



## **EUROPA OIL & GAS (INISHKEA) LIMITED SITE SURVEY**

### **APPROPRIATE ASSESSMENT DETERMINATION AND ANNEX IV SPECIES ASSESSMENT**

#### ***I. Project Proposal***

On 15<sup>th</sup> May, 2019 Europa Oil & Gas (Inishkea) Limited (a wholly owned subsidiary of Europa Oil & Gas (Holdings) PLC) (**'Europa'**) submitted an application to the Department of Communications, Climate Action and Environment (DCCA) seeking Ministerial approval to undertake a geophysical and environmental baseline site survey over Licensing Blocks 18/19 and 18/20, offshore Ireland in 2019 or 2020. The survey called the 'Inishkea survey' is located approximately 4 km north-west of the western-most end of the Corrib gas pipeline and over 63 km from landfall at Inishkea South Island which is located approximately 4 km west of the Mullet Peninsula, County Mayo, Ireland.

The application proposed that survey operations would be undertaken by a single survey team between June and late November 2019, but that if the survey had not commenced or concluded in 2019, the proposed operations would be undertaken sometime between early February 2020 and late November 2020. Excluding weather and technical downtime, survey operations are expected to take a total of 14 survey working days.

The aim of the geophysical and environmental baseline survey is to:

- Accurately determine water depths and seabed/ subsurface geology at the site.
- Identify any seabed obstructions and confirm the location of any existing infrastructure (such as pipelines, wellheads).
- Assist in the identification of all geo-hazards and geological conditions that may be of significance to future drilling activities.<sup>1</sup> This may include shallow gas, channelling, faults and other geological features that may be of significance.
- Provide information on the cultural potential of the survey area, including the location of any shipwrecks or other underwater cultural heritage features.
- Identify and delineate Annex I habitats (as defined in the EC Habitats Directive 92/43/EC) or other sensitive habitats and identify any areas of environmental interest.
- Establish environmental baseline to establish a benchmark for ongoing environmental monitoring as per OSPAR guidelines; and
- Acquire sediment samples for determination of physico-chemical baseline conditions.

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<sup>1</sup> Drilling activities do not form part of the survey operations proposed in the Europa application.

The following documents were submitted with the Europa Inishkea Survey application:-

- (i) Inishkea Prospect Site Survey – Screening for Environmental Impact Assessment and Environmental Risk Assessment Report, prepared by RPS on behalf of Europa;
- (ii) Inishkea Prospect Site Survey – Screening for Appropriate Assessment and Natura Impact Statement Report, prepared by RPS on behalf of Europa;
- (iii) Inishkea Prospect Site Survey – Survey Technical Specifications Report, prepared by RPS on behalf of Europa;
- (iv) Inishkea Prospect Site Survey - Pre-Survey Fishery Assessment, prepared by RPS on behalf of Europa.

## **II. Assessment Process**

The Environment Advisory Unit (**EAU**), a functionally independent and separate 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 respect of applications made to the Minister for permission to undertake activities under an exploration licence or petroleum prospecting licence.

EIA – The *European Union (Environmental Impact Assessment) (Petroleum Exploration) Regulations 2013* (S.I. 134 of 2013), as amended by the *European Union (Environmental Impact Assessment) (Petroleum Exploration) (Amendment) Regulations 2019* (S.I. 124 of 2019) give effect to the EIA Directive as a matter of Irish law in the context of applications for permission to undertake activities under an exploration licence or petroleum prospecting licence. Regulation 3(1B) provides that the EAU shall carry out an EIA Screening Assessment and make a Determination 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.

AA – The European Communities (Birds and Natural Habitats) Regulations 2011 – 15, 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 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 required Stage 2 Appropriate Assessment in accordance with the Birds and Natural Habitats Regulations, in respect of applications to the Minister for permission to undertake “*activities*” under an exploration licence or petroleum prospecting licence.

On receipt of an application, the Petroleum Affairs Division in DCCAE places the application on the DCCAE 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.

### **III. Independent Expert Advisors**

DCCAIE has further engaged Ramboll UK Limited (**Ramboll**) as independent experts, to provide assistance to the EAU with regard to the carrying out of statutory environmental assessments of applications for permission to carry out “activities” under an exploration licence or petroleum prospecting licence.

