



APPROPRIATE ASSESSMENT DETERMINATION AND ANNEX IV SPECIES ASSESSMENT

Project Proposal

Exola DAC, a wholly owned subsidiary of Providence Resources, have applied to the Minister for Communications, Climate Action and Environment for permission to conduct a site survey within the Barryroe licence area (SEL 1/11) situated in the Celtic Sea basin approximately 43 km south east of the closest coastline at Ballymacshoneen, Butlerstown North, County Cork on the south coast of Ireland. The application was received on the 21st February, 2019.

The site survey will comprise a seabed and shallow geophysical survey and an environmental baseline and habitat assessment survey to be conducted over three survey areas, encompassing four potential future well locations, within two separate survey vessel activity areas at Barryroe, together with a single environmental control point approximately 10 km to the east-south east.

The key aims of the survey are to:-

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

Exola DAC submitted the following documents with their application:

- Application for approval to conduct a Seabed Debris Clearance, Environmental Baseline and Habitats Assessment Site Survey;
- Barryroe Site Survey Environmental Impact Assessment Screening Report;
- Pre-Fishery Survey Assessment at Barryroe (SEL 1/11); and
- Combined Appropriate Assessment Screening and Natura Impact Statement.

Assessment Process

The Environment Advisory Unit (EAU), a functionally separate and independent unit of DCCA 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.

In Ireland, 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) provide (at Regulation 3(1B)) that the EAU shall carry out an EIA Screening Assessment and make a Determination as to whether activities the subject of an application to the Minister for consent would, or would not, be likely to have significant effects on the environment by virtue, inter alia, of their nature size and location.

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, 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. Where it is determined 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 AA screening assessments (and any required Stage 2 Appropriate Assessment) in accordance with the 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 DCCA (PAD) places the application on the Department 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

The Department has further engaged Ramboll Environment and Health UK Limited (**Ramboll**) to provide assistance with regard to the 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.

Legislative Background: Appropriate Assessment

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) and 6(4) of Directive (92/43/EEC) (as amended) (**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.

Article 6.3 states that “ *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 European Communities (Birds and Natural Habitats) Regulations 2011-15 as amended (**Birds and Habitats Regulations**) provide as follows:-

- Regulation 42(1) provides 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*”.
- 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.*

Factual Background: Public Consultation Process and Stage 1 AA Screening Assessment

The Exola DAC application and supporting documentation were published on the Department website on 27th February, 2019 and submissions were invited to be made on the application during a 30 day consultation period concluding on the 1st April, 2019. Two responses were received:

- Consultation response received from Harrington & Co. Solicitors on behalf of An Taisce dated 1st April 2019;
- Consultation response received from Department of Culture, Heritage and the Gaeltacht dated 4th April 2019.

A Stage 1 Appropriate Assessment Screening process of the Exola application was conducted in accordance with Articles 6.3 and 6.4 of the Habitats Directive (92/43/EEC), the Birds and Habitats Regulations and relevant jurisprudence of the EU and Irish courts, which provide the decision making framework and tests for carrying out screening for appropriate assessment.

On 1 May 2019, having carried out an Appropriate Assessment Screening of the Exola application in accordance with the Habitats Directive and the Birds and Natural Habitats Regulations, it was determined that a Stage 2 Appropriate Assessment was required in respect of the Exola application.

Further, while Exola submitted a combined Appropriate Assessment Screening and Natura Impact Statement with their application, having reviewed the Exola application and accompanying documents, the responses received to the public consultation and the recommendation from Ramboll that additional information was required for the purposes of carrying out a Stage 2 Appropriate Assessment, the Ramboll recommendation was adopted and it was concluded that insufficient information had been provided by Exola to enable a Stage 2 Appropriate Assessment of their application. By Notice dated 1 May, Exola was directed to provide additional information considered necessary for the purposes of carrying out a Stage 2 Appropriate Assessment.

A Newspaper Notice was published noting the outcome of the AA Screening Determination and the request for additional information. The Department website was further updated to this effect.

