Submission HLG 00255-21: FS006915 Celtix Connect Ltd - Havhingsten Telecommunication Cable

TO: Minister of State Burke
STATUS: Completed
PURPOSE: For Decision

AUTHOR:
OWNER:
REVIEWERS: [redacted]

DIVISION: Foreshore
DECISION BY:

Final comment

Approved by minister, 28/07/2021

Action required

Ministerial approval is sought to grant a Foreshore Licence to Celtix Connect Limited under section 3 of the Foreshore Act 1933, as amended.

Executive summary

The approval of the Minister is sought to grant a Foreshore Licence to Celtix Connect Limited - Havhingsten Telecommunications Cable, under section 3 of the Foreshore Act 1933, as amended, for a term of 35 years, to facilitate the installation, operation, maintenance and decommissioning of the Havhingsten telecommunication subsea fibre-optic cable on the foreshore, extending from landfall site at Loughshinny, Fingal, County Dublin to the 12nm limit.

Detailed information

BACKGROUND

Celtix Connect Limited submitted an application to the Department of Housing, Local Government and Heritage (formerly Department of Housing, Planning and Local Government) for a foreshore licence under section 3 of the Foreshore Act 1933, as amended, for a term of 35 years, to facilitate the installation, operation, maintenance and decommissioning of the Havhingsten telecommunication subsea fibre-optic cable on the foreshore, extending from Loughshinny in North Dublin to the 12nm limit. See application form attached at **Tab 1**.

This application was originally submitted in 2019, however, was deemed unsatisfactory. A revised application and supporting documentation, the subject of this submission, were submitted in January 2020.

The cable will cross the Irish Sea with a UK landfall at Squires Gate Lane (south of Blackpool in England). This section also includes two branches onto the Isle of Man. The location of the proposed cable route is shown in the following drawings submitted by the applicant; see drawings attached at **Tabs 2** and **3**:

- Drawing No. P2228-CORR-006-B "Foreshore Licence Map"
- Drawing No. P2228-CORR-007-B "Foreshore Licence Map Landfall"

Other marine elements of this proposed cable in the North Sea will extend to Denmark. The cable route will extend more than 940km in total and deliver a boost to bandwidth (maximum rate of data transfer) between Ireland/Isle of Man/UK and Denmark. The general line of the subsea route is shown in Figure 1.1 of the "Planning Report" dated December 2019. The proposed cable route within Irish foreshore domain is shown on Drawing No. P2228-CORR-006-B (outlined red). The cable length on foreshore is 29.8km and the 40mm diameter cable will be laid within the marine corridor or 500m - narrowing to a 250m corridor at nearshore/landfall point (this area was subject to a site investigation on foot of a pervious foreshore licence granted in autumn 2018 - FS006746) with an area of 1,446ha (3,573 acres).

The post lay area of cable on foreshore from landfall at Loughshinny to the 12nm limit will take up an area of approximately 29.8km (73.63 acres). On completion of the works, the applicant is to provide, the Department of Housing, Local Government and Heritage with a statement confirming the completion of the works in accordance with the documentation submitted, together with a

drawing and route position list showing the 'as laid' location of the subsea fibre-optic cable, as provided for at Site Specific Condition No. 5.

PROPOSED WORKS

Nearshore Ducting: In advance of the submarine cable installation, a 100mm diameter duct is to be laid from the Beach Manhole to the landside edge of the beach, this work is above the high water mark (HWM). The duct will be laid by trenching using excavators and handheld trenching tools to a target depth of 2m. It is planned to stop the duct at a point, high up on the beach, from where the remainder of the cable trenching on the beach can be easily excavated.

Grapnel Run: Prior to the start of the submarine cable lay installation a pre lay grapnel run will be undertaken by a vessel over the length of the cable route to clear any obstructions from the route. Any debris retained from this process will be collected on-board the vessel and disposed of appropriately through licenced onshore facilities.

