

Ms. Hennessy
Mr. Nugent
Rúnaí Aire Stáit

Decision Sought:

That the Minister of State:

- Grant approval for Vermilion Exploration and Production Ireland Limited (VEPIL), to undertake annual maintenance works including:

(1) the inspection of the subsea related infield and export pipelines, the water outfall pipe, the umbilicals and

(2) inspection and maintenance works on the P3 wellhead to address hydraulic fluid loss.

pursuant to Conditions 17(i)-(ii) and 20 of the Consent to Operate (29th December 2015) which states:

- *17(i) Surveys of the offshore pipeline shall be undertaken by the Corrib Gas Partners to monitor any future colonisation of the offshore pipeline, movement of rock armour and any scour. The scope and frequency of the surveys shall be agreed with DCENR. The results of such surveys shall be provided to DCENR at time periods notified by DCENR to the Corrib Gas Partners. In the event that invasive species are identified appropriate remedial measures under EU Regulation 1143/2014 on Invasive Alien Species, and as required by the Minister, should be taken.*
- *17(ii) Rock used for rock armour should be pre-washed.*
- *(20) Subsea facilities and flowlines will be subject to annual inspection to ensure that protection measures remain effective and any remedial measures necessary to provide additional protection will be undertaken as soon as practically possible. The first such inspection will be undertaken within the first month from the start of commercial gas production, when the flowlines are at maximum operating pressure and temperature.*
- VEPIL propose to carry out the following annual maintenance works including:
 - (1) the inspection of the subsea related infield and export pipelines, the water outfall pipe, the umbilicals and
 - (2) inspection and maintenance works on the P3 wellhead to address hydraulic fluid loss.

Background:

1. Vermilion Exploration and Production Ireland Limited (VEPIL) plan to undertake a geophysical and visual survey programme of the Corrib offshore gas pipeline and umbilical, Bellanaboy Bridge Gas Terminal (BBGT) treated surface water outfall pipeline, and infield flowlines and umbilicals between the Corrib Field manifold and the landfall at Glengad, Co. Mayo. The objective of this survey is to inspect all subsea structures including the main gas export pipeline, water outfall, main umbilical and infield pipelines and infield umbilicals. No seismic surveying is being carried out. The estimated duration is approximately 20 days. The location of the survey covers the entire offshore pipeline and umbilical system from landfall valve site in Glengad, Co. Mayo to the Corrib wells.
2. The offshore survey will be conducted using industry standard pipeline and structure inspection equipment. Sensors utilised will include a suitable mix of video camera, sonars, cathodic protection, depth of burial, sub-bottom profiler, multi beam echo sounders, bathymetric unit (pressure sensor), sound velocity probe, stills camera, pipetracker, inertial navigation system, doppler velocity log, USBL transducers, portable subsea USBL transponders, gyros, motion reference unit (MRU), heading sensor, altimeter etc. All sensors will be located on the support vessels, ROVs or other deployable assets as appropriate. Data obtained will include pipelines /umbilicals / structures status, position, cathodic protection levels and depth of burial, speed of sound in water column profiles.
3. On 17th December 2019 a Policy Statement on Petroleum Exploration and Production Activities as part of Ireland's Transition to a Low Carbon Economy was published. This sets out a vision for development of natural gas resources in the Irish Offshore as a key component of our energy mix as we transition to a low carbon economy and underpinning principles for petroleum exploration and production in the broader context of the Government's Climate Action Plan. All applications for activities under a lease or licence are considered within this policy context.

