Natura Site considered by the applicant?	Are Potential Zones of Influence on the Natura Site considered by the applicant?	Are in combination effects considered by the applicant?	Briefly summarise whether the applicant's consideration of relevant Natura sites which may be affected by the proposed project, meets the requirements for a screening opinion:
28. Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment [00365]	243	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
29. Lough Hyne Nature Reserve and Environs [00097]	291	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
30. Lower River Shannon [02165]	290	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
31. Magharee Islands [002261]	277	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
32. Mount Brandon [00375]	255	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
33. Mullet/Blacksod Bay Complex [000470]	419	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
34. North-West Porcupine Bank [02330]	289	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements

Natura site/ species identified by assessor	Distance from Project Site (km)	Are the Natura site / species identified by the applicant?	Are all the qualifying interests listed by the applicant?	Are direct impacts to the Natura Site considered by the applicant?	Are indirect impacts to the Natura Site considered by the applicant?	Are Potential Zones of Influence on the Natura Site considered by the applicant?	Are in combination effects considered by the applicant?	Briefly summarise whether the applicant's consideration of relevant Natura sites which may be affected by the proposed project, meets the requirements for a screening opinion:
35. Omey Island Machair [001309]	365	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
36. Porcupine Bank Canyon [003001]	155	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
37. Roaringwater Bay and Islands [000101]	268	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
38. Slyne Head Islands [00328]	350	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
39. Slyne Head Peninsula [002074]	354	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
40. South East Rockall Bank [03002]	533	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
41. South-West Porcupine Bank [02329]	141	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements

Natura site/ species identified by assessor	Distance from Project Site (km)	Are the Natura site / species identified by the applicant?	Are all the qualifying interests listed by the applicant?	Are direct impacts to the Natura Site considered by the applicant?	Are indirect impacts to the Natura Site considered by the applicant?	Are Potential Zones of Influence on the Natura Site considered by the applicant?	Are in combination effects considered by the applicant?	Briefly summarise whether the applicant's consideration of relevant Natura sites which may be affected by the proposed project, meets the requirements for a screening opinion:
42. Three Castle Head to Mizen Head [00109]	254	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
43. Tralee Bay and Magharees Peninsula, West to Cloghane [IE0002070 - No site code presented in report]	266	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
44. Valencia Harbour/Portmagee Channel [002262]	231	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
45. West Connacht Coast [IE02998]	357	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
46. Beara Peninsula [004155]	230	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
47. Bills Rocks [004177]	394	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
48. Blasket Islands [004008]	227	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements

Natura site/ species identified by assessor	Distance from Project Site (km)	Are the Natura site / species identified by the applicant?	Are all the qualifying interests listed by the applicant?	Are direct impacts to the Natura Site considered by the applicant?	Are indirect impacts to the Natura Site considered by the applicant?	Are Potential Zones of Influence on the Natura Site considered by the applicant?	Are in combination effects considered by the applicant?	Briefly summarise whether the applicant's consideration of relevant Natura sites which may be affected by the proposed project, meets the requirements for a screening opinion:
49. Cliffs of Moher [004005]	350	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
50. Cruagh Island [004170]	362	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
51. Deenish Island and Scariff Island [004175]	234	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
52. Dingle Peninsula [004153]	241	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
53. Galley Head to Duneen Point [004190]	316	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
54. High Island, Inishshark and Davillaun [004144]	362	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
55. Illanmaster [04074]	457	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements

Natura site/ species identified by assessor	Distance from Project Site (km)	Are the Natura site / species identified by the applicant?	Are all the qualifying interests listed by the applicant?	Are direct impacts to the Natura Site considered by the applicant?	Are indirect impacts to the Natura Site considered by the applicant?	Are Potential Zones of Influence on the Natura Site considered by the applicant?	Are in combination effects considered by the applicant?	Briefly summarise whether the applicant's consideration of relevant Natura sites which may be affected by the proposed project, meets the requirements for a screening opinion:
56. Inishglora and Inishkeeragh [04084]	427	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
57. Inishkea Islands [04004]	415	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
58. Inishmore [004152]	347	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
59. Iveragh Peninsula [004154]	231	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
60. Kerry Head [004189]	290	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
61. Loop Head [004119]	300	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
62. Magharee Islands [004125]	278	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements

Natura site/ species identified by assessor	Distance from Project Site (km)	Are the Natura site / species identified by the applicant?	Are all the qualifying interests listed by the applicant?	Are direct impacts to the Natura Site considered by the applicant?	Are indirect impacts to the Natura Site considered by the applicant?	Are Potential Zones of Influence on the Natura Site considered by the applicant?	Are in combination effects considered by the applicant?	Briefly summarise whether the applicant's consideration of relevant Natura sites which may be affected by the proposed project, meets the requirements for a screening opinion:
63. Mid-Clare Coast [04182]	334	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
64. Old Head of Kinsale [04021]	345	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
65. Puffin Island [04003]	229	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
66. Seven Heads [04191]	328	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
67. Sheep's Head to Toe Head [IE0004156 - No site code presented in report]	254	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
68. Skelligs [04007]	218	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
69. Slyne Head to Ardmore Point Islands [04159]	351	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements

