From: Jimmy King [mailto:Jimmy.King@fisheriesireland.ie]

Sent: 18 January 2017 11:07

To: Liz M OBrien

Subject: RE: FS006631 Response to Observations & Recommendations

Liz,

The comments provided re above are helpful.

No further observations from here.

Jimmy King

Dr. James King Senior Research Officer

lascach Intíre Éireann Inland Fisheries Ireland

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3044 Lake Drive, Citywest Business Campus, Dublin 24, IRELAND.

From: Liz M OBrien [mailto:LizM.OBrien@housing.gov.ie]

Sent: 16 January 2017 12:33

To: Jimmy King

Subject: FW: FS006631 Response to Observations & Recommendations

Hi Jimmy,

Please see attached the response from MDM who are working for Donnabate MSI. Can you send me any comments you may have on this please?

Regards,

Liz O'Brien

Marine, Planning & Foreshore, Department of Housing, Planning, Communications & Local Government Newtown Road, Wexford 053 9117465

From: Rory Ryan [mailto:rory@mdmenq.ie]

Sent: 13 January 2017 11:40

To: Liz M OBrien

Subject: FS006631 Response to Observations & Recommendations

Liz,

Please see attached our response to your letter of 20th December 2016 in relation to observations / recommendations received from the Department's Specialist Advisors for the America Europe Connect Ltd. Foreshore Licence Application for a Marine Survey & Site Investigation Work at Donabate Co. Dublin.

Please let us know if you have any queries or if you require anything further in relation to this.

Regards,

Rory

for McMahon Design & Management

McMahon Design & Management Ltd.
Consulting Engineers & Project Managers
15 The Seapoint Building
Clontarf Road
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CONSOLIDATED PRESCRIBED BODIES OBSERVATIONS ON FS006631 AMERICA EUROPE CONNECT MARINE AND SITE INVESTIGATION WORKS AT DONABATE <u>DUBLIN</u>

OBSERVATIONS OF THE MARINE ADVISER

Re FS006631 – Foreshore Licence Application for Marine Survey and Site Investigation works (Geophysical and Geotechnical and localised site investigations) for a subsea fibre optic cable from Donnabate to Blackpool/Lytham St Annes (in UK) –your e-mail to E Mooney of 10/8/2016 refers

In relation to the above, Aqua Comms Ltd is planning to construct a fibre optic cable, Celtic Norse extending from landfall at Donabate Strand to Blackpool/Lytham and St Annes in Lancashire (UK) and, in order to investigate route options, they have made an application for a Foreshore Licence for Marine Survey and Site Investigations in connection with the planned survey route in Irish Waters. The works will be predominately by seaborne electronic surveys (geophysical survey) with some selective sampling of the seabed (geotechnical survey). Once these results are obtained, detailed route selection, design and method statements will be developed as part of a further submission for a Foreshore Licence for the installation works. The following is my report:

SUBMITTED DOCUMENTATION

- Completed Foreshore Licence Application Form dated 4/8/2016
- "Application For a Foreshore Licence for Marine Survey and Site Investigation Works At Donabate Co Dublin" prepared by MDM Ltd –Consultants- and dated August 2016-(this is supporting information in the form of a bound A4 document to the Application Form)
- 'Appropriate Assessment Screening -----------for site investigations (Foreshore Licence Application) at Donabate Co Dublin" –prepared by ALTEMAR (Marine and Environmental Consultants) and dated 03rd August 2016 (this is contained as a separate "Appendix 1 Appropriate Assessment Screening Report" within the bound A4 "Application for a Foreshore Licence --"document referred to above.)
- Drawings/Maps as follows
 - Drawing Number 1297-101 "Foreshore Licence Map 1 Offshore Section" on an Admiralty base Map at Scale 1:100000 on A1 or 1:200000 on A3 (shows the proposed offshore survey corridor within which SI will be undertaken)- ref Fig 3 in MDM Application Doc-
 - Drawing Number 1297-102 "Foreshore Licence Map 2 Inshore Section" on an Admiralty Chart base Map at Scale 1:25000 on A1 or 1:50000 on A3 (shows the

proposed inshore survey corridor for Landfall at Donabate to KP 20Km within which SI will be undertaken)-ref Fig 2 in MDM Application Doc.