Application:

4. An application for consent to undertake offshore pipeline survey and inspection/maintenance programme of the offshore facilities, under the Corrib Petroleum Lease, was received by the Petroleum Affairs Division (PAD) of the Department from Vermilion Exploration and Production Ireland Limited (**VEPIL**) on 16th April 2019. The following documents (**Tab A1 – A6**) were received as part of the application:

- Application Letter for 2019 Offshore Inspection & maintenance works
- Application to conduct an offshore survey
- Corrib P3 Hydraulic Fluid Loss Permanent Repair Method Statement
- Corrib Subsea Inspection Method Statement
- Natura Impact Statement Corrib Pipeline Inspection and Maintenance Survey
- EIA Screening and Environmental Risk Assessment for Annex IV Species

The location covers the entire offshore pipeline and umbilical system from landfall valve site in Glenad, Co. Mayo to the Corrib wells. Repair works on the subsea P3 wellhead (18/20-3) are to be carried out on the Corrib Field, approximately 65 km offshore

Regulatory Context:

5. The **Corrib Lease** was granted under Section 13(1) of the Petroleum and Other Minerals Development Act 1960 ('POMD') which provides that every Lease shall be granted upon such terms and conditions as the Minister thinks fit and specifies therein. The consent to operate was granted pursuant to section 40 of the Gas Act.
6. The application has therefore been considered in accordance with the above legislation, terms and rules, and also in accordance with the following European and Irish legislation:

Environmental Impact Assessment

- Directive on the assessment of the effects of certain public and private projects on the environment (Directive 2011/92/EU) as amended by Directive 2014/52/EU ('the EIA Directive')
- The POMD Act, 1960, as amended.

Appropriate Assessment

- Directive 2009/147/EC on the conservation of wild birds (commonly referred to as the Birds Directive);
- 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;

Ministerial considerations in assessing the application:

7. The Department's Environment Advisory Unit ('EAU') made a recommended EIA Screening Determination to the Minister (**Tab B**) on 14th October 2019, which concluded that the application to proposed survey programme in the Corrib Field, comprising an offshore pipeline and subsea structure inspection (to include repair and maintenance work as necessary), inshore pipeline inspection/maintenance, as well as the programme of repair works of the P3 is not likely to have a significant effect on the environment and, consequently, an Environmental Impact Assessment was not required in respect of the application. The recommended EIA determination was contingent on the mitigation measures proposed by the Applicant being included as conditions in any consent that may be granted by the Minister in respect of the Application.
8. Also on the 14th October 2019, the EAU made an Appropriate Assessment Screening determination, following screening under 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 VEPIL application, as it could not be excluded on the basis of objective scientific information that the proposed survey programme and repair works, either individually or in combination with other plans or projects, would have a significant effect on a European Site (**Tab C**).
9. The EAU in its Appropriate Assessment (AA) Determination to the Minister (**Tab D**) of 26th November 2019, concluded that the proposed survey programme, would not adversely affect the integrity of the relevant European sites identified, whether individually or in combination with other plans or projects. This determination was informed through a review of the relevant sites' conservation objectives and was subject to the implementation of the mitigation measures adopted and outlined in the AA Determination and EIA Screening Determinations made in respect of the Vermillion

application. Such mitigation measures must be included in any consent that may be granted in respect of this application.

It was further concluded that there would be no significant adverse effects on Annex IV species that may be present in the area, should approval be granted in respect of the application, subject to the 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.

10. The technical assessment (**Tab E**) of the application was undertaken by Petroleum Affairs Division Technical Section, who indicated that technical elements of the proposed activities are acceptable and that the proposals by VEPIL meet the Department's requirements.

Public consultation:

11. Although public participation is not required during the screening process under either the EIA Directive or Birds and Habitats Directives, the Department, mindful of the requirements of the Aarhus Convention and the public participation requirements in Article 6 of the EIA Directive, conducted a thirty day public consultation period, on receipt of the application.
12. The application and associated environmental documentation were published on the Department's website on the homepage (under 'Latest Consultations') on 16th April 2019 with submissions to be received by close of business 28th May 2019.
13. On the 7th June Vermillion Exploration and Production Ireland Ltd were directed to provide further information to enable screening for Appropriate Assessment be carried out on the application, Further to Regulation 42(3) of the European Communities (Birds and Natural Habitats) Regulations 2011-15 as amended (Birds and Habitats Regulations). This information was published on the Department website on the 20th June 2019 and further submissions were invited to be made on the additional material until the 5th July 2019.
14. On the 25th June 2019 further information considered necessary to enable an EIA screening assessment and determination to be made in respect of the Vermillion application was sought from the applicant. This information was published on the Department website on the 5th July 2019 and further submissions were invited to be made on the additional material until the 19th July 2019.