CABLE INSTALLATION WORKS

Offshore: These works will commence from the Irish/UK median line and run toward the Loughshinny landing site. Offshore cable laying operations will be undertaken from the Cable Laying Vessel (CLV) by plough burial, the plough delivers simultaneous cable installation and burial. The cable is passed over the back of the CLV and through the plough which is pulled along the seabed via a tow wire. The target burial depth is 1.5m and the plough will provide continuous depth of burial verification during the installation operation. The CLV will lay the cable from the Irish/UK median line to a water depth of approximately 15m at the approaches to the Loughshinny landing site. Where the target burial cannot be achieved with the plough, cable burial depths will be achieved by water jetting. Water jetting trenchers sit on the seabed and follow the cable whilst employing high powered pumps to inject seawater either side of the cable which fluidises the seabed. The cable naturally sinks, in the fluidised seabed, to achieve burial depths of more than 2m in soft clays and sands. Water jetting trenchers can be passed several times if required to achieve the target burial depths. The trench left behind backfills from the natural movement of sediment on the seabed.

Nearshore: The shore end landing operations will begin when the CLV approaches a water depth of approximately 15m. A line will be taken ashore using a small boat, this line is then used to pull the cable ashore. The cable is suspended above the seafloor using floatation buoys. Onshore, the end of the nearshore ducting is exposed by excavation and the cable is then passed into the Beach Manhole via the ducting, leaving sufficient slack for jointing to the terrestrial cable. Once the cable is in position the remaining buoys are removed by a team of divers and the cable sinks to the sea floor. Water jetting trenchers and divers are employed to bury the cable from the 15m contour to the seaward end of the beach, with a post-lay target buried depth of 1.5m. From the seaward end of the beach to the nearshore ducting, the cable will be buried to a target depth of 2m, using excavators and manual trenching. For additional protection, articulated pipe will be applied around the in-situ cable across the beach. The excavated sand will be used to backfill the trench.

Target Burial Depth: The target burial depth for the cable across the beach is 2m. Offshore, the target burial depth is 1.5m. In areas of stiff soil, the actual burial depth may be reduced but it is planned to achieve a depth which will protect the cable from fishing activities and generally be not less than 0.4m to 0.6m subject to the geophysical nature of the seabed together with burial assessment and risk categorisations. All cable laying activities will be closely monitored by the on-board engineers to ensure that the cable is laid according to the engineered design.

The Cable: The cable is an armoured cable designed to protect the optical fibre transmission path over the entire service life of the system, including laying, burial, and decommissioning operations. The fibre-optic elements in this cable area contained within a gel filled 2.3mm diameter steel tube cased within a steel wire and copper composite conductor and a 17mm diameter polyethylene insulating sheath. The construction of this core is intended to provide protection against water penetration and hydrogen. The core is further protected by layers of steel wire, polypropylene yarn and proofing compound, giving a final cable diameter of 40mm. The conductor allows for monitoring of the cable performance and break location in the event of damage. The proposed cable installation is "un-repeated" meaning that there is no power supply to the cable. Therefore operation of the cable is not expected to emit any electric induced magnetic fields or heat to the surrounding sediment of seabed.

The cable has a design life of 25 years, following installation the cable is expected to be operational for at least 25 years.

Cable Maintenance and Repair: Post curial surveys using a Remotely Operated Vehicle (ROV) will be carried out to establish the 'as-built' situation. This information is especially important should the local environmental conditions change or in areas of high tidal or wave energy. If required, cable maintenance/repair activities will have a similar effect to the installation activities, however,

they will be on an extremely localised scale, and as such are not expected to have any significant effect. Any effects will be less than those identified for installation operations.

Decommissioning: The least environmentally damaging option and the usual approach for submarine telecommunication cables is to leave the cable in-situ and this is the expected approach for the Celtix Connect-2 cable. Should decommissioning be undertaken, the operation will be conducted according to the standard industry protocol for the time, taking account of all relevant legislative and environmental requirements.

Duration of Works: The cable installation programme can be summarised as follows:

- Beach manhole construction (note on foreshore) 12-14 days
- Duct installation at Loughshinny (not on foreshore) 2-3 days
- Pre installation works (including grapnel run) 1 day
- Offshore installation (plough and cable lay in Irish waters) 3 days
- Nearshore tie in 2-3 days
- Post lay burial and reinstatement 7 days

It is anticipated that the overall works will be completed in up to 6 weeks. This is dependent on licensing/permitting process, weather and operational factors.

Policy Context: Department of Environment, Climate and Communications (DECC) supports this application and the increased capacity it will bring between Ireland and the UK and internationally to meeting the demand for digital and data services into the future, as well as increased diversity in telecommunication cable routes to ensure network resilience and to safeguard international connectivity in the event of a route failure.