- o Figure 4 (MDM Application Doc) –"Landfall Location on Discovery Map " NTS
- o Figure 5(MDM Application Doc) "Landfall Location on 6" OS Map"
- o Figure 6 (MDM Application Doc) "Landfall Location on 1/2500 OS Map"

PLANNED SURVEY ROUTES

Offshore-

The general line of the planned survey route is shown on Drawing No 1297-101 and also with reference to Figure 3(ref Application document) and the Key Turning Points (to WGS-84) are shown on Table 1(ref Application document Pg 6). The proposed survey corridor will be 500m wide centred on the route shown beyond the 3M contour to the 12 Mile limit.

Inshore

The planned survey route is shown on Drawing Number 1297-102 1 and also with reference to Figure 2(ref Application document).. The proposed survey corridor will be at a width of 200m for the inshore area and will be 500m wide centred on the route shown beyond the 3M contour to the 12 Mile limit.

The proposed total survey corridor area within foreshore domain will be 16.8 KM2(pipe route length of app 33.6km to 12 Mile Limit as shown on Maps)

PROPOSED MARINE SURVEY AND SITE INVESTIGATIONS

The principal objective of the Marine Survey and SI is to ascertain a feasible and safe route for cable system design, deployment, survivability, and subsequent maintenance with due regard for environmental considerations. The survey will identify all route obstacles and carbon hazards and provide detailed information to support cable route installation engineering. The SI will enable "ground truthing" of the seabed along the route.

The proposed Marine Survey and Site Investigations are described in detail with reference to Section 3.0 of the bound A4 Application document, and can be summarised as follows:

Landfall Site Survey and Site Investigations

Topographic survey of beach along proposed cable route (from car park to LWM)

Site Investigations at Donabate as follows:

- 3 No Trial pits on beach (2.5m depth, excavated and reinstated within 1 hour by JCB)
- Bar probes on beach (non-intrusive)
- Bar probes from LW to 3m contour (non-intrusive)

Marine Surveys offshore

These shall include for

- Bathymetry
- Side Scan Sonar
- Sub-Bottom Profiling
- Magnetometer

Seabed Sampling (within locations covered by Small Boat and Shallow Water Surveys)

The proposed sampling point locations (23No) are shown on Drawing No's 1297-101 and 1297-102 and include for the options of the following sampling methods depending on the stratum tested:

- Grab sample (recovery of app one JCB Bucket full)
- Gravity Core (recovery of no less than a 2m deep core of soil)
- CPT (Penetration to 2m below seabed)

Survey Methodology

Depending on proximity to the shoreline the following survey methodologies are proposed:

Near shore (LWM to 3M contour)

Diver swims survey (this will comply with the requirements of the Underwater Archaeology Unit of DAHG and will also investigate and identify any obstacles found during the Small Boat Survey)

Small Boat Survey (3M to 15M contour)

This Small Boat vessel will be equipped with Multibeam Echosounder, sidescan sonar and subbottom profile equipment

Offshore Survey (seaward of 15M contour)

The site investigations seaward of the 15M contour will be undertaken by a large sea-going vessel which will also be equipped with Multibeam Echosounder, sidescan sonar and sub-bottom profile equipment.

Survey line spacing will be designed to ensure adequate coverage and overlap of geophysical measurements

The marine surveys will be carried out in compliance with the Code of Practice for the Protection of Marine Mammals during Acoustic Seafloor Surveys in Irish Waters and with the general requirements for a Geophysical Survey for Archaeological purposes.

Marine activities will be affected only to the extent of keeping clear of the survey vessel in compliance with standard procedures for safety at sea. Marine Notices and Marine Radio announcements will conform to the requirements of the Marine Safety Directorate (Dept of Transport)

A small area on Donabate strand will be required to be fenced off for the duration of excavating and immediately reinstating trial pits.

The proposed start date for the Surveys/SI is February 2017 and the duration for Surveys/SI will be of the order of no more than two weeks depending on weather/sea conditions

MARINE LIASON and CONSULTATION (ref Section 6.0 of the bound A4 Application document)

In advance of and during the course of the proposed marine surveys/SI the applicants propose to maintain communications, consultations and liaise with the following organisations:

Sea Fisheries Protection Authority (SFPA)

To seek advice regarding the timing of work to avoid clashing with spawning periods for marine fish in the area and to advise on consultation with the relevant fisherman's producer organisations on details of the project.

It is proposed to appoint a Fisheries Liaison Officer for both inshore and offshore sections of the survey to keep commercial fishermen informed of the survey works including time lines, dates of sampling and locations of sampling vessels and to inform the survey team of commercial activity and locations of fishing nets or pots that may be impacted by the survey activities.

National Parks and Wildlife Service (DAHG)

It is proposed to appoint a Marine Mammal Observer on board the survey vessel for the small boat survey.