Ramboll has conducted an independent assessment of the information provided by the Applicant, having regard to the Habitats Directive, the Birds and Natural Habitats Regulations and relevant jurisprudence of the EU and Irish courts. The Ramboll Report is shown at Appendix 1.

### **IV. Legislative Background: Appropriate Assessment Process**

Articles 6(3) and 6(4) of the **Habitats Directive** place strict legal obligations on Member States regulating the conditions under which development that has the potential to impact on European Sites can be implemented and requiring that an Appropriate Assessment be carried out of plans or projects, not directly connected with or necessary to the management of a site as a European Site, but which are likely to have a significant effect thereon, either individually or in combination with other plans or projects. An AA Screening assessment is carried out to determine whether a plan or project is likely to have a significant effect on a European Site. The Appropriate Assessment process (AA) is an assessment of the potential for adverse or negative effects of a plan or project, in combination with other plans or projects, on the conservation objectives of a European Site. The focus of AA is targeted specifically on Natura 2000 sites and their conservation objectives.

- Article 6.3 states: *“Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site’s conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.”*
- Article 6.4 states: *“If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.*

*Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.”*

### Stage 1: AA Screening

The first step in the AA process is that an AA Screening assessment is carried out to determine whether a plan or project is likely to have a significant effect on a European Site.

In giving effect to the above as a matter of Irish law, the **Birds and Natural Habitats Regulations** provide, *inter alia*, as follows in relation to screening for Appropriate Assessment:-

Regulation 42(1) of the Birds and Habitats Regulations provides: “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”.

Regulation 42(2) provides that: “A public authority shall carry out screening for Appropriate Assessment under paragraph (1) before consenting for a plan or project is given, or a decision to undertake or adopt a plan or project is taken”.

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.’*

### Stage 2: Appropriate Assessment

Where it has been determined, following screening, that an Appropriate Assessment is required, Regulation 42(11) provides as follows in relation to the carrying out of an Appropriate Assessment:

*(11) An Appropriate Assessment carried out under this Regulation shall include a determination by the public authority under this Regulation pursuant to Article 6(3) of the Habitats Directive as to whether or not a plan or project would adversely affect the integrity of a European site and the assessment shall be carried out by the public authority before a decision is taken to approve, undertake or adopt a plan or project, as the case may be.*

Regulation 42(12) sets out the matters required to be taken into consideration by a public authority in carrying out an Appropriate Assessment:

*(12) In carrying out an Appropriate Assessment under paragraph (11) the public authority shall take into account each of the following matters—*  
a) *the Natura Impact Statement,*

- b) *any other plans or projects that may, in combination with the plan or project under consideration, adversely affect the integrity of a European Site,*
- c) *any supplemental information furnished in relation to any such report or statement,*
- d) *if appropriate, any additional information sought by the authority and furnished by the applicant in relation to a Natura Impact Statement,*
- e) *any information or advice obtained by the public authority,*
- f) *if appropriate, any written submissions or observations made to the public authority in relation to the application for consent for proposed plan or project,*
- g) *any other relevant information.*

## **V. Factual Background**

### **Stage 1 AA Screening Assessment Notified Bodies**

Notification of the Europa Inishkea Survey application was issued to the following organisations:

- Development Applications Unit, Department of Culture, Heritage and the Gaeltacht ;
- Irish Maritime Administration, Department of Transport, Tourism and Sport;
- Ship Source Pollution Prevention Unit Irish Maritime Administration, Department of Transport, Tourism and Sport;
- Irish Coast Guard (& 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;
- Commissioners of Irish Lights

One responded with observations as shown in Section 2.3.1 of the Ramboll Report, referenced above and included at Appendix 1 to this Determination.