15. On the 31st July 2019 Vermillion Exploration and Production Ireland Ltd were directed to provide further additional information to enable screening for Appropriate Assessment to be carried out on the application. This information was published on the Department website on the 21st August 2019 and further submissions were invited to be made on the additional material until the 5th September 2019.
16. On the 31st July 2019 Vermillion Exploration and Production Ireland Ltd were directed to provide further additional information to enable for an EIA screening assessment to be carried out on the application. This information was published on the Department website on the 21st August 2019 and further submissions were invited to be made on the additional material until the 5th September 2019.
17. On 14th October 2019, a determination was made, following screening under 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 VEPIIL application, as it could not be excluded on the basis of objective scientific information that the proposed survey programme and repair works, either individually or in combination with other plans or projects, will have a significant effect on a European Site. The application proceeded to Stage 2 Appropriate Assessment, which had a 21 day consultation on the application documents for the purposes of that assessment. Submissions were invited until 6 November 2019.
18. Following the EAU's EIA Screening Determination on 14th October 2019 (**Tab B**) this decision was published on the Department's website on INSERT DATE and in the Irish Independent newspaper on 15th October 2019 (**Tab F**).
19. Following the EAU's AA Determination on 26th November 2019 (**Tab D**) this decision was published on the Department's website on 28th November 2019 and in the Irish Independent newspaper on 28th November 2019 (**Tab G**).

Technical Review in accordance with Corrib Consent to Operate:

20. The application documents submitted to PAD on 16th April 2019 were accompanied by the following technical documents in accordance with the Corrib consent to operate.
 - 2019 Corrib P3 Hydraulic Fluid Loss Permanent Repair Method Statement
 - 2019 Corrib Subsea Inspection Method Statement

In their report dated 20th November 2019 from PAD Technical Section have indicated that, should this approval be granted, the proposed subsea inspection to assess the facilities and pipelines of the near shore and offshore elements of the Corrib development is reasonable and required for annual maintenance of the facilities using industry standard equipment. No seismic survey is being carried out. The proposed works on the wellhead to fix the bridging plate is reasonable and demonstrates the operator is proactive in maintaining the subsea infrastructure (**Tab E**).

Consultation with State Bodies:

21. The following bodies have been notified of the proposed maintenance survey activities by VEPIL in accordance with the *Rules and Procedures*;

- I. Petroleum Affairs Division, Department of Communications, Climate Action and Environment
 - Development Applications Unit, National Parks and Wildlife Service
 - 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)
 - Sea Fisheries Protection Authority
 - Sea Fisheries Policy Division, Department of Agriculture, Food and the Marine
 - Department of Defence

22. The following bodies provided observations to the Department:

- Maritime Safety Policy Division, Irish Maritime Administration, Department of Transport, Tourism and Sport

“In this regard, I wish to inform you that (prospective) licensees and their employees and contractors are reminded that they should be aware of ship-source pollution prevention provisions which are in place to protect human health and the marine environment, and apply to all shipping activity. These provisions are obligatory independently of particular licence terms and conditions. Under the MARPOL Convention and EU law, as applicable in national law, ships may not cause pollution either by discharge to water or emissions

to air, when at sea or when at berth in port. Ships include Floating Production, Storage and Offloading vessels (FPSOs), also called a "unit" or a "system"; and Floating Storage Units, (FSUs). Ships berthed at terminals at sea are also obliged to conform to the law.

Management of ship waste (mainly oil, hazardous and polluting substances, sewage, garbage and polluting emissions to air) and of all cargo residues must be ensured as required under international (IMO), EU and national law. Under existing provisions ships are obliged to discharge waste and cargo residues at port and ports are obliged to provide adequate facilities for their reception from ships."