Irish Coast Guard

It is proposed to liaise with the Irish Coast Guard to arrange appropriate radio/nav text broadcast warnings to advise shipping approaching the survey area.

Marine Safety Directorate (Dept. of Transport)

It is proposed to publish Marine Notice giving a general description of the operation and dates of commencement and completion in conformance with the requirements of Marine Safety Directorate

ENVIRONMENTAL ISSUES

Fisheries/Marine Mammals

It is proposed to appoint a Fisheries Liaison Officer for both inshore and offshore sections of the survey to keep commercial fishermen informed of the survey works including time lines, dates of sampling and locations of sampling vessels and to inform the survey team of commercial activity and locations of fishing nets or pots that may be impacted by the survey activities. Also in consultation with SFPA it is proposed to undertake the SI works at a time which avoids clashing with the spawning periods for marine fish in the area.

Cetaceans have been recorded near the proposed survey out to the 12 mile limit. The proposed survey would be expected to impact on cetaceans primarily through the emission of noise due to the vessels and acoustics from survey equipment including multibeam. The cetacean species observed along the proposed survey route are mainly mid frequency and high frequency cetaceans. The high frequencies emitted from the equipment (210 kHz and 400 kHz) are above the auditory range of the mid frequency of the mid frequency but within the hearing range of high frequency cetaceans observed (ref Tables 15 and 16 in AA Screening Report of 03/8/16). However the proposed surveys will conform to the DECLG' "Code of Practice for the Protection of Marine Mammals during Acoustic Seafloor Surveys in Irish Waters". These guidelines require 1000m distance which would be deemed adequate to mitigate the negative impacts of the proposed survey. In addition ,cetaceans in the vicinity of the survey vessel during start up procedures would be given ample time to leave the site with soft start up procedures outlined in the guidelines. Furthermore a MMO will be present on Survey Vessel during survey periods. In terms specifically of Harbour Porpoises, these are known to breed annually during the months of May to September and the proposed SI will be undertaken in Q1 of 2016 in order to avoid the main breeding season for harbour porpoises.

Mitigation Measures (7 No ref AA Screening Report pg. 53) are also proposed to further minimise any potential impacts to fisheries and marine mammals and so it can be concluded that the proposed Site Investigations and Marine Surveys will have minimal impacts on marine mammals and that overall fishing activities will not be adversely affected by the surveys.

Navigation

It is proposed to publish Marine Notice giving a general description of the operation and dates of commencement and completion in conformance with the requirements of Marine Safety Directorate .The mariner's notice will be prepared to ensure that other foreshore users are made aware of the operations.

Approaching vessels will be requested to keep a safe distance from survey vessels in accordance with maritime regulations. All vessels involved in marine surveys will have appropriate navigational lighting and be equipped with navigational aids and competent crew maintaining a constant watch on other vessels.

The proposed works will cause minimal disruption to marine users.

Ecology

The potential route for the fibre optic cable in relation to the Irish EEZ and Offshore SAC's are seen in Figure 6(ref AA Screening Report pg. 17). Figures 7 and 8 shows the near shore route with a 5, 10 and 15 km buffer and Figure 13 specifically shows the proposed sampling sites in relation to the 10m contour and SAC's. The potential route for the fibre optic cable in relation to the Irish EEZ and Offshore SPA's are seen in Figure 10(ref AA Screening Report pg. 21). Figures 11 and 12 shows the near shore route with a 5, 10 and 15 km buffer. The Appropriate Assessment Screening Stage Report was prepared by Altemar Ltd at the request of MDM as part of the site investigation and marine survey Foreshore Licence Application and is included as a separate report within the bound A4 Application document (ref Appendix 1 "Appropriate Assessment Screening Report"). The main findings from this AA Screening Report are summarised as follows:

The Natura 2000 sites within 15km (8 No SAC's and 10 No SPA's) of the proposed route are listed in Section 4 d (pg. 16). An initial screening of the Natura 2000 sites is presented in Table 7(pg. 25-32) and all SPA's were scoped out on the basis—that there would be no impact to bird species—or the qualifying interests of the SPA's due to the limited nature of survey in both area and temporal extent and also due to habituation with existing marine traffic operations in the general area.

On a similar basis the majority of the SAC's were also scoped out and only two SAC's were scoped in for further assessment as follows

- 1 Rockabill to Dalkey Island SAC (Site Code IE0003000)
- 2 Malahide Estuary SAC (Site Code 0000205)

Rockabill to Dalkey Island SAC is designated for Reefs and Harbour Porpoises and the proposed survey route is within this SAC.