### **Public Consultation**

The Europa Inishkea Survey application and supporting documentation were published on the Department website on the 15<sup>th</sup> May 2019 and submissions were invited to be made on the application during a 30 day consultation period concluding on the 14<sup>th</sup> June 2019. Six responses were received and were considered as part of the AA screening process as shown below:

- Consultation response received from Patrick Lyne (on behalf of Irish Whale and Dolphin Group dated 19<sup>th</sup> May, 2019
- Consultation response received from private individual dated 12<sup>th</sup> June, 2019
- Consultation response received from Gas Networks Ireland dated 14<sup>th</sup> June, 2019
- Consultation response received from Not Here, Not Anywhere, Futureproof Clare, Love Leitrim and Friends of the Earth Ireland dated 14<sup>th</sup> June, 2019
- Consultation response received from private individual dated 14<sup>th</sup> June, 2019
- Consultation response received from Gluaiseacht dated 14<sup>th</sup> June, 2019

### *AA Screening Determination and Further Information Request for Stage 2 Appropriate Assessment*

A Stage 1 Screening for Appropriate Assessment was carried out in respect of the proposed Europa Inishkea Survey and, on 6 November 2019, an AA Screening Determination was made pursuant to Regulation 42 of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011), as amended, that a Stage 2 Appropriate Assessment was required in respect of the proposed Europa Inishkea Survey, as it could not be excluded on the basis of objective scientific information that the proposed site survey, individually or in combination with other plans or projects, would have a significant effect on a European Site.

By further Notice dated 6 November 2019, Europa were directed to provide specified additional information considered necessary for the purposes of carrying out the Stage 2 Appropriate Assessment of the Europa Inishkea Survey application.

A Newspaper Notice was published noting the outcome of the AA Screening Determination and the Notice for Further Information, and the Department website was further updated to this effect.

### *Stage 2 AA Public Consultation Process and Ramboll NIS Review and Appropriate Assessment Report*

#### *Public Consultation for the purposes of Stage 2 Appropriate Assessment*

On 17 January 2020, Europa provided the additional information directed in the Notice for Further Information as being necessary for the purposes of the Stage 2 Appropriate Assessment of the Europa Inishkea Survey:

- (v) Inishkea Prospect Site Survey – Response to Request for Additional Information, prepared by RPS on behalf of Europa.

On 23 January, the additional information was published on the Department website and a 21 day public consultation was carried out on the application for the purposes of the Stage 2 Appropriate Assessment, which concluded on 13 February 2020. No further submissions were received.

The submissions that were received during the public consultations on the Europa Inishkea Survey application are shown in Section 2.3.2 of Ramboll Report (at Appendix 1 to this Determination), as part of its external review of the information submitted by Europa in the following reports:

- Inishkea Prospect Site Survey – Screening for Appropriate Assessment and Natura Impact Statement Report, prepared by RPS on behalf of Europa; and
- Inishkea Prospect Site Survey – Response to Request for Further Information, prepared by RPS on behalf of Europa.

#### *Ramboll NIS Review and Appropriate Assessment Report*

A Natura Impact Statement (NIS) is a scientifically robust examination of a proposed plan or project which is used to characterise any possible implications of the project individually or in combination with other plans or projects on the conservation objectives of any relevant European site(s).

Ramboll carried out a review of the NIS submitted by Europa in respect of the proposed Inishkea Site Survey, as contained in:

- Inishkea Prospect Site Survey – Screening for Appropriate Assessment and Natura Impact Statement Report (submitted with the application in May 2019); and

- Inishkea Prospect Site Survey – Response to Request for Further Information (submitted in response to Notice directing further information in January 2020),

along with the associated application documents. The Ramboll NIS review and assessment considered the following aspects in the context of European sites:-

- Conservation status of relevant habitats and species listed under Annex II of the Habitats Directive and Annex I of the Birds Directive;
- Baseline conditions and conservation objectives and qualifying features of any relevant European site(s);
- Any management plans associated with relevant European site(s);
- 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;
- Information on population profile of the species and their conservation status (e.g. size, population structure etc.);
- Ecosystem structure and functioning of the site and its overall conservation state;
- The role of the site within the ecosystem region and the Natura 2000 network;
- 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.)

Furthermore the NIS was also assessed in the context of the following:-

- A description of size, scale and objectives of the proposed plan or project;
- A description of the pressures of the proposed plan or project, and its likely impacts on the conservation objectives and local site 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;
- Methodologies, analysis and data sources utilised to demonstrate use of best scientific knowledge;
- 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;
- Details of any appropriate mitigation measures undertaken, or proposed to be undertaken by the applicant (included in Table 1 to this Determination) 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;

- 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 combination with other existing or consented developments).

The Ramboll NIS Review and Appropriate Assessment Report is at Appendix 1 to this Determination.