Reasoned Recommendation:

23. A comprehensive due diligence exercise has been carried out by the Department on the application including environmental and technical assessments and the carrying out of public consultation, as described above. Taking account of all such considerations, it is recommended that the Minister of State grant the consent sought, subject to the applicant's compliance with the eight conditions listed below, for the following reasons:

- I. As set out in detail in the EIA Determination of 14th October 2019, the proposed survey programme in the Corrib Field, comprising an offshore pipeline and subsea structure inspection (to include repair and maintenance work as necessary), inshore pipeline inspection/maintenance, as well as the programme of repair works of the P3 wellhead can be completed without significant effects on the environment, subject to attachment of specified conditions (Table 1).
- II. As set out in detail in the AA Screening Determination of 26th November 2019, the proposed survey programme, comprising an offshore pipeline and subsea structure inspection (to include repair and maintenance work as necessary), inshore pipeline inspection/maintenance, as well as a programme of repair and engineering work on the P3 well) 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 2.
- III. The technical elements of the proposals are acceptable and meet the Department's requirements. It is considered that the proposed subsea

inspection to assess the facilities and pipelines of the near shore and offshore elements of the Corrib development is reasonable and required for annual maintenance of the facilities using industry standard equipment. The proposed works on the wellhead to fix the bridging plate is reasonable and demonstrates the operator is proactive in maintaining the subsea infrastructure.

Approval Sought

- The Minister of State confirms that:
 - a) Having considered this submission, including the TABs attached to it;
 - b) Having considered the EIA and AA Screening Determinations made by the EAU with contingent conditions;
 - c) Having considered the technical review by the Petroleum Affairs Division Technical Section;
 - d) Having regard to any observations made by State Body consultees;

That the Minister of State:

Grant Approval for Vermilion Exploration and Production Ireland Limited (VEPIL) to undertake annual maintenance works including

(1) the inspection of the subsea related infield and export pipelines, the water outfall pipe, the umbilicals and

(2) inspection and maintenance works on the P3 wellhead to address hydraulic fluid loss.

In granting such consent it is recommended that the Minister of State require it to be contingent on adherence to the following conditions:

1. The Minister of State consents to the carrying out of annual maintenance works under the Corrib Lease including:
 - (1) the inspection of the subsea related infield and export pipelines, the water outfall pipe, the umbilicals and
 - (2) inspection and maintenance works on the P3 wellhead to address hydraulic fluid loss.
2. All operations shall be conducted in compliance with the provisions of the Rules and Procedures Manual for Offshore Petroleum Production Operations.
3. In particular the applicant must comply with Reporting Procedures of the Rules and Procedures Manual for Offshore Petroleum Production Operations.

4. Daily reporting shall commence from the time the maintenance works commence and shall continue until the maintenance works are completed
5. Compliance with the conditions outlined in the attached Table 1: Mitigation measures required to be specified in any Consent that may be granted, following the EAU's EIA Determination.
6. Compliance with the conditions outlined in the attached Table 2: Mitigation and Management measures required to be specified in any Consent that may be granted, following the EAU's AA Screening Determination.
7. The applicant must seek approval from DCCAE prior to the commencement of the survey should alternative survey vessels be proposed. In this event, confirmation will be required that the survey equipment and methodology on any replacement vessel are equivalent to that described in the applicant's EIA Screening Report, and that the nature and extent of the proposed activities described in that Report has not materially changed.
8. The Department is to be informed on the commencement and completion of the maintenance works. Daily progress reports should be sent to DCCAE via secure website or by posting to a designated secure website or by emailing (addresses to be advised separately).