Malahide Estuary SAC is designated for a range of coastal habitats including

- Mudflats and sand flats not covered by seawater at low tides
- Sallycornia and other annuals colonising mud and sand
- Spartina Swards
- Atlantic salt meadows
- Mediterranean salt meadows
- Shifting dunes along the shoreline
- Fixed coastal dunes with herbaceous vegetation.

The landfall element of the site investigations are within this SAC. The proposed fibre optic cable route is not in the vicinity of Saltmarsh or Sand dune habitats (ref Figures 14 and 15) however it is within the habitat "Mudflats and sandflats not covered by sea water at low tide".

Based on the areas identified in (NPWS 2013) intertidal or subtidal reef habitats would not be expected to occur in the vicinity of the proposed site investigations. However the purpose of the SI is to assess the route for burial suitability and in these circumstances areas of subtidal reef may be

encountered, however it would be expected that this would be similar in nature to effects of a small boat anchor on the seabed. Therefore the proposed SI would not impact on the distribution or the permanent area occupied by reef and will not impact on the integrity of this habitat within the SAC.

Cetaceans have been recorded near the proposed survey out to the 12 mile limit. The proposed survey would be expected to impact on cetaceans primarily through the emission of noise due to the vessels and acoustics from survey equipment including multibeam. The cetacean species observed along the proposed survey route are mainly mid frequency and high frequency cetaceans. The high frequencies emitted from the equipment (210 kHz and 400 kHz) are above the auditory range of the mid frequency of the mid frequency but within the hearing range of high frequency cetaceans observed (ref Tables 15 and 16 in AA Screening Report of 03/8/16). However the proposed surveys will conform to the DECLG' "Code of Practice for the Protection of Marine Mammals during Acoustic Seafloor Surveys in Irish Waters". These guidelines require 1000m distance which would be deemed adequate to mitigate the negative impacts of the proposed survey. In addition ,cetaceans in the vicinity of the survey vessel during start up procedures would be given ample time to leave the site with soft start up procedures outlined in the guidelines. Furthermore a MMO will be present on Survey Vessel during survey periods. In terms specifically of Harbour Porpoises, these are known to breed annually during the months of May to September and the proposed SI will be undertaken in Q1 of 2017 in order to avoid the main breeding season for harbour porpoises.

Mitigation Measures (7 No ref AA Screening Report pg. 53) are also proposed to further minimise any potential impacts to fisheries and marine mammals and so it can be concluded that the proposed Site Investigations and Marine Surveys will have minimal impacts on marine mammals and that overall fishing activities will not be adversely affected by the surveys.

The proposed works will not result in the species range within the site being restricted by artificial barriers to site use.

Mudflats and sandflats not covered by seawater at LT occur in the vicinity of the proposed SI at Donabate Strand . No significant impact is predicted on this habitat as the disturbance will be minor and temporary. However certain mitigation measures should be put in place to maintain the integrity of this habitat and it is recommended that machinery on site avoid driftlines and limit access to the same route up and down the beach.

The SI will involve the placement of machinery and personnel on shore for bar probes and digging of three trial pits. Bar probes will cause localised disturbance to the sediments and may result in mortality of a small number of in fauna but this is not deemed to be significant.

The movement of machinery on the shore may result in temporary localised compression of sediments during one tidal cycle. The extent of disturbance along the 300m track is app 300 m2 and trial pits should be dug within this track. The total area of SAC Habitat is 311Ha so this temporary disturbance represents less than 0.015 of the overall habitat and so the proposed works will not alter the extent of the permanent habitat area.

The proposed works will not alter the long term ecology or "natural condition" of the site in this area that is already exposed to footfall as a result of the blue flag beach status.

Although no impacts are foreseen on the conservation objectives of the Malahide Estuary SAC mitigation measures are proposed (ref pg 53 of AA Screening Report) to reduce the footprint of the works.

MITIGATION MEASURES

The suite of Mitigation measures (7 No), as presented in the AA Screening Report on Pg. 53 are proposed to minimise any impacts to the SAC and SPA and in particular their Conservation Objectives and Qualifying Interests and include for:

- Not to disturb any seal haulout sites
- No SI to take place if brent geese, roosting or other birds of Conservation Interest are present
- Drift lines to be avoided by machinery
- Trial pits to commence on a receding tide and be completed (i.e. reinstated) before incoming tide when the birds return to feed.
- Trial pits to be dug within the tracks of disturbance caused by machinery and machinery to use same exit/entrance route to/from the beach.
- Images should be taken of the process and upon completion for inspection.