#### **VI. Appropriate Assessment Determination**

I have carefully considered the following documents in carrying out an Appropriate Assessment of the proposed Europa Inishkea Survey, as detailed in the Europa application:-

- Documents provided by the applicant:
  - Documents submitted with the application (as listed at (i) – (iv) above), in particular, the Inishkea Prospect Site Survey – Screening for Appropriate Assessment and Natura Impact Statement Report, prepared by RPS on behalf of Europa;
  - Response to Request for Further Information, prepared by RPS on behalf of Europa (listed at (v) above).
- Appropriate Assessment Screening and NIS Review Report prepared by Ramboll (March 2020), (at Appendix 1 to this Determination);
- Submissions received during the public consultation;
- Observation received from the Maritime Safety Policy Division, Department of Transport Tourism and Sport (as a Notified Body).

Based on careful consideration of the information contained in the above referenced documents, I agree with and adopt the conclusions reached in the Ramboll Report (at Appendix 1 to this Determination) regarding the adequacy of the information provided by the applicant with regard to European sites and/or species that may be affected by the proposed survey and accordingly am satisfied that the applicant has provided sufficient information to enable an Appropriate Assessment of the proposed geophysical and environmental baseline site survey over Licensing Blocks 18/19 and 18/20, offshore Ireland in 2020.

I further agree with and adopt the Ramboll response to the observations received from the Maritime Safety Policy Division, Department of Transport Tourism and Sport (as a Notified Body), set out in section 2.3.1 of the Ramboll Report and the Ramboll responses to the project specific observations received during the public consultation processes, set out in section 2.3.4 of the Ramboll Report.

As regards the additional observations received during the public consultation processes, comprising general economic comments, general comments regarding climate change and general contractual comments (set out in section 2.3.3 of the Ramboll Report), I agree that these are outside the scope of the Stage 2 Appropriate Assessment process in respect of the Europa Inishkea Survey application.

By way of additional response to the observations received relating to the current regulatory process and structures in DCCA (also set out in section 2.3.3. of the Ramboll Report), the “Assessment Process” section of this Determination describes in more detail the structural changes that have occurred in DCCA’s management of the environmental assessment and decision making processes in respect of applications such as the within application.



The applicant submitted with their application a Natura Impact Statement (NIS) prepared by RPS, examining the proposed Europa Inishkea Survey. A supplementary report (also prepared by RPS) was submitted in response to the Notice issued by the EAU directing provision of the further information determined as being necessary for the purposes of carrying out a Stage 2 Appropriate Assessment.

I note the mitigation and management measures committed to by Europa, which include the requirement by Department of Culture, Heritage and the Gaeltacht to adhere to the Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters (DAHG, 2014).

I further note the observations submitted by the Maritime Safety Policy Division, Department of Transport Tourism and Sport in relation to ship – source pollution prevention provisions (per MARPOL Convention and EU Law) and management of ship waste.

I agree with and adopt the Appropriate Assessment Screening and NIS Review Report prepared by Ramboll in respect of the Europa Inishkea application (dated 23<sup>rd</sup> March, 2020 and attached as Appendix 1 to this Determination) and the conclusions reached in that Report that the proposed Europa Inishkea Survey – individually and/or in combination with other plans or projects – will not have an adverse effect on the integrity of the relevant European sites concerned, in view of the sites' conservation objectives, subject to the implementation of the mitigation measures set out at Table 5.1 of the Ramboll Report.

Accordingly, I adopt all the Mitigation Measures set out in Table 5.1 of the Ramboll Report, which are reproduced in Table 1 (below) in this Determination, and am satisfied and have decided that the proposed Europa Inishkea geophysical and environmental baseline site survey over Licensing Blocks 18/19 and 18/20, offshore Ireland in 2020, will not adversely affect the integrity of the relevant European sites identified, whether individually or in combination with other plans or projects, in view of the sites' conservation objectives, subject to the implementation of the mitigation measures adopted and outlined in Table 1 – which are additional to the mitigation measures already adopted in the EIA Screening Determination made in respect of the Europa Inishkea Survey application – and this decision is contingent on the inclusion of all these mitigation measures in any consent that may be granted in respect of this application.