DECC has advised that this telecommunication cable project is welcomed as part of developments in this area to meet the key initiative set out in the Telecommunications chapter of the forthcoming National Marine Planning Framework, guaranteeing existing and future international telecommunications connectivity is critically important to support the future needs of society and enterprise in Ireland. The value of this digital economy in Ireland is estimated at €12,3bn or 6% GDP and is expected to grow significantly over the coming years. In an increasingly interconnected word, continued investment in sustainable telecommunications connectivity will be critical to ensure that Ireland can address digital related challenges, enabling citizens to participate and benefit fully from a more integrated digital single market, improving skills, reducing the digital divide, fostering and strengthening innovation and providing better job opportunities.

In addition, arising from development at European level, including an initiative led by the Portuguese presidency - the "European Data Gateway Platforms Strategy" as part of "Shaping Europe's Digital Future" - there is an increased ambition to further strengthen the international connectivity. This ambition stems from a desire to improve the conditions for the EU to develop into a world-class data hub by strengthening the EU's internal and external communication capacity and thereby to protecting its interests, whilst promoting its values. Ireland supports the principle of boosting the telecommunications subsea connectivity of the EU as a whole and also Ireland's telecommunications subsea connectivity, and will be advocating at European and national levels for a pro-investment approach to be taken to encourage the development of high capacity telecommunications networks, including subsea telecommunications cabling interconnectivity within the EU, including Ireland, and between the EU and third countries.

The proposed Havhingsten cable development, which will span 940km of cable and enable high capacity connectivity for global carriers, cloud-based networks, data centres, information technology (IT) and the global media. Accordingly, DECC has advised that it would strongly welcome this planned investment in new infrastructure that will enhance Ireland's international connectivity, and considers it to be in line with that Department's policy position in relation to encouraging high capacity telecommunications connectivity between Ireland and the UK, between Ireland and mainland Europe, and in respect of other global connectivity for Ireland. Letter of support from DECC is attached at **Tab 4.**

COMPANION CONSENTS

Section 225 of the Planning and Development Act 2000, as amended, confirms that planning permission is not required for this development.

PUBLIC CONSULTATION

An initial public consultation concerning this application ran from 21 August 2019 to 27 September 2019. Ten (10) submissions

were made by the public. However, as there were discrepancies between the documentation on display at the local Garda Station and those published on this Department's website, the public consultation was deemed unsatisfactory and therefore repeated.

The second public consultation concerning this application was published in the 'Irish Independent' and the 'Northside People East' newspapers on 29 January 2020. The documentation was on display at Balbriggan Garda Station, County Dublin for a period of 30 calendar days, and was also made available on this Department's website. The public consultation period was from 29 January 2020 to 29 February 2020. Members of the public who had submitted observations in the first public consultation period were advised of the second public consultation.

From the twenty five (25) public submissions received, during both consultation periods, two hundred and five (205) issues were identified and considered.

Detailed responses to the public submissions were received from the applicant and these have been considered as part of the Marine Licence Vetting Committee's assessment of the proposed project.

PRESCRIBED BODIES CONSULTATION

Observations on the proposed subsea fibre-optic telecommunication cable project were received from the following prescribed bodies:

- Department of Housing, Local Government and Heritage (Water and Marine Advisor)
- Department of Housing, Local Government and Heritage (Nature Conservation)
- Department of Housing, Local Government and Heritage (Underwater Archaeology)
- Department of Agriculture Food and the Marine (Aquaculture and Foreshore Management Division)
- Marine Institute
- Inland Fisheries Ireland
- Sea Fisheries Protection Authority
- Marine Survey Office
- Fingal County Council
- Department of Environment, Climate and Communications

There were no objections in principle to the proposed installation of the subsea fibre-optic telecommunication cable. A number of the submissions from the prescribed bodies raised particular observations and put forward suggested conditions to be included in the foreshore licence, if granted, to address their specific interests.

Detailed responses to the prescribed bodies submissions were received from the applicant and these have been considered as part of the Marine Licence Vetting Committee's assessment of the proposed project.