Sinéad O'Reilly

Petroleum Affairs Division

30th January 2020

Table 1: Mitigation measures required to be specified in any Consent that may be granted

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific Condition Recommended
Physical Presence	<p>The survey will be scheduled to minimise the duration of the Leah-C and Edda Sun at sea. Activities will be confined to as small an area as possible to minimise acoustic and visual presence.</p> <p>Vessel(s) will operate in accordance with the inspection and maintenance survey vessel Code of Conduct (Document No. COR-14-SH-0227, 2018) for operations within and adjacent to Broadhaven Bay SAC.</p> <p>The camera system will be lowered to the seabed using a taut vertical oceanographic cable, reducing the likelihood of interaction (such as entanglement) with Annex IV species.</p>	X	X
	<p>Dedicated MMO and vessel crew will monitor and report immediately any interactions with Annex IV species that cause concern.</p> <p>With the potential exception of the side-scan sonar towfish on the inshore survey, acoustic survey equipment will be mounted directly to the hull of the Leah-C, or to the ROV of the Edda Sun, reducing the likelihood of interaction (such as entanglement) with Annex IV species</p>	X	X
Interactions with Other Sea Users	<p>The work will be scheduled so as to minimise the duration of project activities and to confine activities to as small an area as possible (i.e. directly over the pipeline and umbilical route, and other seabed assets being surveyed).</p>	X	

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific Condition Recommended
	<p>Sound-producing activities will only commence in daylight hours where effective visual monitoring, as performed and determined by the MMO, has been achieved. Effective visual monitoring should be undertaken in good weather conditions, where sea state is low and visibility is good (no fog, heavy rain).</p> <p>Prior to the soft start the MMO will survey for 30 minutes. Soft start can only begin if the 500m zone around the centre of the sound source has been clear of species for 30 minutes.</p> <p>Soft start procedure will ensure controlled build-up of acoustic energy output is undertaken in consistent stages, providing a steady and controlled graduation acoustic source levels that will allow animals the opportunity to vacate the area:</p> <ul style="list-style-type: none"> • In commencing an acoustic survey operation, the following soft start (or ramp up) must be used, including during any testing of acoustic sources, where the output peak sound pressure level from any source exceeds 170 dB re: 1µPa @1m: <ul style="list-style-type: none"> • a) Where it is possible according to the operational parameters of the equipment concerned, the device's acoustic energy output shall commence from a lower energy start-up (i.e., a peak sound pressure level not exceeding 170 dB re: 1µPa @1m) and thereafter be allowed to gradually build up to the necessary maximum output over a period of 20 minutes. 	<p>X</p> <p>X</p> <p>X</p> <p>X</p>	

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific Condition Recommended
	<ul style="list-style-type: none"> • b) This controlled build-up of acoustic energy output shall occur in consistent stages to provide a steady and gradual increase over the ramp-up period (e.g., output peak sound pressure level of 170 dB>180 dB>190 dB>200 dB>200+ dB over 20 minutes). • c) Where the acoustic output measures outlined in steps (a) and (b) are not possible according to the operational parameters of any such equipment, the device shall be switched “on” and “off” in a consistent sequential manner over a period of 20 minutes prior to commencement of the full necessary output. • In all cases where a Ramp-Up Procedure is employed the delay between the end of ramp-up and the necessary full output should be minimised to unnecessary high-level sound introduction into the environment <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 Annex IV species occur within a 500 m radial distance of the sound source, i.e., within the Monitored Zone</p> <ul style="list-style-type: none"> • If there is a break in sound output for a period greater than 30 minutes (e.g., due to equipment failure, shutdown, survey line or station change) then all Pre-Start Monitoring and a subsequent Ramp-up Procedure (where appropriate following Pre- Start Monitoring) must be undertaken. 		

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific Condition Recommended
	<ul style="list-style-type: none"> • An agreed and clear on-site communication signal must be used between the MMO and the Works Superintendent as to whether the relevant activity may or may not proceed, or resume following a break (see below). It shall only proceed on positive confirmation with the MMO. • For higher output survey operations which have the potential to produce injurious levels of underwater sound (see sections 2.4, 3.2) as informed by the associated risk assessment, there is likely to be a regulatory requirement to adopt a shorter 5- 10 minute break limit after which period all Pre-Start Monitoring and a subsequent Ramp-up Procedure (where appropriate following Pre-Start Monitoring) shall recommence as for start-up. • Vessel(s) working in or in vicinity to Broadhaven Bay SAC will operate in accordance with the Vessel Code of Conduct for Inspection and Maintenance Surveys (Document No. COR-14-SH-0227, 2018). This document forms part of the Operators Environmental Management Plan (EMP) and details specific measures for vessel operators to avoid impacts to marine mammals (particularly small cetaceans). Where at all possible when operating acoustic geophysical survey equipment, the Leah-C will work in an inshore to offshore direction, in an effort to retain an open aspect for animals to leave the confines of Broadhaven Bay, rather than animals wishing to increase their distance from the sound sources having to head further inshore 		