These Mitigation Measures are reasonable and should equally help to minimise any impact to the foreshore and marine environment during the course of the surveys and so can be made a condition of any Foreshore Licence when/if granted.

The overall conclusion in the AA Screening Report is that "no significant impact on associated NATURA 2000 sites is foreseen. This Department's own independent AA Screening Report reached a similar conclusion (this will be forwarded in separate communication on follow on to this report)

COMMENTS

The proposed Site Investigations and marine surveys will be of limited extent and duration (2 weeks subject to weather)

Overall fishing activities will not be adversely affected by the surveys. It is proposed to appoint a Fisheries Liaison Officer for both inshore and offshore sections of the survey to keep commercial fishermen informed of the survey works including time lines, dates of sampling and locations of sampling vessels.

The proposed surveys will conform to the DECLG' "Code of Practice for the Protection of Marine Mammals during Acoustic Seafloor Surveys in Irish Waters". Furthermore it is proposed to appoint a Marine Mammal Observer on board the survey vessel for the small boat survey at Donabate. While some intrusive SI works are required at the proposed beach landfall these will be of limited duration and extent (i.e. three trial pits to be excavated and reinstated within one hour)

A small area on the beach will be required to be fenced off for the short duration of excavating and immediately reinstating trial pits. Appropriate health and safety procedures should be adopted to protect the public users of this beach especially in view of its popularity during the summer months as a bathing area(this is a Blue Flag Beach) by the provision of appropriate signage/notices.

It is proposed that the SI and Marine Surveys will be undertaken in Q1 of 2017 in order to avoid the main breeding season for harbour porpoises.

In advance of commencing the marine surveys the contractor will publish local Marine Notices through DTAS Marine Safety Directorate and SFPA providing a description of the SI Works/survey operations, locations and dates for commencement and completion. The mariner's notice will be prepared to ensure that other foreshore users are made aware of the operations.

Approaching vessels will be requested to keep a safe distance from SI Works/survey vessels in accordance with maritime regulations. All vessels involved in marine surveys will have appropriate navigational lighting and be equipped with navigational aids and competent crew maintaining a constant watch on other vessels.

Given the temporary nature of the effect and small scale of the operations, the impact from the marine site investigations and marine surveys, the proposed mitigation measures as put forward in the AA Screening Report to protect the Natura 2000 sites, I would consider that there should be minimal impact on the foreshore and marine environment as a result of these proposed Site Investigations and Marine Surveys for both outfall options

CONCLUSIONS/RECCOMENDATIONS

The Applicants have demonstrated satisfactorily that, subject to the adoption of the Mitigation Measures as set out in the Application Documents (the AA Screening Report), the proposed site investigations and marine surveys, for the proposed cable route will not impact on fisheries, navigation or the environment (including potential impact to Natura 2000 sites).

Engineering Inspectorate is satisfied that these proposed SI Works and surveys will not impact on navigation, fisheries or the environment and has no objection to the granting of a Licence subject to the following conditions:

- The Applicant should notify this Department of the date of commencement of the Site Investigation / survey operations at least 2 weeks prior to commencement.
- 2 During the course of the Site Investigation /survey operations the Applicants shall ensure that,
 - (a) All necessary precautions are put in place to protect the public in accordance with relevant Health and Safety Legislation;
 - (b) Existing public access arrangements to the general foreshore area are not impeded by any vessels, plant or materials used in connection with the site investigations/surveys, and where relevant this access should be made safe and guaranteed by the provision of appropriate signage/notices/barriers etc. to the

- satisfaction of the Department of Environment, Community and Local Government;
- (c) Procedures are adopted to ensure that the site investigations/survey operations are not injurious to fishing, navigation, adjacent lands or the public interests
- 3. All vessels/floating plant shall have appropriate certification from the Marine Survey Office.
- 4. On completion of the Site Investigation works/Surveys the Applicants should ensure that all equipment and materials are removed and the foreshore is reinstated to its original condition, to the satisfaction of the Department of Environment, Community and Local Government.
- 5. Marine notice, lighting and markings to be carried out in consultation with the Maritime Safety Directorate, Department of Transport, Leeson Lane, Dublin2.
- 6. All surveying to comply with DAHG's "Code of Practice for the Protection of Marine Mammals during Acoustic Seafloor Surveys in Irish Waters" as appropriate.
- Where relevant Mitigation Measures as specified in the "Appropriate Assessment Screening Report (Appendix 1) shall be implemented during the marine survey operations unless otherwise varied by separate condition in this Licence.
- 8 Only those Site Investigation Works and Marine Surveys, the subject of this foreshore licence application and in particular as outlined in Sections 3.0 and 4.0 of the "Application for Foreshore Licence" document dated August 2016, shall be undertaken.