ENVRIONMENTAL ASSESSMENT

Independent Environmental Consultant (IEC)

The Department engaged the services of MERC Consultants Limited to prepare the statutory and non-statutory environmental assessments of this foreshore licence application. The IEC conducted an independent assessment of the application including the information provided by the applicant, having regard to the Habitats Directive, the Birds and Natural Habitats Regulations, and the prescribed bodies and public submissions. The following reports have been considered:

- Screening for Appropriate Assessment Rev 03, 12 March 2021 - **Tab 5**
- EU Habitats Directive: Article 12 Assessment Rev 02, 09 March 2021 - **Tab 6**
- Non-Statutory Environmental Analysis Rev01, 09 March 2021 - **Tab 7**

In the MLVC's consideration of the application, the submissions from the public and prescribed bodies, the IEC's environmental assessment reports and the conclusions reached therein, it accepts and adopts the IEC's Screening for Appropriate Assessment, EU Habitats Directive: Article 12 Assessment, Non-Statutory Environmental Analysis, and its conclusions.

Appropriate Assessment Screening

AA Screening: MERC Consultants Limited were commissioned as IEC to conduct an Appropriate Assessment (AA) Screening

(stage 1 screening) and if required, an AA (stage 2), of the likelihood of significant impact on Natura 2000 sites.

A number of application documentation informed the Screening for AA Conclusion by the IEC including:

- The information provided in the licence application, including supporting documentation and drawings.
- The responses of the applicant to the submissions of the public and the observations of the prescribed bodies.
- The submissions from the public.
- The observations of the prescribed bodies (statutory consultees).
- The imposition of the licence conditions proposed, in their observations, by:
    - Marine Survey Office
    - Marine Institute
    - Department of Agriculture, Food and the Marine
    - Inland Fisheries Ireland
    - Department of Housing, Planning and Local Government – Water and Marine Advisor
    - National Parks and Wildlife Service
    - Underwater Archaeology Unit of the National Monuments Service
    - Department of Environment, Climate Action and Communications
    - Fingal County Council
- Compliance by the applicant with those licence conditions

After a review of the proposed project a screening assessment was conducted by the IEC. It was concluded that it can be excluded, on the basis of objective information, that the proposed project, individually or in combination with other plans or projects, will not have a significant effect on any European site and that an Appropriate Assessment is not required.

Screening for Appropriate Assessment Determination: Minister of State Burke, upon a review of all materials of the application concurred with the IEC and Recommending Officer, and accepted and adopted the IEC Screening for Appropriate Assessment and its conclusions (**Related submission link:** HLG 00256-21: FS006915 Celtix Connect Ltd - Screening for Appropriate Assessment Determination). On 27/07/2021 the Minister determined the following:

In accordance with Article 6(3) of the EU Habitats Directive (Directive 92/43/EEC) and Regulation 42(1) of the European Communities (Birds and Natural Habitats) Regulations 2011, as amended ("the Regulations"), the Department of Housing, Local Government and Heritage has undertaken Screening for Appropriate Assessment (AA) to assess, in view of best scientific knowledge and the conservation objectives of relevant European sites, if the proposed project for the installation, operation, maintenance and decommissioning of a subsea fibre-optic cable individually or in combination with other plans or projects would be likely to have significant effect(s) on a European site(s).

In accordance with Regulation 42(7) of the European Communities (Birds and Natural Habitats) Regulations 2011, S.I. 477 as amended, the Department of Housing, Local Government and Heritage has made a determination following screening that an Appropriate Assessment is not required as the project individually or in combination with other plans or projects is not likely to have a significant effects on any European sites. The risk of likely significant effects on European sites can be excluded on the basis of objective evidence. This determination is based on the location, scale, extent and duration of the proposed development, including temporary works, and has not taken account of measures intended to avoid or reduce significant effects on European sites. (**Tab 8**)

EU Habitats Directive: Article 12 Assessment: This examination is under Article 12 of the Habitats Directive and does not form part of the Screening for Appropriate Assessment Report which has examined the Natura 2000 sites and their qualifying interests, and reached a conclusion below in relation to those sites independently:

"This assessment concluded that the proposed project will not give rise to significant impacts on species listed under Annex II or IV of the Habitats Directive."

Environmental Impact Assessment Screening

The proposed project does not fall within a class, defined under Annex I or Annex II of the EIA Directive 2011/92/EU as amended, that would require the submission of an Environmental Impact Assessment Report. An EIA pre-screening documentation is attached at **Tab 9**.