#### **VII. Legislative Background: Annex IV Species Assessment**

Article 12 of the Habitats Directive provides that:

*“Member States shall take the requisite measures to establish a system of strict protection for the animal species listed in Annex IV (a) in their natural range, prohibiting:*

- (a) all forms of deliberate capture or killing of specimens of these species in the wild;*
- (b) deliberate disturbance of these species, particularly during the period of breeding, rearing, hibernation and migration;*
- (c) deliberate destruction or taking of eggs from the wild;*
- (d) deterioration or destruction of breeding sites or resting places.”*

Regulation 29 of the Birds and Natural Habitats Regulations transposes Article 12 into Irish law and provides that:

*“29. (1) Where the Minister has reason to believe that any activity, either individually or in combination with other activities, plans or projects, is of a type that may—*

- (a) have a significant effect on a European Site,*
- (b) have an adverse effect on the integrity of a European Site,*
- (c) cause the deterioration of natural habitats or the habitats of species or the disturbance of the species for which the European Site may be or has been designated pursuant to the Habitats Directive or has been classified pursuant to the Birds Directive, insofar as such disturbance could be significant in relation to the objectives of the Habitats Directive,*
- (d) cause pollution or deterioration of habitats within the meaning of the second sentence of Article 4(4) of the Birds Directive, or*
- (e) have an adverse effect on the conservation status of—*

- (i) animal species listed in Annex IV(a) to the Habitats Directive in their natural range pursuant to Article 12 of the Habitats Directive,*
- (ii) plant species listed in Annex IV(b) to the Habitats Directive pursuant to Article 13 of the Habitats Directive,*
- (iii) species of wild fauna and flora listed in Annex V to the Habitats Directive pursuant to Article 14 of the Habitats Directive,*
- (iv) naturally occurring birds in the wild state,*

*the Minister shall, by notice, subject to paragraph (2), where he or she considers appropriate, direct that the activity shall not be carried out, caused or permitted to be carried out or continue to be carried out by any person in the European Site or part thereof or at any other specified land or may restrict or regulate the activity in the European Site or part thereof or at any other specified land, and each such notice shall be accompanied by a statement of the Minister's reasons for making the decision."*

#### **VIII. Annex IV Species Assessment and Determination**

Ramboll carried out an assessment of the information submitted by Europa for the purposes of Article 12 / Annex IV of the Habitats Directive, as detailed in the Ramboll Report.

The Ramboll Report further concludes that the proposed Europa Inishkea geophysical and environmental baseline site survey over Licensing Blocks 18/19 and 18/20 will not cause any significant disturbance to the Annex IV species described, subject to the implementation of the mitigation measures set out in Table 5.1 of the Ramboll Report.

I agree with and adopt the conclusions in the Ramboll report in relation to impacts on Annex IV species. Accordingly, I am satisfied that the assessment for Annex IV Species is of an acceptable standard and am further satisfied that there would be no significant adverse effects on Annex IV species that may be present in the survey area, should approval be granted for the Europa Inishkea Survey application, subject to the implementation of the mitigation measures adopted above (and outlined in Table 1 to this Determination) and the mitigation measures already adopted in the EIA Screening Determination made in respect of the Europa application, which must be included in any consent that may be granted in respect of this application.

#### **IX. Conclusion**

Having considered the application by Europa, the conclusions of the Screening for Appropriate Assessment and Natura Impact Statement Report and Response to Request for Additional Information (prepared by RPS on behalf of Europa), the observations received from the Maritime Safety Policy Division, Department of Transport Tourism and Sport (as a Notified Body) and from the

public during the various public consultations on the application, and having adopted the conclusions reached in the Ramboll Report, it can be concluded, and I conclude, for the purposes of Article 6(3) of the Habitats Directive and Article 42(11) of the Birds and Natural Habitats Regulations, that the proposed Europa geophysical and environmental baseline site survey over Licensing Blocks 18/19 and 18/20 to take place offshore Ireland in 2020 will not adversely affect the integrity of the relevant European sites identified (whether individually or in combination with other plans or projects), in view of the sites' conservation objectives, subject to the implementation of the mitigation measures adopted and outlined in Table 1 and the mitigation measures already adopted in the EIA Screening Determination made in respect of the Europa Inishkea Survey application, and this decision is contingent on the inclusion of all these mitigation measures in any consent that may be granted in respect of this application.