OBSERVATIONS OF THE MARINE INSTITUTE

America Europe Connect Ltd. has submitted an application for a foreshore licence to facilitate site investigation works in the western Irish Sea in the vicinity of Donabate, Co. Dublin. The site investigations are required to provide the necessary data and information on the characteristics of the seabed conditions along the route of a planned fibre optic cable, CelticConnect 2, extending from landfall at Donabate, Co Dublin to Blackpool / Lyttham St Annes in Lancashire, UK.

It is intended that the site investigations would be carried along a 500m wide route as shown in Drawing 1297-101 "Foreshore Licence Map Offshore Section" dated 21/04/2016 and Drawing 1297-102 "Foreshore Licence Map Inshore Section" dated 21/04/2016.

The site investigations will include a geophysical survey involving the collection of bathymetric, sidescan sonar, sub-bottom profiler and magnetometer data along the survey route as well as a geotechnical survey involving the collection of 18 No. grab samples from the 3m depth contour to the 15m depth contour and 5 No. gravity cores or Cone Penetration tests from the 15m depth contour to the 12 nautical mile limit. The locations of the sampling points are shown in the Drawings mentioned above. It is also intended to excavate 3 No. trial pits in the vicinity of the landfall site at Donabate as shown in Drawing 1297-103 "Site Location Map Landfall at Donabate" dated 21/04/2016 and also carry out bar probes and a diver swim survey in this area out to the 3m depth contour.

The geophysical survey methods to be used are standard and have been used on similar surveys in Irish waters and internationally. They are non-intrusive and will have no impact on the water column or the seabed. The collection of seabed samples as proposed along the survey route as part of the geotechnical survey are also standard and significant impacts on the marine environment are not considered likely. The excavation of the trial pits will be completed within a single intertidal period and the pits will be backfilled with the original excavated material with no likely significant impacts.

Given the nature, scale and purpose of the proposed activity the Marine Institute is satisfied that the activity will not have a significant impact on the marine environment in the study area, will not interfere with other legitimate users of the area and therefore has no objections to a licence being granted. It is recommended that the following specific conditions should be attached to any licence that may issue.

- 1. The licensee shall use that part of the Foreshore the subject matter of this licence for the purposes as outlined in the application and for no other purposes whatsoever.
- 2. The licensee shall notify the Department of the Environment, Community and Local Government at least 14 days in advance of the commencement of the works on the foreshore.
- 3. The licensee shall ensure that the beach and inshore survey works are conducted in such a manner so as to minimise disturbance to recreational and all other legitimate users of the area

OBSERVATIONS OF THE DEPARTMENT OF ARGICULTURE, FOOD AND THE MARINE

Further to your email dated 10th August 2016, please find below observations from this Department.

There are no licensed aquaculture sites in the vicinity of the survey area. There may be some interaction with fishing activity along the survey route but this would be localised and of short duration. It is noted that the applicant has stated that a Fisheries Liaison Officer will be appointed to keep commercial fishermen advised of the survey works including timing, dates of sampling and location of survey vessels. It is recommended that the appointment of a Fisheries Liaison Officer should be a condition of any licence that may issue.

It is known that certain marine geophysical survey methods can have a detrimental impact on dolphins, whales and porpoises as well as having an impact on fisheries. With the presence of anglers and occasional walkers on the nearby foreshore, it is important that their safety is safeguarded by the applicant.

Given the location, nature and scale of the proposed site investigations the Department is of the view that they will not have an adverse impact on aquaculture or seafisheries in the area of the survey and has no objections to a licence being granted, subject to the conditions as outlined above.

OBSERVATIONS OF DEVELOPMENT APPLICATIONS UNIT, DEPARTMENT OF ARTS, HERITAGE AND THE GAELTACHT

On behalf of the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs I refer to the above.

Outlined below please find the Underwater Archaeology & Nature Conservation observations.