A Non-Statutory Environmental Assessment Report was carried out and it was concluded that there will be no significant direct or

indirect impacts by virtue of the scale and scope of the project relative to the receiving environment.

MARINE LICENCE VETTING COMMITTEE (MLVC)

MLVC Considerations

The following documentation was considered and assessed:

- Foreshore licence application dated 09 January 2020, and supporting documentation
- Drawings / Maps:
    - Drawing No. P2228-CORR-002-B *'Installation Corridor Republic of Ireland Route'*
    - Drawing No. P2228-CORR-006-B *'Foreshore Licence Map'*
    - Drawing No. P2228-CORR-007-B *'Foreshore Licence Map Landfall'*
- Applicant's "Planning Report", dated December 2019
- Written submissions and recommendations received prescribed bodies consultations
- The applicant's responses to the prescribed bodies submissions
- The public submissions received from the public consultations
- The applicant's responses to the public submission
- Independent Environmental Advisor's submissions including:
    - Non-Statutory Environmental Analysis Rev 01, dated 09 March 2021
    - Screening for Appropriate Assessment Rev 03, dated 12 March 2021
    - EU Habitats Directive: Article 12 Assessment Rev 02, dated 09 March 2021
- Clarifications requested and received. MLVC Report Appendix 1

The MLVC reviewed the technical, scientific, and environmental aspects of the documentation submitted by the applicant. The MLVC is satisfied that the purpose and objective of the proposed works on the foreshore are adequately explained.

In addition, the MLVC is satisfied that the environmental information provided is sufficient to allow an assessment of the environmental effects of the proposed development to be carried out and to make a recommendation.

In its consideration of the case, the MLVC has responded to the issues raised during the prescribed bodies and public consultations by way of site specific conditions. The MLVC Report, dated 21/07/2021, is attached at **Tab 10**, and the MLVC Report Appendix 1 document is attached at **Tab 11**.

The MLVC recommends that the Minister issues a foreshore licence for the installation, operation, maintenance, and decommissioning of the subsea fibre-optic cable from Loughshinny to the 12nm limit as set out in the application. Any foreshore licence issued shall be subject to the appropriate conditions attached at **Tab 12**.

AGREEMENT OF THE APPLICANT

Celtix Connect Limited have agreed to the recommended site specific conditions, which will be attached to the licence, if granted.

FINANCIAL CONSIDERATIONS

Celtix Connect Limited have agreed to pay [redacted] for a once off buy-out payment of the licence fee, to include a peppercorn rent of [redacted] per annum, if demanded.

BASIS FOR RECOMMENDATION

Having regard to:

- The application, together with accompanying documentation;
- The submissions received from prescribed bodies (statutory consultees);
- The public consultations undertaken and submissions received;
- The Screening for Appropriate Assessment Report;
- EU Habitats Directive: Article 12 Assessment;

- Non-Statutory Environmental Analysis;
- The Appropriate Assessment Screening (Stage 1) – Determination
- The assessment of the proposed development by the MLVC, its conclusions and recommendations in this regard; and
- The consent conditions to be attached to the foreshore licence, if granted.

It is considered that the proposed development on the foreshore would not have a significant negative impact on the marine environment and would not adversely affect the integrity of the Natura 2000 sites, and the proposal is in the public interest.

It is recommended that a foreshore licence be granted to Celtix Connect Limited, subject to the conditions recommended by the MLVC, and the financial considerations set out above.

NOTIFICATION OF MINISTERIAL DETERMINATION

If approval is granted by the Minister, Celtix Connect Limited will be informed accordingly, an appropriate licence will issue for execution, and a Notice of Determination regarding the decision (including the reasons) will be published on the Department's website.

The Notice of Determination will address:

- The outcome of the Minister's determination of the application.
- The main reasons and considerations for the Minister's determination.
- A statement that all relevant documentation on which the determination is based is available for inspection on the website of this Department and at the Department's Wexford office.
- Confirmation that a review procedure is available before the High Court whereby the substantive or procedural legality of the Minister's determination may be challenged, together with practical information on the review procedure.

Submitted for approval, to grant a foreshore licence to Celtix Connect Limited, for installation and maintenance of a subsea fibre-optic telecommunication cable.

Related submissions

HLG 00256-21: FS006915 Celtix Connect Ltd - Screening for Appropriate Assessment Determination

User details

INVOLVED: [redacted]

READ RECEIPT: [redacted]