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific Condition Recommended
Atmospheric Emissions	Air emissions will be minimised through regular maintenance of all engines on-board, in line with Maritime Registry of Shipping (MRS), MARPOL 73/78 Annex VI and other similar requirements.	X	
Discharges to the Sea	All waste will be handled in accordance with the vessels waste management plan, which will operate in accordance with all national and international legislation/regulations and corporate guidelines. Compliance with MARPOL 73/78.	X X	
Archaeology	No mitigation proposed.		

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific Condition Recommended
General	<p>No refuelling of the vessels will take place at sea.</p> <p>Refuelling operations will be managed through detailed vessel specific procedures and be supported by emergency response plans.</p> <p>The use of well-maintained and modern vessels, with modern navigational systems to identify/avoid obstacles.</p> <p>All fuels and chemicals aboard the survey vessels will be stored according to regulations and manufacturer's directions. Material Safety Data Sheets (MSDSs) for all chemicals stored on-board will be readily available. Procedures will be in place for dealing with spills and leaks.</p> <p>Vessel decks will have measures in place to contain fuel / lubricant/chemical leaks, such as bunding. Spill response equipment will also be present on board vessels and personnel will be trained in its usage.</p> <p>The vessels will operate with strict safety, navigational, operating and communications procedures in place in order to avoid collisions. These will include use of Automatic Identification System (AIS) tracking, adherence to the Collision Regulations, communication with other vessels, and 24 hour look ahead plans.</p> <p>Use of marine grade oil (MGO), rather than traditional heavy bunker fuel. In the event of a release of oil, this will disperse more readily in the offshore environment.</p> <p>On-board the vessel, the valves between fuel tanks will be kept closed, thereby minimising potential for complete fuel loss. Refuelling will occur according to a specific procedure;</p>	<p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p>	<p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p>

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific Condition Recommended
	<p>Shipboard Oil Pollution Emergency Plans (SOPEP), spill mitigation equipment and other facilities are kept on-board all vessels in order to contain or minimise spills; all the vessel crews have been trained in the use of the plans and equipment; and</p> <p>The Emergency Response Plan will set out how all spill response resources (personnel, command structure, equipment, etc.) will interface, including co-ordination between other seismic survey operators, if applicable</p>	<p>X</p> <p>X</p>	

Table 2: Mitigation and Management Measures

Commitment proposed	Additional notes
Application of the NPWS (2014) Guidelines for marine mammal mitigation.	All measures outlined in the Guidelines will be implemented.
Spill contingency plans will be implemented.	To reduce the potential environmental impact of an unplanned oil spill.
No fuelling of vessels will be undertaken within European sites; it will take place in port. All deck machinery will only be refuelled within a bunded area.	To reduce the likelihood of occurrence of an oil spill.
Regular maintenance of all engines on-board, in line with Maritime Registry of Shipping (MRS), MARPOL 73/78 Annex VI (as appropriate) and other similar requirements.	To reduce impacts from standard emissions.
Vessel discharges will also be managed in accordance with the requirements of MARPOL 73/78 as appropriate.	To reduce impacts from discharges.
Communication between operators to ensure that surveys are co-ordinated to limit noise exposure.	Noise mitigation measures have been outlined in the EIA screening determination.
All project operators will apply appropriate mitigation measures to protect/prevent animals from the risk of collision/entanglement.	To reduce the risk of collision/entanglement with animals.