On 16 May, additional information was received from Exola in response to the request for further information. The material was published on the Department website for a further public consultation for the purposes of the Stage 2 Appropriate Assessment. A technical issue was identified with accessing this material on the DCCAE website, which was rectified on 24 May. The public consultation was extended to 13 June. No further submissions were received in response to the public consultation.

The consultation responses received (including the project specific observations) are shown in Appendix 1 as part of the external review of the applicant's Combined Appropriate Assessment Screening Report and Natura Impact Statement undertaken by independent external environmental advisors commissioned by the Department (Ramboll Environment and Health UK Limited; 'Ramboll').

Stage 2: Appropriate Assessment and Review of Natura Impact Statement

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).

The assessment of the NIS and associated documents submitted by Exola DAC 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).

Appropriate Assessment Determination

I have carefully considered the following documents in carrying out the Appropriate Assessment of the EXOLA DAC application:-

- Documents provided by the applicant – combined Appropriate Assessment Screening and Natura Impact Statement Report;
- Additional material provided by the applicant - combined Appropriate Assessment Screening and Natura Impact Statement Report (updated May 2019);
- External review of the applicant’s Natura Impact Statement by Ramboll (Appendix 1);
- Submissions received during the public consultation process;
- Ramboll’s consideration and response to each submission received during the public consultation phases (included in Appendix 1).

Based on careful consideration of the information summarised above, 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 and accordingly am satisfied that the applicant has provided sufficient information to enable an Appropriate Assessment of their application to conduct a site survey within the Barryroe licence area (SEL 1/11) situated in the Celtic Sea basin approximately 43 km south east of the closest coastline at Ballymacshoneen, Butlerstown North, County Cork on the south coast of Ireland.

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.

By way of response to the additional observations made during the public consultation process relating to the current regulatory process applicable to applications made to the Minister for permission to undertake “*activities*” under an exploration licence or petroleum prospecting licence, significant structural changes have occurred in the Department’s management of the environmental assessment and decision making processes in respect of such applications. As described in detail above, the Environment Advisory Unit (EAU), a functionally separate and independent unit of the Department, 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. I further am satisfied that all appropriate process steps were followed, including as regards informing the public / public consultation.

I note the applicant’s own conclusion following an examination, analysis and evaluation of the relevant information including in particular the nature of the predicted impacts from the proposed site survey operations and with the implementation of the mitigation measures proposed, that the proposed Barryroe site survey operations, together with the mitigation measures proposed will not adversely affect (either directly or indirectly) the integrity of any European site, either alone or in combination with other plans or projects and that there is no reasonable scientific doubt in relation to this conclusion.

I agree with and adopt the Appropriate Assessment Screening and NIS Review Report prepared by Ramboll in respect of the Exola DAC application and the conclusions reached in that Report that it can be excluded on the basis of the latest and best objective scientific information that the plan or project, individually and/or in combination with other plans or projects, will not have an adverse effect on the integrity of the named European sites (Ramboll Report is at Appendix 1 to this Determination).

I note the mitigation and management measures committed to by Exola DAC and 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).and I adopt all the mitigation measures as outlined in Table 1.

Accordingly, I am satisfied and have decided that the application by Exola DAC to conduct a site survey within the Barryroe licence area (SEL 1/11) situated in the Celtic Sea basin approximately 43 km south east of the closest coastline at Ballymacshoneen, Butlerstown North, County Cork on the south coast of Ireland 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 mitigation measures outlined in Table 1.

Annex IV Species Assessment

Legislative Background

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."

Annex IV Species Assessment and Determination

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

The Ramboll Report not only concludes that the proposed project will not have an adverse effect on the integrity of any European site in view of its conservation objectives, but also that it will not cause any significant disturbance to the Annex IV species described that may be present in the area.

I agree with and adopt the conclusions in the Ramboll report in relation to impacts on Annex IV species and 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, should approval be granted for the EXOLA DAC application.