Nature Conservation

The following mitigation, as recommended by supporting documents, should be attached as a condition of consent by the consenting authority:

- 1. Under no circumstance should seals hauled out in the area be disturbed such that they enter the water. This is unlikely, as this area is not recognised as a haul out area.
- 2. All site investigations should not take place if Brent Geese or other birds of conservation interest are present in the immediate area. If roosting birds are present on the upper shore, the survey should be postponed until the birds depart, without provocation.
- 3. Drift lines if present should be avoided by machinery.
- 4. The bucket of the digger should have teeth, so as to minimize scraping of metal against rock/boulders, if these are found to be present.
- 5. The trial pits should be dug on a receding tide. This is to ensure all operations are done on one tidal cycle and should be completed before an incoming tide when many of the birds return to feed and in-fauna are exposed to a minimum amount of disturbance.
- 6. Trial pits should be dug within the tracks of disturbance caused by machinery. Machinery should exit the beach on the same tracks that it entered the beach.
- 7. The sand layer should be treated as a separate layer and stored on the surface separately to ensure the integrity of the sandflat upon completion of the site investigation.
- 8. Images should be taken of the process and upon completion for inspection.
- 9. The survey must comply with "Guidance to Manage the Risk to Marine Mammals from Manmade Sound Sources in Irish Waters". The latest version of this document was published in January 2014 and is available to download from http://www.npws.ie/marine/bestpracticequidelines/.

Underwater Archaeology

It is noted that the proposed development is within an area of underwater archaeological potential. The Shipwreck Inventory of Ireland lists numerous wrecks for the Donabate area and in the wider environs of Lambay, which are subject to statutory protection under section 3 of the 1987 National Monuments (Amendment) Act. Given the location of the proposed development it is possible that underwater archaeology may be impacted by the development.

It is therefore recommended that the geophysical surveys be carried out in advance of the geotechnical works taking place. The geophysical data for all proposed geotechnical investigation locations and grab sample locations should be assessed by a suitably qualified archaeologist to ensure that the proposed works do not negatively impact on locations where there is known or potential archaeology. A report summarising the assessment of the geophysical data should be forwarded to this office for review prior to the geotechnical works taking place. Where archaeological material/features are shown to be present, preservation in situ, avoidance, preservation by record (archaeological excavation) or archaeological monitoring may be required. The applicant shall be prepared to be advised by the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs in this regard.

The proposed excavation works on Donabate beach should be subject to archaeological monitoring licenced under the National Monuments Acts 1930-2014.

The proposed geophysical surveys and archaeological dive surveys should be licenced under the National Monuments Acts 1930-2014. The dive survey should be accompanied by a hand-held metal detection survey which should also be licenced under the National Monuments Acts 1930-2014.

The results of the geotechnical investigations should be assessed by a suitably qualified archaeologist and this assessment should form part of the overall archaeological assessment of the proposed cable route.

OBSERVATIONS OF THE MARINE SURVEY OFFICE

Marine Survey Office,	Tel: 353-071-9822400
Abbey View House	
Ballyshannon,	
Donegal,	
Ireland.	

Memorandum to	Dept. H,P,C&LG Foreshore.
Attention	Liz O'Brien
Fax No	6199408
From	Nick Cantwell
No of Pages	1
Date	25 th August 2016
Reference	FS006631
	America Europe Connect site investigation

	works. Donabate, Dublin.
сс	

Having reviewed the Marine Environmental report for the proposed site investigation works, I am satisfied that all reasonable steps have been considered to minimise disruption to marine navigation.

In support of this it is imperative that as much warning is given to shipping interests as possible. This should be by means of a Marine Notices issued by the Irish Maritime Administration and a notice in a locally read newspaper.

These notices should provide information on commencement and completion dates, the nature of the work and a clear statement referring to marine safety broadcasts as arranged with the Irish Coast Guard.

In view of the above this office raises no objections.

OBSERVATIONS OF THE SEA FISHERIES PROTECTION AUTHORITY

Following a review of the documentation submitted on behalf of America Europe Connect Ltd regarding the site investigation works at North County Dublin, there is unlikely to be any impact on the razor clam fishery which operates within the general area.

OBSERVATIONS OF INLAND FISHERIES IRELAND

Inland Fisheries Ireland's (IFI) brief includes conservation of relevant fish species. Of relevance in the present case are marine sport fish species, such as tope and smoothound (both members of the shark family and caught via off-shore deep water leisure angling), and migratory species traversing the coastline and entering into the Avoca river – including Atlantic salmon, sea trout, sea- and river lamprey.

IFI notes that it is proposed to have a Marine Mammal Observer in place during the sound-generating survey activities. It is pointed out that such mitigation provides zero protection for fish species.

Table 4.3 of the supporting documentation indicates sound frequencies and decibel (dB) generation by the survey methods proposed are at or in excess of 200 dB.