Natura site/ species identified by assessor	Distance from Project Site (km)	Are the Natura site / species identified by the applicant?	Are all the qualifying interests listed by the applicant?	Are direct impacts to the Natura Site considered by the applicant?	Are indirect impacts to the Natura Site considered by the applicant?	Are Potential Zones of Influence on the Natura Site considered by the applicant?	Are in combination effects considered by the applicant?	Briefly summarise whether the applicant's consideration of relevant Natura sites which may be affected by the proposed project, meets the requirements for a screening opinion:
70. Termoncarragh Lake and Annagh Machair [004093]	433	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
71. The Bull and The Cow Rocks [04066]	226	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements
72. Tralee Bay Complex [004188]	274	Yes	Unknown	Yes	Yes	Yes	Yes	Consideration meets requirements

3.5 Assessment of Likely Significant Effects

Table 3.5 provides a summary of the LSE 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 AA Screening

Summary of LSE

The applicant's AA screening report identifies the following impact sources for further consideration in the determination of LSE:

- Underwater sound and pressure emissions; and
- · Well blowout.

Do you agree with the applicant's AA screening assessment? Why?

No. Ramboll does not agree with the applicant's AA screening assessment for the following reasons:

- The applicant has relied on what are described as 'current best practice' mitigation and monitoring
 measures in relation to marine mammals, and 'industry best practice' measures in relation to well
 blowout or other spill scenarios to arrive at their conclusion that there would be no LSE on the
 Natura Sites.
- Ramboll agrees that the measures specified are appropriate and represent current good practice.
 It is noted that the applicant references DEHLG (2010)⁴ and states that the measures proposed are "inherent to how the Project will (and must) be executed to comply with applicable legislation, guidance and good industry practice and are thus given due consideration in this Appropriate Assessment Screening Report".
- It is noted that in accordance with relevant jurisprudence, mitigation must be disregarded at the AA screening stage. While this report acknowledges that some of the measures proposed may be considered to be 'embedded' or inherent to the project design, other aspects are considered to be mitigation and are specified or required due to the sensitive receptors identified and the potential LSE (for example, the use of marine mammal observers and soft start procedures).
- This report concludes that it is not possible, as a matter of scientific certainty, to rule out the risk of a LSE (without mitigation). As such an AA is required and the applicant must provide a NIS to allow the AA to be prepared to consider the potential adverse effects on the integrity of European sites, taking account of their relevant conservation objectives.

3.6 Screening Determination

Paragraph 42(2) of the Habitats Regulations states that "A screening for Appropriate Assessment of a plan or project for which an application for consent is received, or which a public authority wishes to undertake or adopt, and which is not directly connected with or necessary to the management of the site as a European Site, shall be carried out by the public authority to assess, in view of best scientific knowledge and in view of the conservation objectives of the site, if that plan or project, individually or in combination with other plans or projects is likely to have a significant effect on the European site".

Furthermore the regulations provide under Regulation 42 (6) and 42 (7) that:

"6. The public authority shall determine that an Appropriate Assessment of a plan or project is required where the plan or project is not directly connected with or necessary to the management of the site as a European Site and if it cannot be excluded, on the basis of objective scientific information following screening under this Regulation, that the plan or project,

⁴ DEHLG (2010) Department of Environment, Heritage and Local Government) (2010). Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities. Revised 11th February 2010. Available at https://www.npws.ie/sites/default/files/publications/pdf/NPWS_2009_AA_Guidance.pdf (accessed 15/03/2019)

individually or in combination with other plans or projects, will have a significant effect on a European site.

7. The public authority shall determine that an Appropriate Assessment of a plan or project is not required where the plan or project is not directly connected with or necessary to the management of the site as a European Site and if it can be excluded on the basis of objective scientific information following screening under this Regulation, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site."

If significant effects are certain, likely or uncertain then the DCCAE must request the applicant provides a NIS in order for the DCCAE 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 DCCAE to make a screening determination.

Table 3.6: Summary of Applicant's Screening Report Review

Is the plan or project is 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.
Is an AA required? (Yes / No / More Information Required?)	Yes

Table 3.7: Recommendation of Screening Determination

Outcome of Screening Report Assessment	Overall Screening Opinion / AA Required?
Likely or Potentially 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 required.
Next Steps	DCCAE to request NIS from Applicant.
Notes	The following additional information should be requested from Applicant in the NIS:
	The information provided states that Vertical Seismic Profiling (VSP) is expected to generate a noise level around 220 dB re 1uPa @ 1 m. In preparing the NIS, the Applicant should be asked for confirmation of maximum sound levels.
	Given the spatial effects of some of the impacts the applicant should be asked to confirm if there are any other projects further inshore or elsewhere off the other coasts of Ireland that may interact to give rise to LSE in combination with the proposed project.
	The applicant NIS must confirm that:

Outcome of Screening Report Assessment	Overall Screening Opinion / AA Required?
	the entirety of habitat types and species for which a site is protected have been considered; AND
	the implications of the proposed project for the species present on that site and for which that site has not been listed are identified and examined – as well as the implications for habitat types and species outside the boundaries of that site, insofar as those implications are liable to affect the conservation objectives of the site.