Conclusion

Having considered the application by Exola DAC, the conclusions of the NIS, the submissions from the public consultations and the conclusions reached in the Ramboll Report and based on the foregoing, 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 application by Exola DAC to conduct a site survey within the Barryroe licence area (SEL 1/11) situated in the Celtic Sea basin approximately 43 km south east of the closest coastline at Ballymacshoneen, Butlerstown North, County Cork on the south coast of Ireland 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 mitigation measures outlined in Table 1.

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 Exola DAC application.

Jean Clarke, 22nd July, 2019



Environment Advisory Unit, Department of Communications, Climate Action and Environment

Table 1 Mitigation and Management Measures

Commitment proposed	Additional notes
Exola and its survey contractor will adhere to the DAHG Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters (DAHG, 2014).	None
Two qualified Marine Mammal Observers (MMOs) will be appointed to monitor marine mammals and log all data according to the standardised forms provided in the DAHG Guidance and provide an MMO report to the Regulatory Authorities	None
Acoustic surveying will not commence if marine mammals are detected within a 500 m radius around the acoustic sources (referred to as the Monitored Zone)	None
Sound producing survey activities will only be commenced in daylight hours where effective visual monitoring, as determined by the MMO, can be achieved	If a break in sound output occurs during the hours of darkness, the survey will be suspended until daylight when effective visual monitoring, as determined by the MMO, can be completed before start up.
For sound producing activities, as water depths across the proposed survey area are less than 200 m, pre-start-up monitoring will be conducted by the MMO at least 30 minutes before any activity using the acoustic sources is due to commence. Sound producing survey activity using the acoustic sound sources will not commence until 30 minutes have elapsed with no marine mammals detected within the Monitored Zone by the MMO. This pre-start monitoring will be followed by the soft-start procedure	None
Commencement of sound producing 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 170 dB re 1 μ Pa at 1 metre. 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 20 minutes). Where the power of the acoustic noise source cannot be increased gradually, due to operational parameters of the device, the device will be switched "on" and "off" in a consistent sequential manner for a period of 20 minutes prior to commencement of the full necessary output	None
Where a soft-start procedure is employed, the delay between the end of the soft-start and the start of the survey will be	None

minimised to prevent unnecessary high-level sound introduction	
Where there is a break in sound output (i.e. in the event of equipment failure, shut down etc.) from the acoustic sources for more than 30 minutes, all soft-start procedures must be undertaken before the activity can recommence	None
Full reporting on MMO operations and mitigation measures must be provided to the Relevant Authorities in accordance with the DAHG Guidance	None
Should the applicant change the survey vessel or equipment they should be required to seek approval from the DCCAE and that as part of that process DCCAE should expect to see evidence that the vessel, equipment and methodology proposed are not materially different from the assumptions used to inform the applicants assessment of potential effects.	None
The services of a suitably qualified and suitably experienced maritime archaeologist, to include experience in the interpretation of marine geophysical data, shall be engaged in advance of any such survey to undertake the Underwater Archaeological Impact Assessment (UAIA) so as to inform on the cultural potential of the area and advise on the known or potential location of any shipwrecks or other underwater cultural heritage (UCH) within the specified survey area. This is particularly relevant where grab samples, etc. are being carried out.	None
The (UAIA) should comprise detailed desktop study and archaeo-geophysical interpretation of all geophysical survey results as well as assessment of the results of all sampling.	None
The UAIA shall be licensed by DAHG and a detailed method statement shall accompany the licence application by the archaeologist.	None
Ideally the archaeologist would be on board the survey vessel to view the geophysical data in real time and identify known or potential UCH as it is encountered. If this is not possible the results of all marine geophysical survey undertaken shall be made available to the archaeologist for assessment and interpretation, and to inform on any potential submerged cultural heritage or submerged palaeo-landscape evidence.	None
The UAIA report shall be forwarded to the Underwater Archaeology Unit of DAHG for consideration and further comment in advance of any site investigation/sampling works taking place.	None

The Underwater Archaeology Unit is happy to liaise with the applicant's archaeologist, once engaged, to assist with discussions on archaeological assessment already carried out and any new areas requiring assessment for the current application.

None