I further conclude that the assessment for Annex IV species is of an acceptable standard such that I am satisfied that there would be no significant adverse effects on Annex IV species that may be present in the area, should approval be granted for the Europa Inishkea Survey application, subject to the implementation of all the mitigation measures adopted, which must be included in any consent that may be granted in respect of this application.

Jean Clarke, 30<sup>th</sup> March, 2020

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

Environment Advisory Unit,

Department of Communications, Climate Action and Environment

**Table 1 Mitigation and Management Measures (additional to measures outlined in EIA Screening Determination)**

Discipline	Mitigation Measure Proposed	Additional Notes
Physical Presence	<p>In line with current recommendations from PAD and NPWS, Europa will maintain a 100 km separation distance between concurrent acoustic surveys that may be operating. Implementing the 100 km separation zone between concurrent acoustic survey operations will ensure in-combination effects from noise generating equipment are avoided. Europa are in regular communication with operators proposing to undertake operations offshore Ireland in 2020. Survey operations will be coordinated to ensure a 100 km separation is maintained between surveys during concurrent geophysical operations.</p>	
	<p>Final details of the timing and duration of the survey, including proposed survey vessel, will be communicated to PAD of DCCAE in advance of operations commencing.</p>	
	<p>Final survey lines and transects will be confirmed to PAD DCCAE prior to survey.</p>	
	<p>The location of environmental seabed sampling stations, including reference stations, have yet to be identified. Once locations have been confirmed details will be provided to PAD DCCAE.</p>	<p>A final seabed monitoring strategy will be submitted for the agreement of DCCAE including details of total sediment volume removal and reference stations prior to commencement.</p>
	<p>Prior to undertaking seabed sampling operations, a visual inspection will be undertaken using AUV mounted cameras and/or drop down video to ensure the areas to be sampled do not support sensitive habitats (including Annex I habitats)</p>	
Annex I Habitats	<p>Details of any previously unknown Habitats Directive Annex I Habitats will be recorded and shared with the NPWS of the DCHG.</p>	
Underwater Noise	<p>It is recommended that the survey vessel should be particularly mindful of Rule 18 of the IMO Convention on the International Regulations for Preventing Collisions at Sea 1972 (COLREGs) which covers "Responsibilities between vessels".</p>	

Discipline	Mitigation Measure Proposed	Additional Notes
	<p>DAHG (2014) protective measures will be implemented during the Inishkea Survey. DAHG (2014) measures include the use of Marine Mammal Observers (MMOs) and operational protocols. Qualified MMOs to be appointed to monitor marine mammals and operator's implementation of the DAHG guidance.</p>	
	<p>Seismic surveying shall not commence if marine mammals are detected within a 1,000 m radial distance of the sound source.</p>	<p>Airgun operations will not commence if marine mammals are detected within 1,000 m of the sound source, and within 500 m in the case of the MBES, SBES, SSS, SBP and USBL.</p> <p>Air guns are to be treated as SBP with regards to clearance zone.</p>
	<p>Pre-start monitoring will only be undertaken when visual conditions are conducive to effective monitoring and outside the hours of darkness. Sound producing activities will only commence where the pre-start monitoring periods have elapsed with no marine mammals detected within the monitored zone by the MMO.</p>	
	<p>Sound-producing activities will only commence in daylight hours where effective visual monitoring by the MMOs is achieved.</p>	
	<p>Operations in waters &lt;200 m and &gt;200 m, the MMO will conduct pre-start-up constant effort monitoring for 30 and 60 minutes respectively before the sound producing activity is due to commence. Sound producing activity will not commence until monitoring period have elapsed with no marine mammals detected within the monitored zones by the MMO.</p>	
	<p>In the case of site survey operations in &lt;200 m survey operations the MMO will conduct pre-start-up constant effort monitoring for 30 minutes before the sound producing activity is due to commence.</p>	
	<p>Pre-start up monitoring shall subsequently be followed by a Ramp-Up Procedure</p>	
	<p>Commencement of sound producing survey activities will be undertaken using a 'soft-start' (ramp up and gradual increase in energy/noise source) procedure for any equipment where the output peak SPL exceeds</p>	