IFI would wish to see sound-management mitigations introduced to take account of fish conservation issues. These should include

- Reduction in the number of sound-requiring test types to be employed (sound-generating testing is proposed for engineering/ground works as well as for archaeological works)
- Reduction in the footprint area for any sound-generating surveys
- Use of soft-start and ramp-up procedures for any sound-generating surveys undertaken
- Use of video camera for geomorphology assessment in deeper water areas, outside the 0-3 m depth zone
- Timing to be in line with requirements of SFPA.

Video camera work is proposed within the diver swim area in order to compile geomorphological information but this technology is not considered for the deeper-water areas. While some areas may be beyond dive depths it is not necessary to have video recording equipment used in 'manual mode' and is assumed that remote video recording of geomorphology along the cable route could be undertaken. I(f video camera work is adequate to assess geomorphology in the 0-3 m depth zone why is this technology not used throughout, to assess geomorphology? This would, presumably, reduce the requirement for use of the sound-emitting devices?

Mitigations proposed by applicant:

The application proposes mitigation measures including

- Liaising with Sea Fisheries Protection Authority to develop an optimal timing for the survey works in order to avoid or minimise any adverse impact on fisheries, particularly in regard to the spawning season of commercially-important species
- Establishment of a Fisheries Liaison Officer for the inshore and offshore stages of the survey
- Proposals in regard to management of sound-emitting devices at 4.5 and 4.6 are positive All of these measures above are positive and should be included in any foreshore licence conditions

OBSERVATIONS OF THE PLANNING AND STRATEGIC

INFRASTRUCTURE DEPARTMENT, FINGAL COUNTY COUNCIL

Proposed Development:

Geophysical survey and localised site investigations for a subsea fibre optic cableare being proposed.

The applicant has stated that the proposed works are required to ascertain a feasible and safe route for the future provision of a fibre optic cable intended between Donabate and Blackpool / Lytham St

Annes, Lancashire in the UK.

The landfall site survey and investigation works involve a non-intrusive topographic survey, 3 no.

trial pits on the beach 2.5km in depth, and bar brobes.

Site Description:

The landfall location is located at balcarrick beach, Donabate, with a further survey corridor extending 33.6km into the Irish Sea, with a width of 500m. The landfall location on Balcarrick beach

is identified in Fig. 6 of the Application for Foreshore Licence, August 2016.

Fingal Development Plan 2011-2017 Zoning, Objectives and Policies:

The subject site, and immediate adjacent lands are located within the zoning objective 'HA' High

Amenity, which seeks to 'Protect and enhance high amenity areas'.

The following are highlighted in the consideration of any development proposal at the subject site:

• The lands are designated as a Beach and County Geological Heritage Site;

There is an objective to preserve views from the coastline;

Lands to the west are designated as Highly sensitive landscapes; and

A Martello Tower listed on the Record of protected Structures, RPS 543 refers, is located to

the northeast of the landfall location.

Reports;

Transportation Planning section: No objection

Heritage Officer: Verbal report received, no comment.

Fingal County / Irish Water have two assets in the area;

- 1) There is a short outfall from the public toilets on the north end of Balcarrick Beach, just north of the corridor shown in Fig 6, page 10 of the Foreshore Application Report. This outfall has been blocked and has no discharge.
- 2) The new Portrane Waste Water Treatment Plant has a long sea outfall. A buoy marks the discharge point.

Water Services planning section: Notes the presence of a short outfall serving the public toilets on Balcarrick beach and the new Portrane Waste Water Treatment Plant has a long sea outfall. Neither of which should be impacted by the proposal.

Biodiversity Officer: No objection, and recommends that the applicant submit a final report on the works with photographic proof where possible and relevant, to show the implementation of these mitigation measures or provide an alternative method that will allow for cross checking of the mitigation measures against their working practices; and for the applicant to contact Fingal's Operation department regarding access to the beach.

Assessment: From the submitted information it is apparent that this development will be for a temporary period. Impact on the beach and surrounding lands will be minimal and it and it is not foreseen that there will be any long term impacts associated with this temporary development. An Appropriate Assessment Screening has been carried out by Altemer (Marine & Environmental Consultancy) and which has found there to be unlikely to be any negative impacts on designated sites.

The Planning and Strategic Infrastructure Department has no objection to the development as outlined in the application.

Recommendation: It is considered that the geophysical survey and localised site investigations for a subsea fibre optic cable will not have a negative impact on the amenity of the area. There is no objection to this application.