Discipline	Mitigation Measure Proposed	Additional Notes
	<p>170 dB re 1 <math>\mu</math>Pa @ 1 m. The build-up of acoustic energy output will occur in consistent stages to provide a steady and gradual increase in power over a period of 40 minutes in the case of 10 cu in. seismic airgun operation and 20 minutes in the case of site survey activity. Where the power of acoustic noise sources cannot be increased gradually, due to operational parameters of the device, the device will be switched on and off in a consistent sequential manner for the duration of the defined ramp up period prior to commencement of the full necessary output.</p>	
	<p>Where a soft start procedure is employed, the delay between the end of the soft start and the start of the survey will be minimised to prevent unnecessary high level sound introduction.</p>	
	<p>In all cases the delay between the end of ramp up (i.e. the necessary full seismic output) and the start of a survey line or station will be minimised to prevent unnecessary high level sound introduction into the environment.</p>	
	<p>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 marine mammals occur within 1,000 m radial distance of the sound source.</p>	
	<p>Where the duration of a survey line or station change will be greater than 40 minutes the activity shall, on completion of the line/station being surveyed, either:</p> <p>shut down and undertake full pre-start Monitoring, followed by a Ramp Up Procedure for recommencement; or</p> <p>Undergo a minor reduction in seismic energy output to a lower energy state where the output peak sound pressure level from any operating source is 165-170 dB re: 1 <math>\mu</math>Pa @ 1 m and then undertake full Ramp Up Procedure on recommencement.</p>	
	<p>Where the duration of the survey line or station changes is less than 40 minutes the activity may continue as normal (i.e. under full seismic output).</p>	<p>Equipment would be switched off in the event that line turns take longer than 40 mins as per NPWS guidance</p>
	<p>If there is a break in sound output for a period of 5-10 minutes (e.g. due to equipment failure, shut-down, survey line or station change), MMO monitoring will be undertaken to check that no marine mammals are observed within the Monitored Zone (i.e. within the</p>	

Discipline	Mitigation Measure Proposed	Additional Notes
	1,000 m radius) prior to recommencement of the sound source at full power	
	Where a marine mammal is observed within the Monitored Zone during such a break of 5-10 minutes, then all Pre-start Monitoring and Ramp Up Procedure (where appropriate following Pre-start Monitoring) shall recommence as in normal start-up operation.	
	If any case, if there is a break in sound output for a period greater than 10 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) will be undertaken.	
	Full reporting on MMO operations and mitigation undertaken will be provided to the Regulatory Authority.	
	In addition to the above measures, MMOs will use passive acoustic monitoring (PAM) to optimise marine mammal detection around the survey.	PAM equipment must be operated by dedicated and suitably trained/experienced operators. A detailed monitoring plan setting out how the PAM will be used will be submitted for approval prior to survey commencement.
	Sound producing equipment on the AUV will be switched on at surface following pre-start monitoring and ramp up procedures. Monitoring at depth will be undertaken using PAM.	Other than in the event of a planned or unplanned break of less than 10 minutes all equipment start-up will be at surface to allow for adequate visual monitoring, in addition PAM will be used prior to AUV equipment start-up.
Discharges to the Sea	Treated grey and black water will be discharged in line with MARPOL 73/78 Annex IV	
	Food waste will be macerated in line with MARPOL 73/78 requirements, and no discharges will be made within 12 nm of the coastline.	

Discipline	Mitigation Measure Proposed	Additional Notes
	Discharge of bilge water from the survey vessel will comply with standards set out in the 1973/78 MARPOL Convention with no discharge occurring within the 12 nm limit.	
	Solid waste stored onboard and handled to comply with the Waste Management Hierarchy, MARPOL and the Sea Pollution (Prevention of Pollution by Garbage from Ships). Garbage Management Plan will be developed. Contractors must use authorised waste contractors.	
	Survey vessel will have a SOPEP in place in accordance with Annex I of MARPOL.	
	Spill kits on board the vessel deck to clean-up spills of utilities hydrocarbons or chemicals before they can enter the sea.	
	Refuelling of the survey vessel to be undertaken in port, thus reducing potential for collision or spillage at sea	
	Ballast water discharges may be required during operations and will be managed through a Ballast Management Plan	